UNDERGRADUATE STUDIES CATALOGUE

2024-2025

https://www.du.edu.om/

DHOFAR UNIVERSITY

UNDERGRADUATE STUDIES CATALOGUE

2024-2025

Salalah
Sultanate of Oman

Dhofar University Contact Information

Address: -
PO Box 2509
Postal Code 211
Salalah
Sultanate of Oman

Telephone   (968) 23 23 70 00

Fax   (968) 23 23 77 77

E-mail   info@du.edu.om

Colleges & Center for Preparatory Studies:

CPS: Ext: 23237502

CAAS: Ext: 23237201

CCBA: Ext: 23237401/ 7402 / 7403

CE: Ext: 23237301 / 7305 / 7303

CL: Ext: 23237171 / 7181

Deanship of Admission, Registration and Student's Affairs:

Registration: Ext: 23237046 / 7047 /7048

Student Affairs: Ext: 23237127

Female Student Residency: Ext: 23237113

This catalogue can also be viewed at **http://www.du.edu.om**

Student Responsibility for Catalogue Information

Students are responsible for reading the information in this catalogue. Failure to read and comply with College and University regulations will not exempt students from whatever penalties they may incur.

Notes: -

1) Information in this catalogue applies to the academic year 2024-25 as of September 1, 2024. The University reserves the right to make changes without prior notice in programs, course offerings, academic requirements, and teaching staff as the need arises.

2) The catalogue has been drafted to conform to related Omani laws and Ministry of Higher Education, Research, and Innovation (MoHERI) rules and regulations. In the event of a contradiction, related Omani laws and MoHERI rules and regulations take precedence.

College Academic Calendar for AY 2024-25

(Fall Semester)

* Month	Week	Date	Day	Activity/Event
September		01-02	Sun.- Mon.	Incomplete exams
		03-05	Tue.-Thu	Registration (Online)
	W01	08	Sun.	First day of classes
		10-11	Tue.-Wed	Add/Drop (Online)
		15	Sun.	Birth of Prophet *(tentative)*
October		17	Thu.	Fall 24-25 Final Exams announcement
	W12	27-28	Wed.-Thu.	National Day *(tentative)*
December	W14	12	Thu.	Spring 24-25 schedule announcement
	W16	26	Thu.	Last day for course withdrawal "*W*"
	W16	26	Thu.	Last day of classes
Dec - Jan		31-13	Tue.-Mon.	Final exams *

★ *January 12, Sun. The Sultan's Accession Day Holiday (tentative)*

(Spring Semester)

Month	Week	Date	Day	Activity/Event
January		22-23	Wed.-Thu.	Incomplete exams
		26-28	Sun.-Tue.	Registration (Online)
	W01	29	Wed.	First day of classes
February		02-03	Sun.- Mon.	Add/Drop (Online)
March		13	Thu.	Spring 24-25 Final Exams announcement
March - April		31-03	Mon.-Thu.	Eid Al-Fitr *(tentative)*
April	W11	06-10	Sun.-Thu.	DU Student Week
	W13	22	Tue.	Job Fair
May	W15	8	Thu.	Fall 2025-26 schedule announcement
	W17	18	Sun.	Last day for withdrawal "*W*"
	W17	22	Thu.	Last day of classes/Summer 2024-25 schedule announcement
May - June		24-05	Sat.-Thu.	Final exams

(Summer Semester)

Month	Week	Date	Day	Activity/Event
June		08-09	Sun.-Mon.	Eid al-Adha *(tentative)*
		15-16	Sun.-Mon.	Registration (Online)
	W01	17	Tue.	First day of classes
		19	Thu.	Online Add/Drop
	W02	26	Thu.	Islamic new year *(tentative)*
August	W06	03	Sun.	Last day for withdrawal "*W*"
	W07	06	Wed.	Last day of classes
	W08	10-12	Sun. -Tue.	Final exams

CPS Academic Calendar for AY 2024-25

Fall Semester (Term 1) 2024-2025				
MONTH	**WEEK**	**DATE**	**DAY**	**ACTIVITY/EVENT**
September	1	1	Sun	Start of the Fall Semester
		2	Mon	First Placement Test
				Re-sit & Makeup (English)
				Online Registration for Continuing Students (L2 & L3)
		3	Tue	Second Placement Test
				Re-sit & Makeup (Math & IT)
		4	Wed	Third Placement Test
				Registration for all Students (L1, L2 & L3)
		5	Thu	Fourth Placement Test
				Registration for all Students (L1, L2 & L3)
	2	8	Sun	First day of Classes for all Students (L1, L2 & L3)
	3	15	Sun	Birth of Prophet *(tentative)*
October	7	13-17	Sun - Thu	Mid Term Exam (*Tentative*, TBA)
November	11	14	Thu	Last day of Classes
	12	17-21	Sun - Thu	Final Exam/Exit Exam L3
	13	24-26	Sun - Tue	Marking, Finalizing Grades and Posting
		27-28	Wed & Thu	National Day *(tentative)*
Spring Semester (Term 2) 2024-2025				
MONTH	**WEEK**	**DATE**	**DAY**	**ACTIVITY/EVENT**
December	1	8	Sun	Start of the Spring Semester
		9	Mon	First Placement Test
				Re-sit & Makeup (English)
				Online Registration for Continuing Students (L2 & L3)
		10	Tue	Second Placement Test
				Re-sit & Makeup (Math & IT)
		11	Wed	Third Placement Test
				Registration for all Students (L1, L2 & L3)
	2	15	Sun	First day of Classes for all Students (L1, L2 & L3)
January	6	12	Sun	The Sultan's Accession Day (*tentative*, TBA)
	7	19 - 23	Sun - Thu	Mid Term Exam (*tentative*, TBA)
	8	27	Mon	Al-Israa wal Meraaj *(tentative)*
February	11	20	Thu	Last day of Classes
	12	23 - 27	Sun - Thu	Final Exam/Exit Exam L3
March	13	2 - 4	Sun - Tue	Marking, Finalizing Grades and Posting
Summer Semester (Term 3) 2024-2025				
MONTH	**WEEK**	**DATE**	**DAY**	**ACTIVITY/EVENT**
March	1	16	Sun	Start of the Summer Semester
		17	Mon	First Placement Test
				Re-sit & Makeup (English)
				Online Registration for continuing students (L2 & L3)
		18	Tue	Second Placement Test
				Re-sit & Makeup (Math & IT)
		19	Wed	Third Placement Test
				Registration for all Students (L1, L2 & L3)
	2	23	Sun	First day of Classes for all Students (L1, L2 & L3)
Mar/Apr	3	30 - 3	Sun - Thu	Eid al Fitr *(tentative)*
May	8	4 - 8	Sun - Thu	Mid Term Exam (*tentative*, TBA)
June	12	5	Thu	Last day of Classes
	13	9 - 12	Mon – Thu	Eid al-Adha *(tentative)*
	14	15 - 19	Sun - Thu	Final Exam/Exit Exam L3
	15	22 - 24	Sun -Tue	Marking, Finalizing Grades and Posting

ACADEMIC OFFICERS
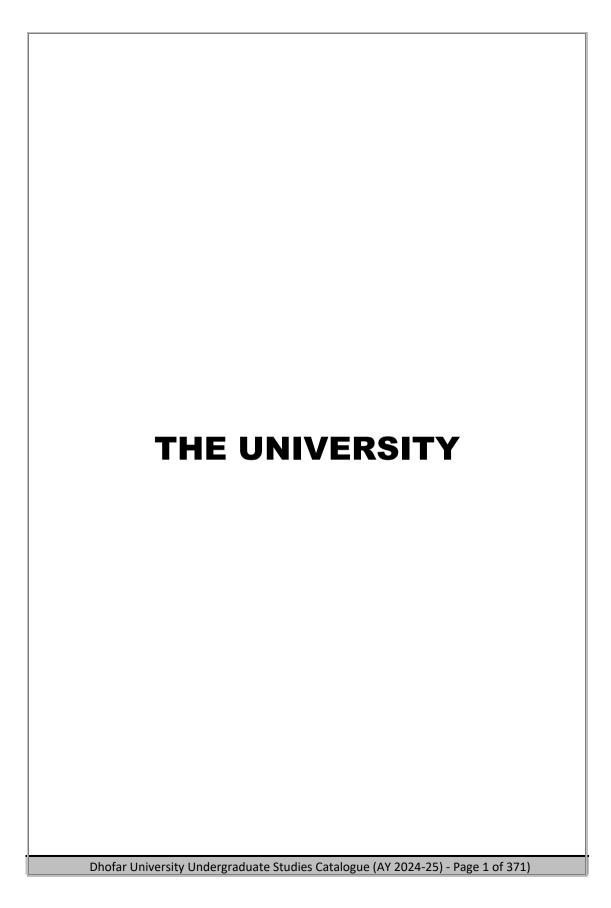
Prof. Amer Bin Ali Al Rawas, Vice Chancellor

Dr. Syed Ahsan Jamil, Deputy Vice Chancellor

Dr. Tareq Alhousary, Dean of Admission, Registration, and Students Affairs

Dr. Wesam Beitelmal, Assistant Dean of Admission, Registration, ans Students Affairs

Dr. Khalid Al Mashikhi, Dean of the College of Arts and Applied Sciences

Dr. Youssef AL Barami, Assistant Dean of the College of Arts and Applied Sciences

Dr. Issam Mahfoodh Al Bahdoor, Dean of the College of Engineering

Dr. El Manaa Barhoumi, Assistant Dean of the College of Engineering

Dr. Mawih Al Ani, Acting Dean of the College of Commerce and Business Administration

Dr. Abdullah Al Ghazali, Assistant Dean of the College of Commerce and Business Administration

Dr. Ahmed Mohamed Elzein, Acting Dean of the College of Law

Dr. Moosa Ahmed Ali Sulaiman, Director of the Centre for Preparatory Studies

Mr. Veeraiyan Maruthappan, Deputy Director of the Centre for Preparatory Studies

ADMINISTRATIVE OFFICERS

Prof. Amer Bin Ali Al Rawas, Vice Chancellor

Dr. Syed Ahsan Jamil, Deputy Vice Chancellor

Dr. Tareq Alhousary, Dean of Admission, Registration and Students Affairs

Dr. Wesam Beitelmal, Assistant Dean of Admission, Registration, and Students Affairs

Mrs. Salama Al Mashani, Director of the Department of Admission and Registration

Mr. Hassan Said Kashoob, Director of the Department of Student Affairs

Mrs. Fatima Ahmed Al Baraami, Director of the Department of Hostel Services

Mrs. Amina Khalid AL Mashikhi, Director of Department of Quality Assurance

Mr. Ali Ba Omar, Director of the Department of Administrative Affairs

Mr. Mohammed Tabook, Director of the Department of Financial Affairs

Prof. Nasser said Abdelrasheed, Director of Student Counseling Center

Dr. Syahro Syerina Binti Syahrin, Director of International Cooperation Office

Ms. Fatima Qatan, Director of the Vice Chancellors Office

Eng. Mohammad Dimachkieh, Director of the Computing and Networking Center

Mr. Musallem Kashoob, Director of the Department of Human Resources

Eng. Baskaran Ramadoss, Director of the Department of Technical Affairs

Mr. Abdullah Hussein Al Hafeedh, Director of the Department of Purchase

Mr. Abdulrahman Ba Omar, Director of the Department of Public Relations and Information

Mr. Ali Bakhit Al Awaid, Director of the Library

Mr. Mohammed Al Rawas, Director of Centre for Career Services and Alumni

Mr. Omar Ali ALShahri, Director of Community Services and Continuing Education Center

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THE UNIVERSITY

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1.1. Background

Dhofar University (DU) is a private institution of higher education in Salalah, Sultanate of Oman, established by Ministerial Decree No. 5/2004 issued in January 2004. The University formally commenced its operations in September 2004. DU has a Board of Trustees that represents its highest policy making body.

1.2. Vision

Dhofar University aspires to occupy a distinct position among the leading institutions of higher education in the Arab Region.

1.3. Mission

To provide quality teaching and learning, conduct research in an inspiring environment conducive to creativity and innovation, and engage with the community.

1.4. Core Values

The core values of DU are:

Excellence - Our commitment to excellence drives us to do better consistently.

Integrity - We believe in honesty and coherence between our words and actions.

Responsibility - We accept full responsibility for our actions all the times.

Commitment - We are committed to give our best and deliver what we promise.

Transparency - For us, transparency is the foundation of trust.

Adaptability - We believe adaptability is the key to success in an ever-changing environment.

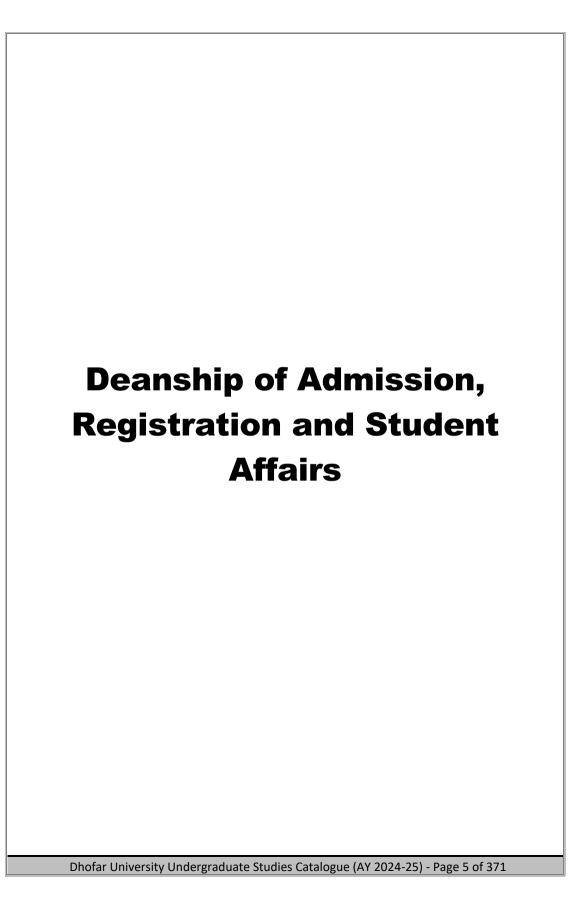## 1.5. Graduate Attributes

The graduate attributes of DU are:

1. Master theoretical knowledge and practical skills in the students' chosen discipline commensurate with program level and objectives.
2. Demonstrate capacity for effective communication, critical thinking, creativity, and innovation.
3. Exhibit honesty, discipline, and accountability.
4. Practice tolerance, humility, respect for differences and commitment to service.
5. Practice life-long learning.

1.6. Location and Climate

Being in Salalah, the University community enjoys the well-known geographic beauty of Dhofar region and the mild weather throughout the year particularly in the Summer, which is locally known as Khareef. The temperature remains steady in the upper twenties, with occasional rise to mid-thirties. The long and clean sandy shores of Salalah, one of the most beautiful in the world, are ideal for fishing and swimming. The nearby mountains are ideal for hiking.

1.7. Campus Facilities

DU campus is designed to conform to local needs and cultural context while meeting both international design standards and those of the Ministry of Higher Education, Reseach and Innovation (MoHERI). The campus includes an administration building, three buildings for the four colleges and the Centre for Preparatory Studies (CPS), a common classroom building, a library building, a student activities center, a Conference Hall, a Mosque, female student residency, housing for the senior administration and an engineering workshop.

Deanship of Admission, Registration and Student Affairs

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1. Department of Admission and Registration

1.1. Admission Requirements

1) Students are admitted to the undergraduate Programs on the basis of their:
   a) General Education Diploma Certificate or its equivalent; and
   b) Results of the English, Mathematics and IT placement tests conducted by DU Foundation Program (CPS).

2) Based on the results of placement tests, accepted students are divided into two groups as follows:
   a) Students who need remedial work; will join the CPS, for one or more semesters, until they successfully complete the Program; and
   b) Students who are ready, proceed directly to the first year of the Diploma or Bachelors Program.

3) Students may be exempted from English, Mathematics or IT Foundation requirements and admitted directly to their chosen fields of specialization if they meet the following criteria:
   a) Exemption from English requires a minimum score of 50 on the Cambridge English Placement Test (CEPT), or a minimum score of 5 in IELTS, or a minimum of 500 in TOFEL.
   b) Exemption from Mathematics requires a minimum score of 60 on the Moodle-based Math Placement Test.
   c) Exemption from IT requires a minimum score of 70 in the Moodle-based IT Placement test or an International (English) IC3 certificate. In case of the provision of a domestic (Arabic) IC3 certificate, students shall be required to take an IT Challenge Test and score a minimum of 60% to clear IT.

Please note that the validity of these international tests is limited to two years from the date of taking the exam. Applicants must submit the original certificate of test results and the University reserves the right to verify the authenticity of the certificate. Holders of IELTS and Test of English as a Foreign Language (TOEFL) certificates issued by institutions outside Oman may be asked to take the CEPT.

1.2. Application Procedure

Every applicant is required to submit an **online** application through the DU Website (www.du.edu.om), along with uploading copies of the following color-scanned supporting documents:

1) A recent photograph
2) A valid passport (first and second pages) in addition to the Omani visa page for non-Omanis.
3) The national identity card for Omanis OR residence card for non-Omanis.
4) A certified copy of the General Education Diploma Certificate or its equivalent
5) A non-refundable application fee of RO 30 for Diploma/Bachelor program. Payment can be made to the bank account of Dhofar University as mentioned in the online application.

It is important to note that any certificate that has been issued outside Oman must be authenticated by the Ministry of Education for the high school certificate, and from the Ministry of Higher Education for the Diploma certificate and Bachelor degree.

1.3. Registration

Periods of registration are announced in the academic calendar, which is published in the DU catalogue and on DU Website.

1.4. Special Students

DU accepts students of other HEIs who would like to take a certain number of courses and transfer their credits to their Universities. DU allows them to register for courses as special students. These students are required to present documents that show their credentials and preparedness to take courses in the University.

1.5. Academic Advisors

Each student is assigned an academic advisor at DU. The academic advisor is a faculty member in the academic department in which the student is enrolled. The role of the academic advisor is to assist the advisee in preparing course schedule during registration, support and guide him/her during the university studies, monitor the academic progress, and offer counselling on any academic difficulties or problems the student may experience.

2. Fees and Expenses

2.1. Tuition Fees

Tuition fees are as follows:

- 900 RO for each of three semesters for the Centre for Preparatory Studies.
- 70 / 80 RO for each credit hour taken in the Fall, Spring and Summer semesters for all Undergraduate Programs.

  The above fees do not include books, transportation or late registration.

2.2. Tuition Fees Refund

A student may withdraw from a semester after registration, but the refund of tuition fees depends on the timing of the withdrawal:

1) Full tuition fees will be refunded only to those students who withdraw from the semester before the end of the first week of classes.

2) 50% of tuition fees will be refunded to those students who withdraw before the end of the second week of classes.

3) NO REFUND to be made to students who withdraw from the semester from the beginning of the third week of classes onwards.

3. Academic Programs and Degrees Offered

DU offers 55 Academic Programs, comprising of 15 Diploma Programs, 26 Bachelor Programs, 13 Master Programs and 1 Teaching Diploma Program. Further, DU also offers variety of courses and training Programs for its staff, executives and employees of government agencies and commercial firms and for adult learners in local community through its Community Service and Continuing Education Centre (CSCEC).

Academic Programs follow the American model of higher education and use English as the medium of instruction, except for some programs as shown in Section 4, which are delivered in Arabic.

The academic year of the colleges is divided into two semesters of sixteen weeks of instruction each, and a Summer term of eight weeks of instruction (it delivers the same number of contact hours as in the regular semester).

A student is awarded either a Diploma or a Bachelor degree, in accordance with the choice he/she had made when he/she joined DU.

If a Bachelor bound student decided, for a legitimate reason, to forgo his/her desire to finish the Bachelor Program in the middle of a semester and decided to receive a diploma instead, then he/she may decide to drop all courses in progress pertaining to the Bachelor program. A Diploma will then be awarded contingent to completing the requirements of the Diploma Program, subject to the approval of the College Council. However, scholarship students will need to have the approval of their sponsor before changing their degree.

4. Colleges and Centre for Preparatory Studies

The University has four Colleges: The College of Arts and Applied Sciences (CAAS), the College of Commerce and Business Administration (CCBA), the College of Engineering (CE) and the College of Law (CL). In addition, there is a Centre for Preparatory Studies (CPS) that is designed to bridge the gap between secondary education and university undergraduate studies.

The programs offered in each college are summarised below.

4.1. College of Arts and Applied Sciences

CAAS offers the following Programs:

1	Diploma in Computer Science
2	Diploma in Computer Science for Students with Hearing Impairment
3	Diploma in English Language
4	Diploma in Mathematics
5	Diploma in Social Work
6	Bachelor of Education in Teaching Mathematics
7	Bachelor of Education in Teaching English Language
8	Bachelor of Education in Teaching Information Technology

9	Bachelor of Science in Computer Science –Cyber Security Track or Data Science Track
10	Bachelor of Science in Mathematics
11	Bachelor of Arts in English Language
12	Bachelor of Arts in Translation
13	Bachelor of Arts in Arabic Language
14	Bachelor of Arts in Social Work
15	Bachelor of Education: Teacher of Field I
16	Bachelor of Education: Teacher of Field II
17	Master of Education in Educational Leadership
18	Master of Education in Psychological Counselling
19	Master of Education : Teaching English as a Foreign Language(TEFL)
20	Master of Education in General Curriculum & Instruction
21	Master of Science in Cybersecurity
22	Master of Arts in Language Studies
23	Master of Arts in Literature and Criticism
24	Master of Social work
25	Teaching Diploma

4.2. College of Commerce and Business Administration

CCBA offers the following Programs:

1	Diploma in Accounting
2	Diploma in Finance
3	Diploma in Management
4	Diploma in Digital Marketing
5	Diploma in Management Information Systems
6	Bachelor in Accounting
7	Bachelor in Finance
8	Bachelor in Management
9	Bachelor in Digital Marketing
10	Bachelor in Management Information Systems
11	Bachelor of science in Logistics & Supply chain management
12	Bachelor of Science in Business Analytics
13	Master of Business Administration
14	Master in Management (Arabic)
15	Master of Science in Accounting (Arabic)

4.3. College of Engineering

CE offers the following Programs:

1	Diploma in Civil and Environmental Engineering
2	Diploma in Chemical Engineering
3	Diploma in Electrical and Computer Engineering
4	Diploma in Mechanical Engineering
5	Diploma in Interior Architecture Engineering
6	Bachelor of Science in Chemical Engineering
7	Bachelor of Science in Civil Engineering
8	Bachelor of Science in Computer and Communications Engineering
9	Bachelor of Science in Electrical and Electronics Engineering
10	Bachelor of Science in Mechanical Engineering
11	Bachelor of Science in Internal Architecture Engineering
12	Bachelor of Science in Architectural Engineering

4.4. College of Law

LAW offers the following Programs:

1	Bachelor of Law (Arabic)
2	Master in Private Law (Arabic)
3	Master in Public Law (Arabic)

4.5. Centre for Preparatory Studies

DU offers a Centre for Preparatory Studies, which is aligned with Oman Academic Standards (OAS) for General Foundation Program (GFP). All students admitted to DU have to take a placement test conducted by the CPS. The students are placed at the appropriate level, depending on their performance in the placement test. There are three levels in the FP for English language and two each for Maths and IT.

A student can progress to his/her major in the College only after successfully completing all CPS requirements (English, Maths and IT).

5. Graduation Requirements

5.1. Diploma

To receive a Diploma, students must satisfactorily complete 60 - 75 credit hours, depending on the program, with a cumulative grade point average (CGPA) of 65 percent. Other graduation requirements are stated in the corresponding section of this catalogue.

5.2. Bachelor Degree

To receive a Bachelor Degree, a student must satisfy the following conditions:

1) Complete the total number of credit required for the program which ranges from 120 up to 150 credits based on the major.
2) Reach a (CGPA) of 65 percent.

5.3. Study Period

The study period that a student must spend in a Diploma Program ranges from a minimum period of two academic years, up to a maximum period of four academic years.

The study period that a student must spend in a Bachelor Program ranges from a minimum period of four academic years, up to a maximum period of eight academic years. However, if the student joins in second or third year the maximum period will be proportionately reduced.

5.4. Minimum Study Period at DU

Students transferring to DU from other Higher Education Institution (HEI) must earn at least 60 credits (30 credits) required for graduation during thier ternure at DU for a Bachelor Degree (Diploma). In other words, an equivalency of a transfer student cannot exceed 50% of the total number of credits for the academic program he/she is joining at DU.

5.5. Studying Abroad

A DU student in good academic standing who did not transfer to DU from another HEI and wishes to study abroad must seek the approval of the College Council to spend up to one year and earn up to 30 credits at another HEI; however, the student must spend his/her final year of study at DU.

6. Course Requirements for Academic Programs

The course requirements for the academic program are stated in the student's plan of study (PoS). Even though the PoS of one program is different from another, still all these PoS for undergraduate programs share a same structure of the course distribution as given below.

6.1. University Requirements

This includes courses that are common for all programs across DU Colleges. These courses aim to provide essential knowledge and skills that are required to be acquired by all DU students. The courses of this category must be completed by all students of DU.

The total number of "University Requirements" for bachelor's program is upto 30 credits and for diploma program upto 21 credits. The English and Mathematics courses are designed separately for the needs of the students based on their colleges/majors. The other courses are common for all students across the university.

The university requirement courses are:
1) ARAB101: Academic Writing in Arabic
2) ENGL101: Basic Academic English
3) ENGL102A: English for Arts, Humanities and Social Sciences I, *or*
   ENGL102B: English for Business I, *or*
   ENGL102C: English for Computer Sciences I, *or*
   ENGL102E: English for Engineering and Sciences I

4) ENGL203A: English for Arts, Humanities and Social Sciences II, *or*

   ENGL203B: English for Business II, *or*
   ENGL203C: English for Computer Science II, *or*
   ENGL203E: English for Engineering and Sciences II
5) ENGL204: Advanced English for Academic Purposes and Research
6) ENGL305: Advanced English Language and Communication Skills
7) ENTR200: Entrepreneurship: Innovation and Creativity
8) CMPS100A: Introduction to Technical Computing for Arts, *or*

   CMPS100B: Introduction to Technical Computing for the Sciences
9) MATH103: Mathematics for Social Sciences, *or*
   MATH103B: Mathematics for Business, *or*
   MATH199: Calculus I
10) SOCS102: Omani Society

6.2. College Requirements

This includes courses that are common among the students of the same college only. The number of credit hours differ based on the level of the degree and the nature of the program. The courses of this category must be completed by all students who belong to the same college. These are mentioned under the particular program and college in this catalogue.

6.3. Major requirements

Students of the same major have to study a specific group of courses that differ according to the major and level of the degree. The courses of this category must be completed by all students who belong to the same major. These are mentioned under the particular program and college in this catalogue. For majors mandating practical training, students in their third year with 90 or more completed credit hours are allowed to register for the practical training course. However, the maximum number of academic hours they can register for in that semester is limited to 6 credits.

6.4. Elective requirements

This category is only available at the bachelor level where students have the freedom to select from a number of courses within the required number of credits allotted for this category. Under this category there are subcategories which are: general electives, social electives, college electives and major electives. These are mentioned under the particular program and college in this catalogue.

6.5. Seeking a Second Bachelor Degree from DU

A student who already holds a Bachelor's Degree and wishes to obtain a second Bachelor Degree in a different major of study must complete, after admission to the new College, all major credit hours as well as fulfil any other non-major graduation requirements for the new degree.

7. Academic Rules and Regulations

7.1. Grading System

The undergraduate grading system adopted at DU and its equivalence to the Letter Grade system and the Grade Points Average (GPA) system are shown below:

Numerical Grades	Grades Type	Equivalent Letter Grades	Equivalent Grade Points
95-100	Excellent	A	4.0
90-94		A-	3.7
87-89	Very Good	B+	3.3
83-86		B	3.0
80-82		B-	2.7
77-79	Good	C+	2.3
73-76		C	2.0
70-72		C-	1.7
65-69	Pass	D+	1.3
60-64		D	1.0
Below 60	Fail	F	0.0

Abbreviatios

Incomplete	I
Pass	P
In Progress	PR
Withdrawal	W
Withdrawn for Excessive Absence	WA
Fail	F
No Grade Reported	-
Pass Transferred	PT
Exempted	EX

7.2. Credit Load

1) A full-time student should register for not less than 12 credits and no more than 15 credits (18 for engineering and Law students) in any regular (Fall and Spring) semester.

2) A student may register for up to 18 credits (19 for engineering and Law students) if he/she has a cumulative average of at least 80 or a semester average of 80 for two consecutive semesters.

3) A student can register in a summer semester for a maximum of 6 credit hours only. There will be no academic status (probation) for the summer semester. The student's academic status will remain as it is in the previous semester.

4) If graduation within the semester necessitates it, cases exceeding credit load conditions require approval from the college.

5) Credit for incomplete courses will be included in the semester in which the incomplete courses were taken. The evaluation for that semester will be carried out as soon as the grades for the incomplete courses have been finalized.

8. Students' Academic Assessments

8.1. Performance Assessment

A student's academic performance is assessed throughout the semester using various instruments: homeworks, exams, research papers, projects, practical works, researches, etc. The student has the right to receive continuous feedback about his/her performance. The instructor completes a through-the-term performance assessment to give students a chance to withdraw from the course before the end of the withdrawal period and to help academic advisors to better advice students for the next semester registration.

Normally, all courses have final examinations that students must take. The instructor announces the course syllabus at the beginning of the semester where course components and associated assessment criteria are clearly stated. The course components and their allotted grades comply with the University policies.

8.2. Incomplete Course Work - "I"

A student who misses the final exam shall receive a grade of zero for that. However, if the student makes a petition (through the DU website) with a valid excuse for his/her absence, and the petition is approved, a grade of incomplete 'I' would be posted on the student's record.

Normally, no incomplete grade of "I" is given as a final grade in any course. In exceptional cases, and provided the guidelines stated below are met, a student may be allowed to make up the incomplete work. These guidelines are:

1) For securing permission to complete the work for a course, a student must submit an online "incomplete petition" with a valid excuse up to two weeks from the last day of the scheduled examination for that semester. Students should be aware that approval is not automatically granted. Form "I" is available on the student's DU SIS account through (PETITION).

2) Students permitted to complete the work for a course must do so up to two (2) weeks of the start of the immediate next semester. However, incomplete work of Spring semester can be completed within two (2) weeks of Fall semester.

3) After the incomplete work is done and evaluated, the course instructor submits a "change of grade" form to DARSA after approving it by the concerned College Council.

4) If no valid excuse is presented or the work, if permitted, is not completed within the time limit specified above, the "I" will be replaced with numeric grade scored that becomes the final grade in the course.

8.3. Submission of Final Grades

Instructors submit their final results to DARSA through the DU SIS Portal. A parallel hard copy of the final grades should be submitted to DARSA after the approval of the Dean's Office/ CPS Director's Office by the predefined deadline.

8.4. Appeal for the Final Course Grade

Any student who feels that the grading was unfair, must promptly discuss the matter with the course instructor. If the student and the instructor are unable to arrive at a solution, the student can submit an online "Grade Appeal" (PETITION) available on the DU Website up to one week from the end of the final exams period.

The Department Chairperson of the concerned course investigates the student's arguments and may request the College Council to review the instructor's evaluation of the student. If the grade is due for change, an approved electronic change-of-grade form should be sent to DARSA by the college/CPS

8.5. Change of Grade

Normally, grades cannot be changed after the submission of the final grades to the DARSA. Under exceptional circumstances as mentioned above, the Course Instructor submits, electronically, an approved "Change-of-Grade Form" to the DARSA stating the reasons for the change and endorsed by the Department Chairperson and the Dean, or Assistand Dean, of the College. The DARSA should receive the approved "Change of Grade form" up to two (2) weeks from the beginning of the following semester.

9. Dean's Honor List

To be placed on the Dean's Honour List at the end of a given Fall or Spring semester, a student must:
1) Be carrying at least 12 credits
2) Never been on probation
3) Have passed all the courses of the semester and attained a semester average of 90 or more
4) Have finished at least 24 credits
5) Have not been subject to any disciplinary action within the University, and be deemed worthy by the Dean to be on the Honour List

10. Failing, Repeating and Substituting of Courses

10.1. Failing Courses

If a student fails a course, no re-sit examination is permitted. A student who fails a required course must repeat the course at the earliest opportunity. A

student who fails an elective course, he/she doesn't have to repeat it. The student may select another course from the proposed elective courses in his/her Plan of Study (PoS) to maintain the minimum cumulative average and the minimum number of credits required for graduation. A student must pass all core courses to be eligible for graduation. Please read the "Academic Dismissal" section for related important information.

10.2. Repeating Courses

1) A student may repeat any course for which he/she received a grade of less than 70.

2) A student who fails in a course four times (Original attempt plus three repeats) will be dropped from the University/ College/ program/ major depending on the category of the course. Please read the "Student at Academic Risk Policy" for related important information.

3) When a course is repeated, the highest grade will be considered in the calculation of the CGPA. All course grades will remain a part of the student's permanent record.

4) A student who, at the end of her/his forth year, fails to attain CGPA of 65%, will be required to repeat courses in which the student has scored low grades.

10.3. Substituting Courses

A student may be allowed to substitute a course for another in the PoS provided that the substituted course is of the same level or higher than the one being substituted for and is not a major course. Approval of the College Council is required.

11. Dropping and Adding of Courses

11.1. Drop-and-Add Period

The drop and add period is announced in the DU academic calendar. Only the courses that remain in the schedule after the add-and-drop period will appear on the student's permanent academic record and transcript.

11.2. Dropping and Adding Rules

DU follows the credit hour system where students register for a certain number of credits per semester. A student is given an opportunity to choose his/her courses with the help of academic advisor during the registration period. Students should use the advanced online registration system of DU to register and make any Drop/Add operation. However, if for any reason, the online facility was not possible, the student has an opportunity to make changes during the Add-and-Drop period by submitting a "Add-and-Drop Form" approved by the academic advisor to the DARSA.

12. Attendance and Withdrawal

12.1. Class Attendance and Absence Rules

Attendance of all classes and course-related activities is obligatory. The maximum absences allowed for a student is 25% of the total number of sessions of a particular course. Before reaching the withdrawal stage, DU system warns the students by way of three warnings sent to their DU email account by DAR. This email messages to students is a formal communication of the university with its students so they are strongly advised to access their DU email accounts on daily basis to track their absences, along other important things, to respond appropriately when needed.

The warnings of absences are as follows:

1) **First warning**: this is when a student's absence reaches **7%** of the total number of sessions of a particular course.
2) **Second warning**: this is when a student's absence reaches **14%** of the total number of sessions of a particular course.
3) **Third (Final) warning:** this is when a student's absences reach **21%** of the total number of sessions of a particular course.

If the absence crosses 25%, the student will be dismissed from the course and a "WA" will be shown in his/her transcript against the dismissed course and dismissal letter will be sent to his DU email account.

12.2. Withdrawal from Courses

A student may withdraw from one or more courses after the Drop-and-Add period subject to the following conditions:

1) Student cannot withdraw or be withdrawn from a course after the announced deadline (not later than 14 weeks from the start of the semester or the number of the week in the Summer Term as mentioned in the academic calendar).
2) Student cannot withdraw or be forced to withdrawn from a course if this results in his/her being registered for less than 12 credits without the approval of his College Council.

Students who withdraw from a course are given a grade of "W", but those whose absences exceed 25% will receive a grade of "WA".

12.3. Postponement of a semester

A student can apply to postpone a semester at any time up to the last day of the Add-and-Drop period using the Clearance and Postponement forms on the DU SIS. The maximum number of times a self-funded student can postpone a semester is four times while it is two times for a MoHERI sponsored students as of its instructions for the academic year 2019-2020, given that he/she does not exceed the maximum period allowed to study the program, i.e. eight years for bachelor program and four years for the diploma program. When a student returns to the university after semester postponement (for one semester or

more), he/she should submit a 'Resumption of Studies Approval Form' for this purpose through the DU SIS.

12.4. Withdrawal from a Semester

A student can apply to withdraw from a semester at any time after the Add-and-Drop period until the last day of course withdrawal, using the Clearance and Withdrawal forms on the DU SIS. The maximum number of times a student can withdraw from a semester is four times, given that he/she does not exceed the maximum period allowed to study the program, i.e. eight years for bachelor program and four years for the diploma program. When a student returns to the university after semester withdrawal (for one semester or more), he/she should fill in and submit a 'Resumption of Studies Approval Form' for this purpose through the DU SIS.

12.5. Withdrawal from the University

A student may apply to withdraw from the University by submitting a Student's Clearance and Withdrawal forms available on the DU SIS/DU Website.

13. Academic Standing

13.1. Classification of Students

Based on the academic program, an undergraduate student shall be considered to have completed one or more academic years based on the number of credit hours completed successfully by him/her as shown below:

1) For completion of the first year: 30 to 38 credits.
2) For completion of the second year: 60 to 75 credits.
3) For completion of the third year: 90 to 104 credits.
4) For completion of the fourth year: 120 to 150 credits.

13.2. Academic Probation for Students Admitted to Colleges

1) A diploma or a bachelor student is placed under "Academic Probation" if his/her SGPA is less than 65% at the end of the first or any subsequent semester.

2) The probationary status of a student shall be removed when he/she attains a SGPA of 65% or more in the second or any subsequent semester.

A Diploma degree student can be placed on "Academic Probation" for a maximum of two times; while a bachelor degree student can be placed on "Academic Probation" for a maximum of three times. For the diploma degree student, the sequence of probation is: first probation and strict (final) probation. Likewise, for the bachelor degree student, the sequence of probation is: first probation, second probation and strict (final) probation.

In general, a student under probation cannot register for more than 12 credit hours.

13.3. Academic Dismissal

A student can be dismissed from a major, college or DU for any of the following reasons:

1) If he/she fails to clear her/his strict academic probation, which, as was stated earlier, is the final stage in academic probation, excluding the Summer term. The dismissal from a major, college or DU depends on the student's specific problem which should be determined by the college Council based on the advisor's opinion. That is, the student is dismissed because of a major required course then the dismissal should be from the major. If, otherwise, the probation was caused by a particular failure in a college-required course, then the dismissal should be from the college and the student should change the college.

2) If he/she fails in any compulsory course for a total of four times. A student can be dismissed for this reason even if he/she is in the final year at DU. When a student is dismissed from DU because of this reason, he/she cannot resume at DU in any program or college till he/she passes the same/similar course (approved by the course department) from other recognized HEI.

3) A student who is dismissed from a major can change it to another major within or to another college. A student who is dismissed from a college should change the college.

14. Transfer

14.1. Transfer from another recognized College/ University

Students who have started their studies in some other HEI recognized by MoHERI, in or outside Oman, and wish to move and continue their study at DU can do so by submitting an application form with the required documents in addition to their previous transcripts and course descriptions to DARSA, the Admission Section in the DAR. The transfer students are advised to apply as early as possible prior to the start of the semester, as announced in the academic calendar on DU Website, in order to get the course equivalency process done by the beginning of the registration period.

Such students are admitted after the following conditions are satisfied:

1) they meet DU's admission requirements
2) they satisfy the residency requirements (for non-Omanis)
3) they were not dismissed from the previous HEI for any disciplinary reason.

If any of the submitted documents is found to be fabricated, then the University reserves the right to dismiss the student from the University with no obligations from its end.

14.2. Course Equivalency Criteria

A passed course taken for credit by a transfer student at another HEI prior to joining DU may be transferred to DU credit subject to the following conditions:

1) The relevant documents should be provided to DU at the time of admission. Students who bring documents for courses after starting their study at DU may not be considered for equivalency.

2) The course is deemed equivalent to a course offered at DU involves the same components (lecture, lab, tutorial), and has the same number of credits or more.

3) At any circumstances, the number of transferred courses must not exceed 50% of the total number of credit hours required for the academic program the student is applying to.

14.3. Transferring within DU majors or colleges

A student may transfer from one major to another within the same college or to different college after meeting the admission requirements of the new major and college at the time of transfer/change request. The student of this case should duly complete a "Change of Degree/ Major" form available on the DU SIS. This should be done at least one month before the beginning of the new semester.

15. Disclosure Policy

The University may disclose general information without prior written consent from the student and this information may include only: student's name, degrees granted, major and minor fields of study, awards received and participation in official activities and sports.

However, the University shall not release other information from academic records, unless it receives the written consent of the student, and this written consent must specify the information that is to be disclosed, the purpose of the disclosure, and the names and addresses of the individuals or institutions to whom disclosure is to be made.

However, the University may disclose information, including information on academic records, without prior consent of the student in the following cases:

1) Upon the request of officers of the MoHERI or any other educational institutions where the student seeks to enrol (in such cases the student will be given, upon his/her request, a copy of the information sent to the institution.);

2) As necessary to academic officers, academic advisors, and faculty members within the University;

3) In compliance with a judicial order; and

4) To financial aid services in connection with financial aid for which the student has applied or has received.

16. Department of Student Affairs

16.1. Identification Card (ID)

The Department of Student Affairs (DSA) issues an ID card for all new DU students in accordance with the following procedure:

1) Students' submit the placement test permission slip issued to them by DAR to DSA.

2) Three weeks later the student gets her/his ID card from Student Services Section.

All students must carry their DU ID on campus and an extra caution not to miss the DU ID during the final exams! Missing the DU ID will lead a student to miss her/his final exam.

16.2. Orientation

During the period of registration and placement exams, the DSA arranges orientation sessions for new students. The sessions should be attended by all new students as they provide important academic and related information including location of various facilities and services. There is a "Welcoming Committee" composed of students and staff to facilitate the orientation.

16.3. Student Activities and Clubs

Students participate in social, cultural, and scientific events and activities organized by DSA. The Cultural Week is an occasion that allows students to organize cultural, social, intellectual, and entertainment activities. It stretches over a few days, usually in the last week of April, during which students display their talents and artistic productions for the pleasure of fellow students and the Community at large. Student activities are usually sponsored and coordinated by members of the DSA.

16.4. Athletics and Recreation

DU provides some facilities outside campus, particularly the football field and the gymnasium. Counsellors of DSA organize sports events such as football, volleyball, swimming, camps, athletics, and tennis.

16.5. Cafeterias and Coffee Shops

DU has two cafeterias in the main classroom building, one for male students and the other one for female students. There is also a coffee shop located in the courtyard of each College. These serve snacks, sandwiches and beverages. In addition, in the ladies' hostel, there is a large restaurant with kitchen facility to cater to their requirements of meals and snacks. The hostel also has a mini supermarket to cater to their daily needs.

16.6. Student Disciplinary System

Whereas DU aims to develop a student's social character, knowledge, and professional skills, it is also committed to graduating law-abiding and responsible citizens who deserve to carry the DU name. To that end, the University reserves the right to implement a range of disciplinary measures that are commensurate with violations of Omani laws or the rules and regulations of the University including academic misconduct.

Disciplinary measures range from warning to expulsion from the University based on the nature of the offence. Course instructor is authorized to apply some disciplinary measures, while suspension or expulsion shall only be administered by the Student Disciplinary Committee. The harshest action, final expulsion from the University, requires the consent of the University Council. Furthermore, each University employee who observes any offence by any student is required to

report the offensive action to the Students' Disciplinary Committee (SDC) through her/his Dean of the College.

16.7.   Smoking Policy

Smoking inside all buildings on campus is prohibited. Any student, faculty or staff member who violates this policy shall be subjected to the appropriate disciplinary action in accordance with University rules and regulations.

16.8.   DU Clinic

DU has an on-campus clinic that serves the basic health needs of students. A doctor is available on campus for 24 hours a day during which students can visit and seek consultation. The Clinic provides basic medical assistance for minor physical injury and sickness. Urgent and emergency cases are transferred to the nearby Saada Medical Complex or to city hospitals. This medical assistance is also made available to female students in the DU hostel on a 24/7 basis.

DU and non-DU emergency contact numbers are listed hereafter:
- DU Clinic: 23237135/23237131
- Emergency Office: 23237060
- Emergency GSM: 99496766
- Civil Defence Centre and Ambulance: 9999
- Civil Defence Centre and Emergency Management: 23234971
- Police Office (Salalah): 23290099
- Police Station (Saada): 23234170
- Sultan Qaboos Hospital (Salalah): 23216100
- Health Centre (Saada): 23225613

17. Department of Female Students' Residency

DU Hostel is under the supervision of the Director of Department of Female Student Residency. It has four on-campus buildings for female students who come from distant places to study at DU. It provides them with free furnished accommodation and local transportation. The University also provides security service and supervision of students through female supervisors and security guards working 24 hours. Other facilities available inside the hostel include: restaurant, supermarket, study hall and gymnasium.

There is no hostel facility for male students. However, those male students who are not from Salalah are assisted in finding appropriate accommodation.

18. General and Academic Support Services

18.1.   Department of Public Relations and Information (DPRI)

The DPRI is the frontline for the University in regard to relations with the community and the public at large. As such, DPRI plays a dynamic role in fulfilling the University's mission and vision in all of its activities by creating an atmosphere of understanding, trust and appreciation within and outside the University. Its

work covers a wide range of activities including reaching to the community, producing newspaper articles about various DU activities, visual media coverage, University publications, information, translation and advertising.

18.2.   Computing and Networking Center (CNC)

CNC provides an integrated environment of information technology networks that support and enhance the academic activities. Academic computing capability is provided by numerous laboratories, as well as by campus-wide networked facilities. All laboratories are networked and have access to local and remote servers as well as the Internet. All University buildings and labs are connected with fibre optics networks. E-mail services are available to all faculty, students and staff.

18.3.   Library

DU library is one of the main pillars of the educational process at the university. It is called Sheikh Mustheel bin Ahmed bin Ali Al-Mashani's library. It was established in 2004 and moved to the current building in 2010. DU library provides information services to students and faculty from various sources, such as books, references, periodicals and other electronic databases and Websites. The library provides the services of counselling, lending, and reserving for all eligible individuals.

The library is located in a separate building which consists of three floors with a total area of 4000 square meters equipped with a lift. The library occupies a convenient place amid university colleges and administration building. The building is divided into reading rooms, computer labs and special shelves for books, references, and periodicals. It also has administrative departments that manage technical operations and provide services for library users. The library uses electronic systems enable students to search for books through the e-library site on the internet.

The library seeks to ensure an appropriate environment enhanced with rich information to serve beneficiary community for all majors and research according to the university programs. The library works on qualifying and training its staff to be able to employ professional methods and modern technology in the processing and delivery of information services for the library users. The library offers its services through five departments with specific tasks as follows: Acquisition Department, Circulation Department, Reference Department, Cataloguing and Classification Department, periodicals and e-Library. The library is open on all working days from 7.30 am to 8.00 pm.

18.4.   DU Bookstore

The Dhofar University bookstore has been established in February 2017. It is located on the ground floor of Common Classroom Building. It aims to provide convenient and easy access to the students and faculties for their textbooks to support their courses.

18.5.   Students with Disabiilties Unit (SWDU)

Studneents with Disabilities Univts (SWDU) at Dhofar University strives to prvide comprehensive academic and non-academic support services to all persons with disabilities for their holistic growth and development in a way that helps them to adapt to their various enviroments, and empower them in the Omani society for positive chanes in their life and their communities.The unit is headed by CAAS Dean and supported by a dedicated academic team consisting of faculty members drawn from all colleges and CPS. There is a full time coordinator for managing the activities of the unit.

18.6.   Community Service and Continuing Education Center

Community Service

The CSCEC at DU aspires to assist the Dhofar community in solving local issues. CSCEC aims to link the University with all of its resources and expertise with the needs of the community. The CSCEC partners with public and private organisations to support initiatives in the local community.

CSCEC encourages DU students and faculty to make meaningful connections with the local community through participating in various events and programs organised by the Centre.

Continuing Education

The CSCEC offers training Programs to meet the ongoing professional and personal needs of Dhofar's community at large. It also provides services to applicants who aspire to enter the University but fail in the placement tests conducted by the Foundation program. CSCEC is dedicated to serving individuals in the private and public sectors in new and innovative ways. It offers solutions to training needs and provides the local community with the combined support of a professional staff and the diversity of resources at DU.

CSCEC provides on-campus and off-campus offerings that include certificate programs, workshops, seminars, conferences, and customised training programs to meet the needs of individuals and organizations. All CSCEC's certificate programs, workshops, and other activities are taught by experts who bring their hands-on experience into the classroom. Programs and courses are offered in English or Arabic as reflected by the course outlines.

The programs of CSCEC are developed to create an opportunity for strengthening and updating skills and learning new techniques for achieving personal and organizational goals. CSCEC prepares participants for a world of change and their organizations for success by using an innovative approach and programs specifically developed by expert DU faculty members.

18.7.   Centre for Career Services and Alumni

Dhofar University contributes to the achievement of Oman Vision 2040 within the priority of education, learning, scientific research, and national capacities, by establishing career guidance services, which is essential to ensure that the University plays its role in providing the job market with qualified national graduates equipped with locally and globally competitive capacities and skills. For

this, DU has established the Career Services and Alumni center in 2021/2022 succeeding its predecessor section which was under the DSA.

The center's mission is to assist students to plan their future careers, equip them for employment opportunities, establish a sustainable relationship with job market institutions, and build outreach with graduates. To achieve this mission, the center works to apply the best practices and models in leading educational institutions in guiding students towards the best appropriate career choices. It aims to increase the employment rate of the university's graduates and bridge the gap between the university's production and job market requirements, these are by:

- Assist students in planning their careers and prepare them for the demands of the job market.
- Establish sustainable relationships and partnerships with the job market and meet the needs of employers by providing qualified graduates able to meet the requirements of the job providers.
- Inculcating a spirit of affinity between the graduate and the University.

18.8. Centre for student counselling

The Centre for student counselling at Dhofar University was established in 2022 with the aim of providing counselling, academic, educational, psychological, social and educational services to support students' learning, nurture their creative talents, develop their personalities, abilities and positive aspects, and overcome behavioral problems that may face them in their university life. Diligently creating psychological and academic harmony.

Counselling services offering whether in the psychological, professional, social, family or academic domain is an integral component of the educational system. These domains of counselling services are one of the main pillars of the improvement, development and achievement of the goals of the educational process aimed at enforcing the building and preparation of the human personality in all aspects - psychological, social, cognitive, and emotional - through the proper guidance of the students for the benefit of themselves and their communities.
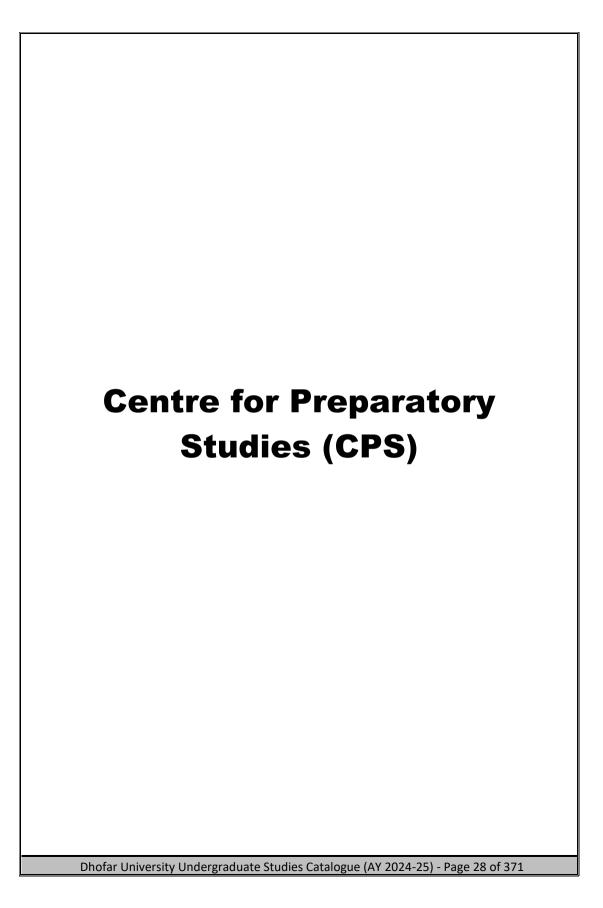
18.9. International Cooperation Office

The International Cooperation Office is a service department of Dhofar University that reports to the Vice Chancellor's office headed by a Director. The establishment of the International Cooperation Office is to facilitate international partnership and agreements process, document control for international agreements, provide service to students for exchange programs and international marketing.

19. Department of Quality Assurance

The Department of Quality Assurance is responsible for maintaining quality of teaching, research, and support services to students, staff, and the DU community by suggesting and reviewing DU policies relating to academic, academic support and non-academic services. The Department develops appropriate qualitative and

quantitative measures of teaching and service performance, taking into account local, regional and international recommended practices, including standards set by OAAAQA and other international accreditation boards. The Department consults with all stakeholders before making recommendations and reports directly to the Vice-Chanceller.

Centre for Preparatory Studies (CPS)

TABLE OF CONTENTS

CENTRE FOR PREPARATORY STUDIES

1. Officers of the Centre

Director   Dr. Moosa Ahmed Bait Ali Sulaiman
Deputy Director   Veeraiyan Maruthappan

Administrative Staff:
Senior Executive Secretary   Fatima Barham
Secretary I   Ahmed Al Haddadi
IT Technical Support I   Sharooq Al Maashani

2. Organizational Structure

The Centre for Preparatory Studies (CPS) is headed by a Director overseeing the following six sections, in addition to general administration:

1) English Language Section (ELS)
2) Mathematics Section (MS)
3) Information Technology Section (ITS)
4) Curriculum Development and Assessment Section (CDAS)
5) Professional Development and Research Section (PDRS)
6) Preparatory Courses and Community Outreach Section (PCCOS)

3. Vision

The Centre for Preparatory Studies aspires to become one of the leading Centers to provide foundation and other preparatory courses in the Arab region, equipping students to be more competitive in colleges inside and outside Oman.

4. Mission

The Centre for Preparatory Studies strives to expose students to rich, engaging curricula using innovative teaching and learning strategies that enable students to tap their learning potential to become autonomous, and long-life learners.

5. CPS: Foundation Program Overview

The Centre for Preparatory Studies (CPS) provides a one-year Foundation Program (FP) which is intended to equip high school graduates to pursue university majors and is undertaken by most university students in Oman. The Foundation program focuses on four major areas: English, Mathematics, IT and General Study Skills.

DU's Foundation Program follows the standards outlined by the Oman Academic Standards (OAS) for General Foundation Programs (GFPs). It aims to impart quality education to students and prepare them for their various majors. With courses ranging from elementary to upper intermediate, it caters to the curricular and co-curricular needs of students to actively bridge the gap between post-basic and tertiary education.

Since its inception, the FP has successfully met both these needs and the academic expectations of DU. There are presently around 51 faculty members of various nationalities in the CPS. The richness of their professional expertise and experience, their enthusiasm, and their involvement in the community constitute the backbone of the CPS.

6. Structure of the Program

The FP courses are designed to bridge the gap between post-basic education and university undergraduate studies. The program's focus is to ensure the students' readiness to embark on their university studies. The curriculum is aligned with the learning outcomes stated in the OAS for GFPs. The English program is divided into three levels and focuses on English language skills, along with general study and communication skills. The Mathematics and IT programs are comprised of two levels along with a pre-IT supporting level.

7. Study Skills

General study skills are integrated in the English, Mathematics and IT Programs and aim to help students develop the range of useful study skills that they need to succeed at the university level. They learn how to use and organize their time, read faster with comprehension, expand their vocabulary, take good notes in class, keep track of assignments, interpret and analyze graphic information, and adopt the most effective communication strategies.

8. Placement in and Exemption from the FP

Students are placed in the appropriate level or exempted from the FP based on their results in the placement tests for English, Mathematics and IT.

8.1. Placement criterion for English

Criterion	Level	Remarks
0-32	1	Students who (a) score 50 and above on the Cambridge University Online Placement Test (CEPT) or (b) produce either an IELTS certificate with a band of 5+ (with none of the four areas of writing, speaking, listening and reading below 4.5) or a TOEFL certificate indicating a score of 500+ are exempted from the English program (certificates are valid for only 2 years from the date of issue).
33-42	2	
43-49	3	
50 & above	Exempt	

8.2. Placement criterion for Mathematics

Criterion	Level	Remarks about Exemption
0-39	pre	Students who score 60 and above on the Moodle-Based Mathematics Placement Test are exempted from the Mathematics program.
40-49	1	
50-59	2	
60 & above	Exempt	

8.3. Placement criterion for IT

Criterion	Level	Remarks about Exemption
0-49	Pre	Students who (a) score 70 and above on the Moodle-based IT Placement Test, (b) provide an International (English) IC3 or (c) provide a Domestic (Arabic) IC3 or any other equivalent certificates AND achieve a 60% score on an in-house IT Challenge Test are exempted from the IT program.
50-59	1	
60-69	2	
70 & above	Exempt	

9. Promotion and Exit Policy

Students are assessed regularly to help determine their progress and attainment of the set goals. They are provided with every opportunity to be promoted to upper levels based on the assessment policy requirements stated in each syllabus. Students who fulfill the promotion requirements of English Level 3, Math Level 2 and IT Level 2 are eligible to exit the FP and join their desired university majors.

Please note the following:

a) Holders of IELTS and Test of English as a Foreign Language (TOEFL) certificates issued by institutions outside Oman may be asked to take the CEPT. The validity of these international tests is limited to two years from the date of taking the exam. Applicants must submit the original certificate of test results and the University reserves the right to verify the authenticity of the certificate.

b) Students can progress to their majors in the College only after successfully completing all FP requirements (English, Maths and IT).

c) Students majoring in Architectural Engineering must score no less than 70% in English, Math and IT to be able to proceed to college.

10. Study Plan

The following tables summarize the FP study plan.

10.1. Regular Program

Level 1		
Code	**Course Title**	**Hours/Week**
FPE 101A	English Level 1	20
FPM 100	Mathematics pre- Level	4
FPT 100	IT pre-Level	2
Level 2		
Code	**Course Title**	**Hours/Week**
FPE 102B	English Level 2	20
FPM 101A	Mathematics Level 1	4
FPT 101A	IT Level 1	4
Level 3		
Code	**Course Title**	**Hours/Week**
FPE 103C	English Level 3	20
FPM 102B	Mathematics Level 2	4
FPT 102B	IT Level 2	4

10.2. Evening Program

Level 1		
Code	**Course Title**	**Hours/Week**
FPE 101A	English Level 1	20
FPM 100	Mathematics pre-Level	4
FPT 100	IT pre-Level	2
Level 2		
Code	**Course Title**	**Hours/Week**
FPE 102B	English Level 2	20
FPM 101A	Mathematics Level 1	4
FPT 101A	IT Level 1	4
Level 3		
Code	**Course Title**	**Hours/Week**
FPE 103C	English Level 3	20
FPM 102B	Mathematics Level 2	4
FPT 102B	IT Level 2	4

10.3. Law Program

Law Courses		
Code	**Course Title**	**Hours/Week**
FPEL 100	English for Law	20
FPML 100	Math for Law	4
FPTL 100	IT for Law	4

10.4. Education Program (Arabic)

Education Courses		
Code	**Course Title**	**Hours/Week**
FPEE 100	English for Education	20
FPME 100	Math for Education	4
FPTE 100	IT for Education	4

10.5. Social Work Program (Arabic)

Social Work Courses		
Code	**Course Title**	**Hours/Week**
FPES 100	English for SW	20
FPMS 100	Math for SW	4
FPTS 100	IT for SW	4

10.6. Arabic Language Program

Arabic Language Courses		
Code	**Course Title**	**Hours/Week**
FPMA 100	Math for Arabic	4
FPTA 100	IT for Arabic	4

10.7. Computer Science Program for SENS

Computer Science Courses		
Code	**Course Title**	**Hours/Week**
FPEC 100	English for CS Level 1	10
FPMC 100	Math for CS Pre Level	4
FPTC 100	IT for CS Pre Level	3
FPMC 101A	Math for CS Level 1	4
FPTC 101A	IT for CS Level 1	3

English Language Section

1. Personnel

Coordinators: Dr. Ramadevi Sakhamuri (Level 1); Erica Bailey (Level 2); Ahmad Al Ani (Level 3);

Assistant Professor: Dr. Moosa Ahmed Bait Ali Sulaiman

Lecturers: Adnann Shatti Muhammed Eteiwi; Ahmad Abdul Hameed Othman (Al Ani); Amal Hassan Mursi Essa; Dr. Amin Rasti Behbahani; Dr. Amjed Ahmed Ayyat; Carmel Antonette Julius; Ebaa Refaie Qasim Momani; Fatima Taher Abdullah Al Ibrahim; Hyder Husni Hussen Al Mughrabi; Lauren Elizabeth Mertens, Mahija Nambiar Veetil; Merin John Charuvila; Millie Paulose; Dr. Mohammed Abugohar; Dr. Nagwa Mohammed Khallaf; Dr. Ramadevi Sakhamuri; Rashida Azhar Iqbal; Dr. Stephen Jayamani Thimothy.

Instructors: Abdulfattah Dukki; Adla Salim Al Haddadi; Asim Mohammad Khresheh; Balqess Al Ibrahim; Erica Bailey; Fatema AL Maashani, Laila Said Al Mashani; Mohamed Achamsi; Nada Thamood Rafeet; Natasha Swinney; Ozlem Isler; Ruba Al Rawas, Shahd Ba Abood, Shahla Ba Abood, Shahid Bashir; Steven Jay Sampliner; Tahir Alam Awan; Kadarkarai Thangadurai.

2. Overview

As English is the medium of instruction for most of the courses at DU, there is a clear need to approach English education in a systematic, meaningful, and purposeful manner. The English Section offers incoming students with intensive English program to help them pursue their studies in the major of their choice through the medium of English with the aim of immersing them in the language.

Ten hours a week are dedicated to Reading & Writing, with ten hours a week dedicated to Listening & Speaking. Students take a midterm, a summative quiz and a final exam. Grades are determined by summative as well as formative assessment, portfolios, progress tests, and quizzes. The weighting for each skill area is as follows:

Skill	Weighting (%)	Formative assessment weighting	Midterm exam weighting	Summative Quiz weighting	Final exam weighting
Reading & Writing	55%	30%	20%	10%	40%
Listening & Speaking	45%				

3. Learning Outcomes (As per OAS)

1) Actively participate in a discussion on a topic relevant to their studies by asking questions, agreeing/disagreeing, asking for clarification, sharing information, expressing and asking for opinions.

2) Paraphrase information (orally or in writing) from a written or spoken text or from graphically presented data.

3) Prepare and deliver a talk of at least 5 minutes. Use library resources in preparing the talk, speak clearly and confidently, make eye contact and use body language to support the delivery of ideas. Respond confidently to questions.

4) Write texts of a minimum of 250 words, showing control of layout, organization, punctuation, spelling, sentence structure, grammar and vocabulary.

5) Produce a written report of a minimum of 500 words showing evidence of research, note-taking, review and revision of work, paraphrasing, summarizing, use of quotations and use of references.

6) Take notes and respond to questions about the topic, main ideas, details and opinions or arguments from an extended listening text (lecture, news broadcast, etc.).

7) Follow spoken instructions in order to carry out a task with a number of stages.

8) Listen to a conversation between two or more speakers and be able to answer questions in relation to context, relationship between speakers, register (i.e., formal or informal).

9) Read a one to two-page text and identify the main ideas and extract specific information in a given period of time.

10) Read an extensive text broadly relevant to the student's area of study (minimum three pages) and respond to questions that require analytical skills, e.g. prediction, deduction, inference.

4. Course Descriptions

FPE 101A   Foundation Program English Level 1   (20 hrs)

FPE 101A is an intensive pre-intermediate level English course designed to develop both English skills and good study habits. Skills taught include Reading & Writing and Listening & Speaking. Learning outcomes are aligned with Oman Academic Standards. Upon completion, students transition to FPE 102B (Level 2).

FPEL 100   Foundation Program English for Law   (20 hrs)

FPEL 100 is an intensive elementary-level English course for intended law-degree students designed to develop both English skills and good study habits. Skills taught include Reading & Writing and Listening & Speaking. Upon completion, students are expected to have attained an elementary level of English.

FPEE 100   Foundation Program English for Education   (20 hrs)

FPEE 100 is an intensive elementary-level English course for intended Education - degree students designed to develop both English skills and good study habits. Skills taught include Reading & Writing and Listening & Speaking. Upon completion, students are expected to have attained an elementary level of English.

FPES 100   Foundation Program English for Social Work Arabic   (20 hrs)

FPES 100 is an intensive elementary-level English course for intended Social Work-degree students designed to develop both English skills and good study habits. Skills taught include Reading & Writing and Listening & Speaking. Upon completion, students are expected to have attained an elementary level of English.

FPEC 100   Foundation Program English for Computer Science   (10 hrs)

FPEC 100 is an intensive elementary-level English course for Special Educational Needs Students (SENS) designed to develop both English language skills and good study habits. Skills taught include Reading & Writing. Upon completion, students are expected to have attained an elementary level of English.

FPE 102B   Foundation Program English Level 2   (20 hrs)

FPE 102B is an intensive intermediate English course designed to develop both English skills and good study habits. Skills taught include Reading & Writing and Listening & Speaking. Learning outcomes are aligned with Oman Academic Standards. Upon completion, students transit to FPE 103C (Level 3).

FPE 103C   Foundation Program English Level 3   (20 hrs)

FPE 103C is an intensive upper intermediate English course designed to prepare students to meet the IELTS Band 5.0 requirement for exiting the program. Skills taught include Reading & Writing and Listening & Speaking. Upon completion, students transfer to their respective majors.

Mathematics Section

1. Personnel

Coordinator: Mohammad Mustafa

Assistant   Dr. Wajdi Dawood Al Jubouri
Professor:

Lecturers: Mohammad Mahmoud Nimer Mustafa; Wesam Sameh Tawfiq Al-Karadsheh; Waqar Ahmad   Khan; Tariq Mefleh

Instructor: Muhammad Siddique; Amal Al Shanfari

2. Overview

The Mathematics section offers FP courses that aim at bridging gaps in students' knowledge of Mathematics. Students are placed either in Pre-math, Math Level 1 or Math Level 2 as per their math placement test score (see 8.2 above). Level 2 Math has two programs, i.e. Pure or Applied Math. Students are placed in either Pure or Applied Mathematics as per the requirements of their majors.

3. Learning Outcomes (In line with OAS)

1) Apply basic mathematical operations on real numbers.
2) Perform basic mathematical operations on polynomials.
3) Obtain the common factors, factor by grouping, and factor second degree polynomials using special factoring rules.
4) Reduce rational expressions and apply different operations.
5) Identify exponent and simplify expressions.
6) Differentiate between and solve a certain type of linear equations and inequalities.
7) Use measurements and unit conversion (metric units).
8) Find the equation of lines in standard form and define the concept of the slope.
9) Identify, graph the circle, and write the equation of a circle in standard and general forms.
10) Define angles and find the length of Arc and area of sector.
11) Define basic Trigonometric Functions.
12) Solve right triangle and using Pythagorean Theorem
13) Solving and graphing two variables linear equations.
14) Define functions graphically and by set, finding the domain of certain types of functions and evaluating them.
15) Graph linear and quadratic functions.
16) Identify exponential functions, draw their graphs, and solve their equations.

17) Define the logarithmic functions, draw their graphs, and solve their equations.

18) Define and apply the rules, identities, and proofs of trigonometric functions.

19) Define and solve different trigonometric functions and express them graphically.

20) Know the basic equations of parabolas.

21) Measure central tendency, mean, median, mode, variance, standard deviation, sample space and probability.

22) Use formulas for permutations and combinations.

23) Use the law of sines and cosines to solve a triangle and real-life problems.

24) Solve System of linear inequalities in two variables.

4. Course Descriptions

FPM 100   Pre-Foundation Math Program   (4 hrs)

The aim of this course is to help incoming students to understand basic concepts of Mathematics. This four-hour course reinforces basic concepts and terminologies through the medium of the English language. The course covers real number systems, basic rules of addition, subtraction, multiplication and division, Properties of basic arithmetic operations, Polynomials, Factoring Polynomials, and reducing rational Expressions, first-degree equations and inequalities.

FPM 101A   Foundation Program   Level 1 (Basic)   (4 hrs)

The aim of this course is to teach conceptual understanding and problem solving. The course covers Graphing Linear equations using intercepts, Graphing Linear inequalities in two variables, Metric Units conversions, Exponents, Graphing quadratic equations, equations of circles, straight lines, Basic Trigonometric Functions and Pythagorean Theorem.

FPM 102B   Foundation Program Math Level 2 (Pure & Applied)   (4 hrs)

The aim of this course is to prepare students for further study of higher-level mathematics at higher and other non-mathematics-related subjects. The course covers Concept of functions, Exponential and Logarithmic functions, and Recognizing three types of symmetric of functions, basic statistics, and introduction to probability. For Pure Course, in addition to that, other topics are covered such as Graphing Trigonometric functions, Identities, and using law of Sine and cosine to solve triangle.

FPML 100   Foundation Program Math for Law   (4 hrs)

The aim of this course is to provide students who intend to major in Law with a basic understanding of mathematical concepts, Sets and Real numbers. Basic mathematical Operations and their properties, Metric Unit Conversion, adding and subtracting Polynomials, Straight Lines, Circles, and Basic Trigonometric Functions.

FPMA 100   Foundation Program Math for Arabic   (4 hrs)

The aim of this course is to provide students who intend to major in Arabic with a basic understanding of mathematical concepts, Sets and Real numbers. Basic

mathematical Operations and their properties, Metric Unit Conversion, adding and subtracting Polynomials, Straight Lines, Circles, and Basic Trigonometric Functions.

FPME 100   Foundation Program Math for Education   (4 hrs)
The aim of this course is to provide students who intend to major in Education with a basic understanding of mathematical concepts, Sets and Real numbers. Basic mathematical Operations and their properties, Metric Unit Conversion, adding and subtracting Polynomials, Straight Lines, Circles, and Basic Trigonometric Functions.

FPMS 100   Foundation Program Mathematics for Social Work Arabic   (4 hrs)
The aim of this course is to provide students who intend to major in Social work with a basic understanding of mathematical concepts, Sets and Real numbers. Basic mathematical Operations and their properties, Metric Unit Conversion, Adding and subtracting Polynomials, Straight Lines, Circles, and Basic Trigonometric Functions.

FPMC 100   Pre-Foundation Program Math for Computer Science   (4 hrs.)
The aim of this course is to help students entering the FP to understand basic concepts of Mathematics. This four-hour course reinforces basic concepts and terminologies learnt in the Arabic language in schools through the use of the English language. The course covers real number systems, basic rules of addition, subtraction, multiplication and division, Properties of basic arithmetic operations, Polynomials, Factoring Polynomials, and reducing rational Expressions, first-degree equations and inequalities.

FPMC 101A   Foundation Program Mathematics Level 1 for Computer Science   (4 hrs.)
The aim of this course is to teach conceptual understanding and problem solving. The course covers basic algebraic operations, Metric Units conversions, Exponents, Graphing System of linear inequalities, quadratic equations, equations of circles, straight lines, Basic Trigonometric Functions, Pythagorean Theorem.

Information Technology Section

1. Personnel

Coordinator: Fatima Al Rawas

Assistant
Professor: Dr. Anita Venugopal

Lecturers: Bhagyalatha Chinta; Fatima Al Rawas; Veeraiyan Maruthappan

Instructors: Amal Marfadi; Shamma Thabrit Al Harizi; Naef Al Muati; Ali Al Manhali

2. Overview

The IT section offers FP courses that aim to bridge the gap for students who wish to join DU but lack university-level IT competency skills. It emphasizes the essential parts of a standard curriculum in IT as required by OAS for GFP. The curriculum provides students with a basic understanding of computers, file management, use of word-processing, spreadsheet, presentation software, internet, email and essential IT skills. It follows a practical approach through the investigation of a variety of situations from across the spectrum of technology. The overall courseware equips students with the IT skills required for their future majors.

3. Learning Outcomes (In line with OAS)

1) Describe the main functional blocks of a computer system and how they work in sequence to process information.

2) Describe the function of different hardware components such as CPU, storage systems, types of memories like RAM, ROM etc. and common input and output devices.

3) Identify different types of software: operating systems, application software and programming software.

4) Explain the Omani data protection legislation and consequences of copyright violations.

5) Demonstrate basic keyboard skills and type effectively using both hands.

6) Demonstrate basic principles of file management using a computer.

7) Apply various features of MS Word (e.g., File, Edit, Format, Tools, Table and Insert).

8) Identify the main components of a spreadsheet window and explain the basic terms (e.g., cells, addresses, etc.).

9) Create, open, save, and edit worksheets, insert and manipulate data, insert new rows and columns, and delete and duplicate sheets.

10) Create various types of charts in MS Excel, apply mathematical functions, references and sort and filter data.

11) Create, open, and save PowerPoint presentations.

12) Apply various types of slide layouts and differentiate between master slides and other types of slides.

13) Insert pictures and objects in slides, duplicate slides, and use headers and footers and automatic numbering for presentation.

14) Explain about transition, animations and color schemes, slide shows and their effects.

15) Identify various styles of presentation and apply different print options.

16) Demonstrate the ability to duplicate, move slides within the presentation.

17) Identify network fundamentals, types and the benefits and risk of network computing.

18) Identify the purpose of a browser in accessing information on the world wide web and navigate the web.

19) Create emails and manage mailboxes.

4. Course Descriptions

FPT 100   Pre-Foundation IT Program   (2 hrs)
The aim of this course is to enable students to develop the basic IT skills and computer access necessary to source, communicate, and process information related to higher education. This two-hour course reinforces basic concepts of IT and terminologies through the use of the English language. The course covers use of keyboard, basic typing skills, introduction to word processor, using DU SIS, DU web mail and basic computer operations. Students are also exposed to the Moodle platform environment.

FPT 101A   Foundation Program IT Level 1   (4 hrs)
The aim of this course is to equip students with the knowledge and skills of IT necessary to source, communicate, and process information related to higher education. Students experience hands-on training with various day-to-day software packages, including MS Windows and word processing. Students are also exposed to basic IT-related concepts, hardware, software, operating system, and file management.

FPT 102B   Foundation Program IT Level 2   (4 hrs)
The aim of this course is to further equip students with the knowledge and skills of IT necessary to source, communicate, and process information related to higher education. Students experience hands-on training with various day-to-day software packages including MS Excel and MS Power Point. Students understand the concept of network, and mobile devices, internet, security and maintenance, digital learning and electronic mail. Students are also exposed to concepts, practices, and usage of the Internet in day-to-day life.

FPTL 100   Foundation Program IT for Law   (4 hrs)
The aim of this course is to equip Law students with the knowledge and skills of IT necessary to source, communicate, and process information. Students experience hands-on training with various day-to-day hardware, software packages, including MS Windows, MS Word, MS Excel, and MS PowerPoint.

Students are also exposed to basic IT-related concepts, computer operations, and file management.

FPTA 100   Foundation Program IT for Arabic   (4 hrs)
The aim of this course is to equip students who intend to major in Arabic with the knowledge and skills of IT necessary to source, communicate, and process information. Students experience hands-on training with various day-to-day hardware, software packages, including MS Windows, MS Word, MS Excel, and MS PowerPoint. Students are also exposed to basic IT-related concepts, computer operations, and file management.

FPTE 100   Foundation Program IT for Education   (4 hrs)
The aim of this course is to equip students who intend to major in Education with the knowledge and skills of IT necessary to source, communicate, and process information. Students experience hands-on training with various day-to-day hardware, software packages, including MS Windows, MS Word, MS Excel, and MS PowerPoint. Students are also exposed to basic IT-related concepts, computer operation, and file management.

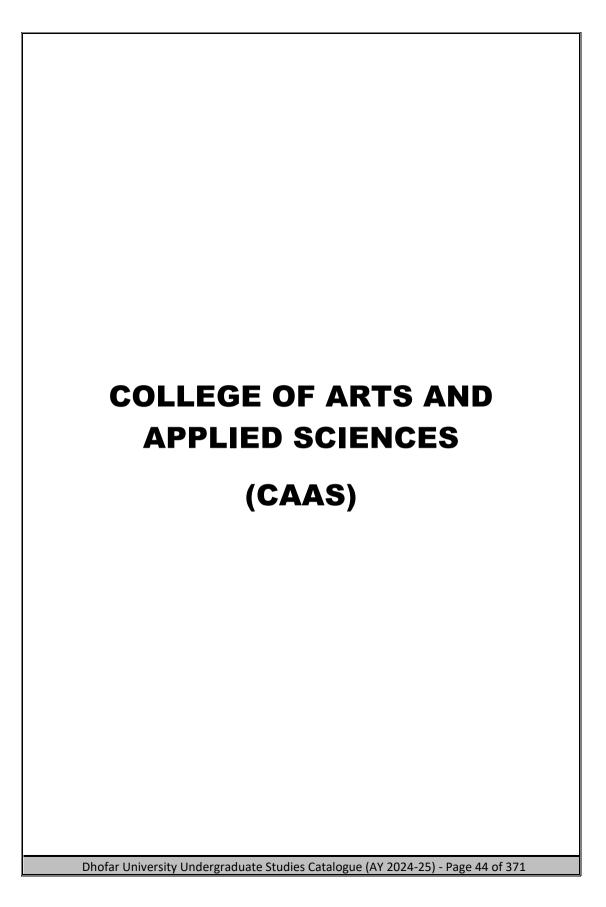**FPTS 100   Foundation Program IT for Social Work Arabic   (4 hrs)**
The aim of this course is to equip students who intend to major in Social Work with the knowledge and skills of IT necessary to source, communicate, and process information. Students experience hands-on training with various various day-to-day hardware, software packages, including MS Windows, MS Word, MS Excel, and MS PowerPoint. Students are also exposed to basic IT-related concepts, computer operation, and file management.

FPTC 100   Pre-Foundation IT for Computer Science   (2 hrs)
The aim of this course is to enable students to develop the basic IT skills and computer access necessary to source, communicate, and process information related to higher education. This course reinforces basic concepts of IT and terminologies through the use of the English language. The course covers use of keyboard, basic typing skills, using DU SIS, DU web mail and basic computer operations. Students are also exposed to the Moodle platform environment.

FPTC 101A   Foundation Program IT Level 1 for Computer Science   (3 hrs)
The aim of this course is to equip students with the knowledge and skills of IT necessary to source, communicate, and process information related to higher education. Students experience hands-on training with various day-to-day software packages, including MS Windows and word processing. Students are also exposed to basic IT-related concepts, hardware, software, operating system, file management and e-mail concepts.

COLLEGE OF ARTS AND APPLIED SCIENCES

(CAAS)

TABLE OF CONTENTS

COLLEGE OF ARTS AND APPLIED SCIENCES

1. Officers of the College

Dean: Dr. Khalid Almashikhi
Assistant Dean: Dr. Youssef Ahmed Al Barami
Senior Executive Secretary: Noor Al-Qamar Amer Jeed
Secretary: Musallam Said Salim Kashoob

2. Organizational Structure

The College of Arts and Applied Sciences (CAAS) is headed by a Dean overseeing the following **six Departments**:

1) Department of Arabic Language and Literature
2) Department of Computer Science
3) Department of Education
4) Department of English Language and Literature
5) Department of Mathematics and Sciences
6) Department of Social Sciences

3. Vision

CAAS aspires to be a leading and renowned college in the region for its high-quality teaching and learning, impactful research, and cutting-edge innovation while actively engaging with the community to make a positive impact.

4. Mission

CAAS is committed to providing a transformative educational experience that empowers our students to excel in their academic endeavours, fosters a passion for lifelong learning, and equip them to become leaders in their fields.

5. Academic Programs Offered

The College offers five (5) Diploma programs, eleven (11) Bachelor programs, eight (8) Graduate (Master) programs and one (1) Postgraduate Diploma. The medium of instruction in all these programs is English except for Bachelor of Arts in Arabic Language and some master programs wherein it is Arabic. Also, Bachelor of Arts in Social Work and Diploma in Social Work programs are offered in both English and Arabic medium. These programs are:

a) Diploma Programs

1) Diploma in Computer Science
2) Diploma in Computer Science for Students with Hearing Impairment
3) Diploma in English Language
4) Diploma in Mathematics
5) Diploma in Social Work

b) Bachelor Programs

1) Bachelor of Education in Teaching Mathematics
2) Bachelor of Education in Teaching English Language
3) Bachelor of Education in Teaching Information Technology
4) Bachelor of Science in Computer Science-Cybersecurity Track or Data Science Track
5) Bachelor of Science in Mathematics
6) Bachelor of Arts in English Language
7) Bachelor of Arts in Translation
8) Bachelor of Arts in Arabic Language
9) Bachelor of Arts in Social Work
10) Bachelor of Education: Teacher of Field I
11) Bachelor of Education: Teacher of Field II

c) Master Programs

1) Master of Education in Curriculum and Instruction: Teaching English Language
2) Master of Education in General Curriculum and Instruction
3) Master of Education in Psychological Counseling
4) Master of Education in Educational Administration
5) Master of Science in Cybersecurity
6) Master of Arts in Language Studies (Arabic Language)
7) Master of Arts in Literature and Criticism (Arabic Language)
8) Master of Social Work

(Details of Master Programs are given in Graduate Studies Catalogue)

d) Postgraduate Diploma

1) Teaching Diploma

(Details of Postgraduate Diploma are given in Graduate Studies Catalogue)

6. Admission Requirements

a) Undergraduate Programs

I) General Requirements

For admission to any of the undergraduate programs offered by CAAS, a student must have:

- A General Education Certificate or its equivalent, and
- Passed FP from DU or any other HEI recognized by MoHE

OR

Be exempted from FP English, Maths and IT courses based on placement tests conducted by DU FP

II) Program-Specific Requirements

Program-Specific admission requirements, if any, are given in the concerned section in this catalogue.

b) Graduate (Master) Programs

(For admission requirements of Master Programs, refer to Graduate Studies Catalogue.)

7. Graduation Requirements

To receive a Diploma in any of the majors in the College of Arts and Applied Sciences, students must satisfactorily complete the required credit hours for his/her major, with a cumulative average of 65 percent.

To receive a Bachelor's Degree in any of the majors in the College of Arts and Applied Sciences, the student must satisfactorily complete the required credit hours for his/her major with an overall minimum cumulative average of 65 percent, and a cumulative average of 70 percent in the major courses.

The total number of required credits varies by major. The following table summarizes the number of credits normally required for each undergraduate program in CAAS.

Program	Requirements				Total Credit Hours
	University	College	Program (Major)		
			Core	Elective	
Diploma in Computer Science	24	3	27	6	60
Diploma in Computer Science for Students with Hearing Impairment	24	3	33	0	60
BS in Computer Science – Cybersecurity or Data Science	24	9	57	30	120
Diploma in English Language	27	6	24	3	60
BA in English Language	30	12	42	36	120
BA in Translation	30	12	48	30	120
B. Ed. in Teaching English Language	30	6	69	15	120
B. Ed. in Teaching Information Technology	30	6	72	12	120
B.Ed in Teaching Mathematics	30	6	77	9	122
Diploma in Mathematics	27	3	32	0	62
BS in Mathematics	30	12-13	64	15	121-122

Diploma in Social Works	15	42	3	0	60
BA in Social Works	12	18	75	15	120
BA in Arabic Language	15	0	57	48	120
B. Ed. : Teacher of Field I	15	6	108	3	132
B. Ed. : Teacher of Field II	15	6	108	3	132

8. University Requirements

The university requirement courses are:

1) ARAB101: Academic writing in Arabic
2) ENGL101: Basic Academic English
3) ENGL102A: English for Arts, humanities and social sciences I, *or*
   ENGL102B: English for business I, *or*
   ENGL102C: English for computer sciences I, *or*
   ENGL102E: English for engineering and sciences I
4) ENGL203A: English for Arts, humanities, and social Sciences II, *or*
   ENGL203B: English for business II, *or*
   ENGL203C: English for computer science II, *or*
   ENGL203E: English for engineering and sciences II
5) ENGL204: Advanced English for academic purposes and research
6) ENGL305: Advanced English language and communication skills
7) ENTR200: Entrepreneurship: Innovation and Creativity
8) CMPS100A: Introduction to technical computing for arts, *or*
   CMPS100B: Introduction to technical computing for the sciences, *or*
   MATH103: for social sciences, *or*
9) MATH199: Calculus I
10) SOCS102: Omani Society

The number of credits to be taken by a student depends on the nature and level of the program. These are listed separately for each program in this catalogue.

9. College Requirements

Undergraduate students who are enrolled in any of the academic programs in the College of Arts and Applied Sciences are required to take a minimum of twelve credits in, natural sciences, social sciences, and elective courses. These are listed in the respective section in this catalogue.

10. Program Requirements

Program requirements vary from 78-115 credit hours from within and outside the department, depending on the chosen major in which the student is enrolled. These are listed in the respective section in this catalogue.

Department of Computer Science

1. Personnel

Chairperson	Essam Alnatsheh
Associate professors:	Essam Alnatsheh, Biju Sayed
Assistant Professors	Hamid Jadad, Nurul Akhmal Mohd Zulkefli
Lecturers	Nasser Tabook, Mukesh Madanan
Secretary	Muna Suhail Zabanoot

2. Vision

Through effective teaching, research and community services, the Department of Computer Science yearns to provide its community an immaculate learning environment while infusing the state-of-the-art curriculum open to a world of global Information technological opportunities.

3. Mission

The computer science department aims at providing students with balanced theoretical and practical background in a variety of computer science topics. Through the fulfillment of coursework, practical projects, and community service activities, students are endowed with the necessary skills and experiences to develop successful careers in computer science and information technology. The program also prepares students to pursue higher education and research in computer science by promoting life-long independent learning.

4. Programs Offered

The department offers the following Diploma, Bachelor and Master programs:

a) Diploma Program

1) Diploma in Computer Science
2) Diploma in Computer Science for students with Hearing Impairments(Arabic)

b) Bachelors Program

1) Bachelor of Science in Computer Science – Cybersecurity or Data Science

c) Master Programs

1) Master of Science in Cybersecurity

(Details of Master Programs are given in Graduate Studies Catalogue.)

5. Bachelor of Science in Computer Science
(With Specialization in Cybersecurity or Data Science)

5.1. Program Overview

The B.Sc in Computer Science with specialization in Cybersecurity or Data Science is a four-year, 120 Credit Hours program designed to enable its holders to contribute to improving and modernizing the lifestyle and work culture through the computerization and automation of a wide range of processes in the industries and the society. The program content is very much in line with the current standards and guidelines established by the Association of Computing Machinery (ACM).

To graduate with a Bachelor of Science in Computer Science degree, students must satisfactorily complete the program of study with an overall minimum average of 65 percent, and a cumulative average of 70 percent in all computer science courses.

5.2. Program Objectives

The objectives of the Bachelor of Science in Computer Science programs in Cybersecurity or Data Science are:

1.A. Apply theoretical and practical computing experiences to creatively solve cybersecurity issues.

1.B. Apply theoretical and practical computing experiences to creatively solve data science issues.

2. Adopt and utilize advanced knowledge in information and communication technologies that will contribute to the economic development of the country

3. Establish successful careers in public and private sectors, computer industry, or educational institutions.

4. Pursue higher education in computer science or the learning opportunities.

5. Practice liberal education, training and appropriate learning skills and values to tackle significant computing challenges.

6. Engage in life-long independent learning to enrich life and career.

5.3. Program Learning Outcomes

Based on the objectives, the specific learning outcomes are expected at the time of graduation:

PLO1: Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.

PLO2: Design, implement and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.

PLO3: Communicate effectively in a variety of professional contexts.

PLO4: Recognize professional responsibilities and make informed judgements in computing practice based on legal and ethical principles.

PLO5: Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.

PLO6: Apply computer science theory and software development fundamentals to produce computing-based solutions.

PLO7A: Apply security principles and practices to maintain operations in the presence of risks and threats.

PLO7B: Apply theory, techniques and tools throughout the data science lifecycle and employ the resulting knowledge to satisfy stakeholders needs.

5.4. Admission Requirements

Admission requirements for a Bachelor of Science Degree in Computer Science Program are as specified in **College Section 6-a on page 50.**

5.5. Graduation Requirements

To graduate with a Bachelor of Science Degree in Computer Science, students must satisfactorily complete 120 credits taken over four academic years, with an overall minimum average of 65 percent, and a cumulative average of 70 percent in the major courses. The university, college, and program requirements are as given in the following table.

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
24	9	57	30	120

5.6. University Requirements

The University requirements for a Bachelor program consist of the following eight courses comprising of 30 credit hours:

1) COMP101: Introduction to Technical Computing
2) ARAB101: Academic Writing in Arabic
3) ENGL101: Basic Academic English
4) ENGL102C: English for Computer Sciences I
5) ENGL203C: English for Computer Science II
6) ENTR200: Entrepreneurship: Innovation and Creativity
7) MATH199: Calculus I
8) SOCS102: Omani Society

5.7. College Requirements

The College requirement for a Bachelor program consists of three (3) courses comprising a minimum of 9 credit hours distributed as follows.

- One course in physical/natural sciences electives
- One course in social/humanities electives
- One course in general electives.

5.8. Program Requirements

The program requirements for a Bachelor program consists of 29 Courses encompassing 87 credit hours distributed as follows.

I) Major Core Courses

The following 19 core course encompassing 57 Credit hours are required:

Course Code	Course Title	Credit Hours	Pre-requisite	Co-requisite
COMP 111	Programming Fundamentals	3	None	COMP 101
COMP 151	Discrete Structures	3	COMP 111	None
COMP 161	Numerical Systems	3	COMP 111	None
COMP 171	Digital Design & Computer Architecture	3	None	COMP 161
COMP 201	Data Structures and Algorithms	3	COMP 151	None
COMP 211	Object Oriented Programming	3	COMP 151	None
COMP 221	Computer Networks	3	COMP 171	None
COMP 251	Operating Systems	3	COMP 221	None
COMP 261	Database Management Systems	3	COMP 211	None
COMP 271	Introduction to Data Sciences	3	None	COMP 161
COMP 281	Introduction to Cyber Security	3	COMP 221	None
COMP 301	Software Engineering	3	COMP 201	None
COMP 311	Random Processes	3	COMP 161	None
COMP 351	Artificial Intelligence	3	COMP 271	None
COMP 361	Linear Systems	3	COMP 311	None
COMP 401	Web Technologies	3	COMP 261	None
COMP 411	IT Ethics and Society	3	COMP 281	None
COMP 451	Analytics for Decision Making	3	None	COMP 361
COMP 499	Final Year Project	3	None	COMP 411
Total Credit Hours		**57**		

II) Major Elective Courses

In every specialization, the students are required to complete ten courses of 3 credit hours each with a total of 30 credit hours.

Major Elective Courses for the Cybersecurity Specialization

Course Code	Course Title	Credit Hours	Pre-requisite	Co-requisite
COMP 321	Network Security	3	COMP 201	None
COMP 322	Software Security	3	COMP 201	None
COMP 323	Information and System Security	3	COMP 281	None
COMP 324	Ethical Hacking	3	COMP 281	None
COMP 325	Database Security	3	COMP 261+ COMP 281	None
COMP 326	Wireless and Mobile Security	3	COMP 281	None
COMP 327	Disaster and Recovery and Management	3	COMP 281	None
COMP 422	Special Topics in Cybersecurity	3	COMP 281	None
COMP 423	Cryptography	3	COMP 281	None
COMP 424	Cyber Security Risk Management	3	COMP 281	None
COMP 425	Digital Forensics	3	COMP 281	None
COMP 426	Cyber Crime Investigation and Forensics	3	COMP 281	None
COMP 431	Parallel Computing	3	COMP 221+ COMP 251	None
COMP 432	Client Server Computing	3	COMP 251	None
COMP 479	Industrial Internship in Cybersecurity	3	None	Taken All Faculty and Program Core Courses

Major Elective Courses for the Data Science Specialization

Course Code	Course Title	Credit Hours	Pre-requisite	Co-requisite
COMP 330	Big Data Analytics	3	COMP 271	None
COMP 331	Data Engineering	3	COMP 351	
COMP 332	Data Analytics Ethics	3	COMP 271	COMP 101
COMP 333	Natural Language Processing	3	COMP 211	None
COMP 334	Knowledge Representation	3	COMP 211	None
COMP 352	Machine Learning	3	COMP 351	None
COMP 353	Data Mining	3	COMP 351	None
COMP 354	Deep Learning	3	COMP 351	None
COMP 428	Data Analytics and Visualization	3	None	COMP 271
COMP 429	Business Intelligence Analysis	3	COMP 271 + COMP 351	None
COMP 430	Advanced Data Analytics	3	COMP 271	None
COMP 452	Data Science for Marketing Analytics	3	COMP 271 + COMP 352	None
COMP 453	Research Topics in data Analytics	3	COMP 271	None
COMP 454	Predictive Modeling	3	None	COMP 271 + COMP 351
COMP 489	Practical Training in Data Science	3	None	Taken all Faculty and Program Core Courses

5.9. Plan of Study

Semester	Code	Course Title	Credits	Pre/Co-Requisite
Semester 1	COMP 101	Introduction to Technical Computing	3	
	COMP 111	Programming Fundamentals	3	=COMP 101
	ARAB 101	Academic Writing in Arabic	3	
	ENGL 101	Basic Academic English	3	
	MATH 199	Calculus I	3	
		Credits/Semester	**15**	
Semester 2	COMP 151	Discrete Structures	3	>COMP 111
	COMP 161	Numerical Systems	3	>COMP 111
	ENGL 102C	English for Computer Science I	3	
	COMP 171	Digital Design & Computer Architecture	3	>=COMP 161
	SOCS 102	Omani Society	3	
		Credits/Semester	**15**	
Semester 3	COMP 201	Data Structures and Algorithms	3	>COMP 151
	COMP 211	Object Oriented Programming	3	>COMP 151
	ENGL 203C	English for Computer Science II	3	
	COMP 221	Computer Networks	3	>COMP 171
	ENTR 200	Entrepreneurship	3	
		Credits/Semester	**15**	
Semester 4	COMP 251	Operating Systems	3	>COMP 221
	COMP 261	Database Management Systems	3	>COMP 211
	COMP 271	Introduction to Data Sciences	3	>=COMP 261
	COMP 281	Introduction to Cybersecurity	3	>COMP 221
		Humanities and Social Science Elective	3	
		Credits/Semester	**15**	
Semester 5	COMP 301	Software Engineering	3	>COMP 201
	COMP 311	Random Processes	3	>COMP 161
		General Elective	3	
		1st Major Elective - 300 Level	3	
		2nd Major Elective - 300 Level	3	
		Credits/Semester	**15**	
Semester 6	COMP 351	Artificial Intelligence	3	>COMP 271
	COMP 361	Linear Systems	3	>COMP 311
		3rd Major Elective - 300 Level	3	
		4th Major Elective - 300 Level	3	
		5th Major Elective - 300 Level	3	
		Credits/Semester	**15**	

	COMP 401	Web Technologies	3	>COMP 261
	COMP 411	IT Ethics & Society	3	>COMP 281
Semester 7		6th Major Elective - 400 Level	3	
		7th Major Elective - 400 Level	3	
		8th Major Elective - 400 Level	3	
		Credits/Semester	**15**	
	COMP 451	Analytics for Decision Making	3	>COMP 361
	COMP 499	Final Year Project	3	>=COMP 411
Semester 8		Physics and Natural Science Elective	3	
		9th Major Elective - 400 Level	3	
		10th Major Elective - 400 Level	3	
		Credits/Semester	**15**	
		Total Credits	**120**	

5.10. Course Descriptions

COMP 101   Introduction to Technical Computing   (3 crs.)

This course covers core topics and basic applications of computing in various real-world fields. The contents in this course would mostly relate to database and fundamentals of programming, an extended coverage will touch upon the basics of human-computer interaction and concepts of networking.

COMP 111   Programming Fundamentals   (3 crs.)

Computer programming is the process of designing, building and deploying a computer solution for a problem. This course introduces the basic concepts of structured and procedural computer programming. The students will learn the main steps to effectively devise a computer program using a modern programming language by providing a comprehensive introduction to problem solving methodology including basic and derived data types, control structures and functions. Special care is also devoted to introducing the IDE functionalities (debugging, testing, etc.)

COMP 151   Discrete Structures   (3 crs.)

Discrete structures are extensively used in various computer science fields such as programming, software development, cryptography, etc. This course focuses on analytical, abstract, and critical thinking, deductive and inductive reasoning as well as mathematical methods used in computer science. Discrete structures including the foundations of logic, algorithms and their complexity, functions and relations, graphs, trees, and combinatorics are addressed in this course.

COMP 161   Numerical Systems   (3 crs.)

This course is an introduction to the number systems that are implemented for computer scientists with a focus on binary representation, Boolean algebra, simplification, manipulation of negative numbers, fractional numbers, the introduction of logic, and storage in computers.

COMP 171   Digital Design & Computer Architecture   (3 crs.)

Digital logic design with computer architecture is the logic design of complex electronic components and internal architecture using digital logic. Using digital logic gates as the simplest building blocks, this course explores the fundamentals of computer organization and processor design. Simple combinational and sequential circuit design will be emphasized, as well as topics such as ALU and CPU design, memory system organization and architecture, object code, microprogramming, CISC, RISC, and parallel computers will be covered. The course will also focus on the fundamentals of assembly language along with an introduction to the microprocessor instruction set.

COMP 201   Data Structures and Algorithms   (3 crs.)

This course introduces the fundamental structures and algorithms for storing, sorting and searching data collections. These fundamentals are presented from a computational problem-solving perspective, with a focus on linking algorithms to programming. The course also covers the basic complexity analysis techniques as well as performance measures for these algorithms through a variety of examples of real-world problems.

COMP 211   Object Oriented Programming   (3 crs.)

The object-oriented programming is a programming approach that centers on objects rather than functions and logic. This course exposes students to object-oriented programming with an emphasis on computer program design and implementation. Introduction to object concepts, describing, declaring, and building user-defined classes and objects, constructors and destructors, inheritance, polymorphism, encapsulation, and function and operator overloading are only some of the topics covered.

COMP 221   Computer Networks   (3 crs.)

The OSI and Internet reference models are used to examine the foundations of computer networks in this course. This course demonstrates the layered architectural principles of communication networks from the top down, with a focus on the Internet and TCP/IP. Client server systems and switching techniques along with stack protocols and socket programming and remote service calls form a core part of the course. Students will learn a rudimentary knowledge of wireless networks and Bluetooth is presented, with a focus on quality of service in communication protocols and network security.

COMP 251   Operating Systems   (3 crs.)

This course covered the fundamentals of operating systems. Operating system fundamentals, scheduling and resource management, virtual memory, file systems, concurrent processing and synchronization, deadlocks, and disk scheduling are the examples of the topics covered. This course includes UNIX programming, with an emphasis on concurrency and inter-process communication (IPC).

COMP 261   Database Management Systems   (3 crs.)

The course would typically cover topics related to relational data model, relational query languages and relational database design. Topics would also include database design, entity relationship modelling, import and export of data, table properties, query and report writing. SQL will be principally emphasized and consistently applied in the delivery of the course.

COMP 271   Introduction to Data Sciences   (3 crs.)

This course provides a theoretical and practical introduction to data science with an emphasis on data management and data analytics. Topics include data collection and integration, data pre-processing, analysis visualization, and privacy. Concepts are presented through practical examples to provide students with an initial hands-on experience with data science projects.

COMP 281   Introduction to Cyber Security   (3 crs.)

Cyber Security courses concerns with technologies, process which used to control and protect systems, networks, devices, programs, and data from cyber-attacks. This course will include software, firewalls, and network frameworks. Students learn cyber security terminologies, protocols, technologies, threat analysis, security mechanisms, security policies, forensics, response cybersecurity incidents and methods or practices to prevent cyber threats.

COMP 301   Software Engineering   (3 crs.)

Software Engineering is the methodical deployment of engineering principles to the production of software. The principles of software engineering are covered in this course, with a focus on the software development process. From the initial specification to system maintenance, software processes, agile approaches, and critical software development activities will be addressed. Formalisms and tools for software development, such as common design diagrams and UML notations, are also discussed. Software testing techniques will be examined, with a focus on software quality assurance. The course will also address IT governance, project management, software security, and professional software engineering practice. For several of these topics, case studies will be provided for practical illustrations.

COMP 311   Random Processes   (3 crs.)

Probability, statistics and random processes are used in many computer science fields such as networks, data science, machine learning, data compression, etc. This course introduces the fundamentals of probability theory and random processes needed by students in computer science discipline. Topics include discrete and continuous random variables, generating functions and transform methods, convergence and limit theorems, random processes; spectral representation, Gaussian processes, Poisson, and birth-death processes; Markov chains, etc.

COMP 351   Artificial Intelligence   (3 crs.)

This course initiates students to the fundamental concepts, approaches and techniques of AI and their practical use to solve real-world problems. These fundamentals are covered in a general way and from a computational problem-solving perspective. Main topics include computational problem-solving

strategies, knowledge representation, uncertain and probabilistic reasoning and learning, and an introduction to robotics.

COMP 361   Linear Systems   (3 crs.)

Linear systems and algebra are extensively used in many areas of computer science including computer graphics, digital image processing, cryptography, machine learning, optimization, quantum computing, computational biology, information retrieval and web search. This course introduces the fundamentals of linear algebra in the context of computer science applications including vector spaces, matrices, linear systems, and eigenvalues. The topics include the basics of floating-point computation and numerical linear algebra, Least squares, LU factorization, QR factorization, and singular value decomposition.

COMP 401   Web Technologies   (3 crs.)

Web technology pertains to the numerous approaches and methodologies used in the course of interaction through the internet among various sorts of technology and devices. This course concentrates on the design and development of internet-based applications, with a particular emphasis on web programming. HTML, CSS, client-side scripting, server-side programming, and XML/web services are among the topics covered. Students will learn how to build a database-driven website and will become familiar with the technologies used at each layer of the web architecture model. This course will also address vital topics such as Internet architecture and web security, which are essential for developing internet-based applications.

COMP 411   IT Ethics & Society   (3 crs.)

The course is designed to acquaint students with knowledge necessary for professional and ethical practice in computer science. It will enable the students to recognize professional and ethical conflicts, be aware of their own responsibilities and propose possible solutions arising out of these conflicts, through professional inferences.

COMP 451   Analytics for Decision Making   (3 crs.)

C and operation research methods play a major role in various fields of industry 4.0 to improve the efficiency of the production and operation management. This course introduces the students to the basic concepts of linear optimization for decision-making. This course focuses on the methods used to convert a problem to a mathematical model that can be solved using a tractable scheme to improve the business outcome by identifying the decision variables, the objective function, and the constraints of a problem. The students will learn how to formulate and solve an optimization problem using appropriate algorithms and techniques.

COMP 499   Final Year Project   (3 crs.)

A Final Year Project is academic work that each undergraduate student must complete individually or as a group in order to graduate. The completion of a semester project that represents and shows the insights obtained during the undergraduate computer science program is obligatory for this course. The final project preferably will be a collaborative task (a group of 2 or 3 students depending on the nature of the project). Prerequisite: Final Semester Students

DATA SCIENCE ELECTIVES

COMP 330   Big Data Analytics   (3 crs.)

This course will provide an overview of the open-source structure Apache Hadoop to proficiently store and process huge datasets. Topics would include introduction to primary data storage system. Students will be introduced with various analytic methods, and tools, technology related to big data analytics.

COMP 331   Data Engineering   (3 crs.)

Data Engineering is about the practice of building systems for collecting, storing, and cleaning data for data scientists and business analysts to interpret. This course introduces the concepts of data engineering, and the tools which are used to keep the data consistent, secure, recoverable, and ready to be used. Students will be introduced to how to design and build systems to collect, store, and to maintain data using relational databases, NoSQL databases and big data infrastructures. They will also learn how to transform data into a useful format for analysis. Building data warehouses and automated data pipelines, and working with massive datasets, will be a major area in this course. Labs and practical examples will include the use of PostgreSQL, Hadoop ecosystem and Spark.

COMP 332   Data Analytics Ethics   (3 crs.)

Data Analytic Ethics is about the ethical consideration (e.g., social values, fairness, privacy, and transparency) of data when it comes to managing and performing analytics activities. This course will address frameworks to analyze and explore ethical and privacy implications of collecting and managing big data. The students will learn applicable theory, guidelines, and recent examples and make use of case studies.

COMP 333   Natural Language Processing   (3 crs.)

This course would introduce basics of natural language processing along with the study of effective contemporary practises and approaches for natural language processing. The primary focus would be to understand the concepts of natural language processing tasks and different algorithms to effectively solve the problems and gauge performance. Basics of information extraction and machine translation would be discussed.

COMP 334   Knowledge Representation   (3 crs.)

The course introduces basics of knowledge representation and reasoning. It will also familiarize other significant emblematic approaches to represent and reason knowledge. Primary focus will be on fragments of first order logic that would be well suited for knowledge representation and to identify relevant reasoning variances. Computational properties of logics, and study algorithms for solving the relevant reasoning problems will also be discussed.

COMP 352   Machine Learning   (3 crs.)

Machine Learning is a fundamental component of modern intelligent systems and data science engineering. This course introduces the main state-of-the-art of supervised, unsupervised and deep machine learning methods and algorithms. It also covers the basic covers theoretical foundations as well as essential algorithms for

supervised and unsupervised learning. It also introduces the basic data pre-processing techniques required for machine learning applications development.

COMP 353   Data Mining   (3 crs.)

Data Mining is the practice of detecting anomalies, patterns, and correlations in big data sets in order to forecast outcomes. The students will learn the principles of data mining in this course. The focus is on the procedures, tools, and algorithms that underpin the concepts' application to real-world scenarios. Prediction, forecasting, clustering, and classification are the main topics addressed in this course. Aspects like association analysis, anomaly and novelty detection, and interactive visualization techniques are also covered. Data mining tools will be introduced in order to improve data mining research skills.

COMP 354   Deep Learning   (3 crs.)

This course will teach you the fundamentals of Deep Learning, how to create neural networks, and how to manage successful machine learning projects. Convolutional networks and other deep learning topics will be covered in this course.

COMP 428   Data Analysis and Visualization   (3 crs.)

This course introduces the fundamental concepts and exploratory techniques for summarizing data and associated visual methods. Exploratory data analysis is a prominent step that precedes formal modeling as it helps to formulate hypotheses and helps develop and informed development of complex data analysis models. The course covers the following topics: basic graphical techniques and tools used in exploratory data analysis, typical statistical methods for exploratory analysis including clustering and dimension reduction techniques that allow you to make graphical displays of high-dimensional data, then focuses on visualization techniques and methods for a broad range of data types.

COMP 429   Business Intelligence Analysis   (3 crs.)

This course would explore the solutions to business problems using techniques used in business intelligence. Starting from core concepts of business intelligence through data warehousing, data mining, data analytics and big data will be discussed along with data management and decision support systems.

COMP 430   Advanced Data Analytics   (3 crs.)

Data analytics is the study of raw data to draw inferences from it. The course explains how to use machine learning and predictive analytics to frame and solve challenges. Several real-world problems will be investigated and solved using analytics techniques. Students will learn how to design a problem, acquire, and clean data, handle missing values, assess descriptive statistics, develop many models, and select the most accurate and interpretable one, and provide insights from model output. This course focuses on using analytics tools and available packages to extract patterns and insights from data and challenges to produce value.

COMP 452   Data Science for Marketing Analytics   (3 crs.)

Data Science for Marketing Analytics covers the different stages of data analytics for segmenting a population of customers. This course provides students with

analytical skills to use data-driven machine learning methods to support decision making and evaluation in marketing. Topics include customer population segmentation using clustering algorithms, revenue prediction using linear regression and applications of the classification algorithms to customer choice modeling.

COMP 453   **Research Topics in Data Analytics**   **(3 crs.)**

The course examines current data analytics research topics, with an emphasis on methodology and approaches for detecting, understanding, and conveying significant patterns in data. Additionally, it entails analyzing data trends for decision making. The course teaches students how to construct and identify research questions within a field, how to choose and apply research methods, how to plan and conduct research investigations, including data collection and analysis, and how to present findings and draw conclusions while relating them to previous work. Additionally, this course features expert lectures on their research and opportunities for student interaction.

COMP 454   **Predictive Modeling**   **(3 crs.)**

Predictive modeling and analytics are prominent fields of data science that involve a wide variety of quantitative methods to analyze data, make predictions and therefore, develop informed decisions. This course introduces the students to the core concepts of predictive analytics by addressing the entire predictive analytics process including preparing and understanding datasets, using exploratory analysis to devise an appropriate machine learning model as well as model evaluation, tuning and performance enhancing.

COMP 489   **Practical Training in Data Science**   **(3 crs.)**

In this course, students are required to complete an internship related to their data science field of study in an organization or company that offers a data science internship program. The internship should give them a real experience and operation of the organization or company. The student should keep a log book for recording his/her daily experiences at work. In addition, every student is required to prepare a report on their industrial experience in data science.

CYBERSECURITY ELECTIVES

COMP 321   **Network Security**   **(3 crs.)**

Stable and efficient network security is of paramount importance in protecting sensitive data over computer networks which cannot be completely immune to attacks. This course introduces the students to the concepts of network security such as authentication, authorization, access control schemes, and the use of cryptography for data and network security. Students are introduced to topics such as firewalls, public key infrastructure, security standards and protocols, virtual private networks, and wireless network security. Students also explore privacy and legal issues, as well as ethics pertaining to network security.

COMP 322   **Software Security**   **(3 crs.)**

This course covers the fundamentals of software security. Topics would include attack methods and techniques, prevent and mitigation strategies, software

vulnerabilities, input validations, buffer overflows, session management, and relevant interrelated areas will be accentuated.

COMP 323   Information and System Security   (3 crs.)

This course introduces the main components of information systems security from both technical and management perspectives. Students will learn the basics of protecting an organization against different types of threats and attacks. Topics include logical and physical security design, security plan implementation and management, and intrusion detection and prevention systems.

COMP 324   Ethical Hacking   (3 crs.)

This course focuses into the why and how of ethical hacking, as well as how it can be used to enhance system security. Students will learn about many types of hackers. Furthermore, this course explores further into the penetration testing lifecycle.

COMP 325   Database Security   (3 crs.)

Database security is a collection of measures for preventing hostile cyber-attacks and illegal access to database management systems. The course covers the fundamentals of database security and auditing. To provide information on features of security, privileges, and profiles, several database scenarios are used and explored. The course will also address the principles of SQL injection as well as security challenges related to database management in the context of web data management. Focusing on trust management and privacy protection, the course will provide a broad view of Database application security models and XML access controls.

COMP 326   Wireless and Mobile Security   (3 crs.)

Wireless and Mobile systems play an important role in our life. The increase in demand on wireless connectivity, and the increased use of Internet of Things presents a new change. This course introduces areas and topics in wireless networks and mobile communication systems. Students will learn how to examine the characterizing aspects of these wireless architectures and learn how to solve the related problems. Students will learn wireless designs, algorithms, protocols, and applications. They will practice how to design and build wireless systems through a research project.

COMP 327   Disaster Recovery and Management   (3 crs.)

Disaster recovery plan is crucial to ensure that an organization or a business can respond timely and efficiently to a disaster (such as severe cyber-attack, natural disaster, etc.) that impacts the continuity of their information systems. This course introduces the students to disaster recovery and virtualization technologies which are directed to the creation of fundamental protocols necessary for the recovery and continuity of a business in response to a major cyber event. Topics covered in this course include contingency planning, Incident Detection and Plan Activation, Business Continuity Planning and Implementation and forensics incident response.

COMP 422   Special Topics in Cyber Security   (3 crs.)

This course would cover emerging and specific set of topics in cybersecurity and will be selected on a need basis by the concerned instructor. In addition, topics related to state of the art and futuristic technologies would be optimally discussed.

COMP 423   Cryptography   (3 crs.)

This course initiates students to the fundamental concepts of cryptography and communication security. It covers the basic cryptanalytic algorithms and techniques from a perspective of designing practical security solutions for real-world problems. Topics include block ciphers, message authentication codes, private and public key encryption, Hash functions and Cryptography digital signatures.

COMP 424   Cyber Security Risk Management   (3 crs.)

Cybersecurity risk management is an essential tool for decision-making at all levels, from tactical to strategic, as well as for developing a shared understanding among individuals from various disciplines or with different objectives. This course takes an interdisciplinary approach. It develops a shared knowledge of risk for a varied group of students from many disciplines such as technical, social, economics, law, and politics to break down communication barriers between strategic, operational, and tactical level decision-makers.

COMP 425   Digital Forensics   (3 crs.)

Digital forensics is the field of forensic science that emphasizes on recovering and investigating data from digital gadgets used in crimes. The course outlines the core technique of data analysis of electronic devices acquired from crime scenes and covers the fundamentals of forensic science. An overview of forensic techniques for securing, handling, and preserving digital and multimedia data is presented. The course will explore the file system basics, file recovery strategies, reporting, and legislation. Students will also create mock crime scenes and digital acquisition reports for a variety of cases involving civil, criminal, and administrative offences.

COMP 426   Cyber Crime Investigation and Forensics   (3 crs.)

Cyber Crime Investigation and Forensics is concerned with investigation and analysis of digital systems and gathering evidence that can be used in the prosecution of internet-based, or cyberspace, criminal activities. This course introduces the digital forensic analysis procedures in computer networks environment. Students will learn the fundamentals of network topologies, protocols, and applications which are used in forensic analysis. This course will focus also on the importance of forensic legal considerations, principles, forensic procedure documentations, and digital evidence controls.

COMP 431   Parallel Computing   (3 crs.)

This course introduces the foundation of parallel computing, where multiple processors work together. In this course students will learn the tools and the techniques used to write, debug, and fix errors for parallel programs to solve a given problem. They also will learn how use parallel architectures, parallel programming methods and techniques and to design parallel algorithms.

COMP 432   Client Server Computing   (3 crs.)

This course will cover a client server underlying building blocks, hardware and architecture. In this course student will learn the basic concepts of client/server computing, Networking, transport protocols, Introduction to operating systems, Client-Server Databases, Socket Programming, Performance and Optimization and Client-Server System security, Distributed System Architecture

COMP 479   Industrial Internship in Cybersecurity   (3 crs.)

In this course, students are required to complete an internship related to their cybersecurity field of study in an organization or company that offers a cybersecurity internship program. The internship should give them real experience and operation of the organization or company. The student should keep a logbook for recording his/her daily experiences at work. In addition, every student is required to prepare a report on their industrial experience in cybersecurity.

6. Diploma in Computer Science Program

6.1. Program Overview

The Diploma in Computer Science is a 60-credit-hour program distributed over two years of study. It is competency oriented as required by the IT industry standards with emphasis on the following concepts:

- Computer Platforms
- System Analysis
- Programming
- Database Design
- Personal Skills Development.

The program strikes a balance between theory and practice. Although it emphasizes practical work, it also covers the theoretical foundations in order to establish adequate links with education at a higher level and keep the students abreast of current knowledge in the field. Students will have hands-on experience with computer hardware, software, and methodologies of software evaluation and development of computer applications with strong emphasis on developing programming skills, including programming for the World Wide Web. In addition, the program follows a modern liberal arts approach by exposing the students to a sound knowledge of general sciences, the arts, study of the Omani culture, mastery of general computing skills, and efficient usage of Arabic and English languages.

Although the Diploma holders may exit the university education with this degree, they will also have opportunities to continue their education to complete a Bachelor of Science in Computer Science if they satisfy the requirements for admission to that program, then most of the credits successfully completed in the diploma program are transferable to the B.Sc program.

6.2. Program Objectives

The objectives of the programs are to:

1) Promote effective learning by exposing students to balanced theoretical and practical experiences that demand thinking and practice;
2) Provide excellent teaching by adopting advanced knowledge in computing and other information and communication technologies and effective teaching practices;
3) Offer the students opportunities to develop careers in computer science and information technology;
4) Prepare students to assume positions in public and private sectors, computer industry, or educational institutions;
5) Offer the graduates opportunities to pursue higher education in computer science;
6) Provide students with solid liberal education, training and appropriate learning skills and values; and
7) Promote life-long independent learning.

6.3. Program Learning Outcomes

Based on the objectives mentioned above, the specific educational outcomes for the programs are by the time of graduation:

1) Mastering knowledge of basic and advanced computer science topics
2) Exhibiting an ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
3) Demonstrating an ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs
4) Having an understanding of appropriate for computer science
5) Demonstrating an ability to locate and use technical information from multiple sources
6) Having an ability to use current techniques, skills, and tools necessary for computing practices
7) Exhibiting an understanding of the links between technology and society
8) Having an ability to participate effectively in a class or project team
9) Having an ability to undertake independent learning
10) Demonstrating an ability to communicate effectively in speech and writing
11) Be prepared to enter a graduate program in Computer Science
12) Having an understanding of professional, ethical and social responsibilities

6.4. Admission Requirements

Admission requirements for a Diploma in Computer Science Program are as specified in **College Section 6-a on page 50.**

6.5. Graduation Requirements

To graduate with a Diploma in Computer Science, students must satisfactorily complete 60 credits taken over two academic years, with an overall minimum average of 65 percent. The university, college, and program requirements are as given in the following table.

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
24	3	27	6	60

6.6. University Requirements

The University requirements for a Diploma in Computer Science program consist of the following eight (8) courses comprising of 24 credit hours:

1) ARAB101: Academic Writing in Arabic
2) ENGL101: Basic Academic English
3) ENGL102C: English for Computer Sciences I
4) ENGL203C: English for Computer Science II
5) ENTR200: Entrepreneurship: Innovation and Creativity
6) CMPS100B: Introduction to Technical Computing for the Sciences
7) MATH199: Calculus I
8) SOCS102: Omani Society

6.7. College Requirement

The College requirement for a Diploma in Computer Science program consists of one (1) course of 3 credit hours chosen from any other major.

6.8. Program Requirements

The program requirements for a Diploma in Computer Science program consists of eleven (11) course encompassing of 33 credit hours distributed as follows.

I) Major Core Courses:

The following nine (9) core course encompassing 27 Credit hours are required:

1) CMPS 110: Introduction to Programming
2) CMPS 160: Data Abstraction
3) CMPS 180: Digital System Design
4) CMPS 215: Computer Organization with Assembly Language
5) CMPS 240: Analysis of Algorithms
6) CMPS 250: Computer Networks
7) CMPS 260: Operating Systems
8) CMPS 270: Database Systems
9) MATH 370: Discrete Mathematics

II) Major Elective Courses:

Two (2) courses encompassing 6 credit hours are chosen from the following set:

1) CMPS 200: Analysis and Design of Information Systems
2) CMPS 205: Introduction to Multimedia Concepts
3) CMPS 210: Digital Image and Video Processing
4) CMPS 225: Introduction to Data Communications
5) CMPS 230: Introduction to System Programming

6) CMPS 235: Numerical Computing
7) CMPS 255: Graphical User Interface
8) CMPS 265: Introduction to Microprocessors
9) CMPS 280: Introduction to Internet Programming & Web Design
10) CMPS 290: Introduction to Database Management
11) CMPS 315: Advanced Programming in C++
12) CMPS 320: Introduction to Computer Security
13) CMPS 340: Advanced Programming in Java

6.9. Plan of Study: Diploma in Computer Science

Year I		
Semester 1 (Fall)	**15 Credits**	
Code	**Course Title**	**Credit Hours**
ARAB 101	Academic Writing in Arabic	3
CMPS 100B	Introduction to Technical Computing for the Sciences	3
CMPS 110	Introduction to Programming	3
ENGL 101	Basic Academic English	3
MATH 199	Calculus I	3
Semester 2 (Spring)	**15 Credits**	
Code	**Course Title**	**Credit Hours**
CMPS 160	Data Abstraction	3
CMPS 180	Digital System Design	3
ENGL 102C	English for Computer Science I	3
MATH 370	Discrete Mathematics	3
SOCS 102	Omani Society	3
Year II		
Semester 3 (Fall)	**15 Credits**	
Code	**Course Title**	**Credit Hours**
CMPS 215	Computer Organization with Assembly Language	3
CMPS 240	Analysis of Algorithms	3
ENGL 203C	English for Computer Science II	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3
Code	Major Elective (Suggested: CMPS200)	3
Semester 4 (Spring)	**15 Credits**	
Code	**Course Title**	**Credit Hours**
CMPS 250	Computer Networks	3
CMPS 260	Operating Systems	3
CMPS 270	Database Systems	3
Code	Major Elective	3
Code	General Elective	3

6.10.   Course Descriptions

CMPS 100A   Introduction to Technical Computing for the Arts   (3 crs)

This course introduces technical computer literacy. Students are expected to learn how computers affect the way we live and work. Students will become familiar with typical software applications such as database application, web page design and publication software. In addition, the course will familiarize with the basics and concepts of multimedia. *Prerequisite: FPT 102B or FPTL 100.* This course is open to arts/engineering students only

CMPS 100B   Introduction to Technical Computing for the Sciences   (3 crs.)

In addition to covering some aspects of CMPS100A like database application and web page design, this course provides an extension to HTML/java scripts. Topics also include programming concepts, using appropriate tool, whereby students will be introduced with concepts like loops and conditional statements. *Prerequisite: FPT 102B*. This course is open to science/business/engineering students only.

CMPS 105   Interlocution to Computer Graphics   (3 crs.)

Through lectures, demonstrations, and practical experiences, the course covers the basics of page layout programs and image handling, utilizing various desktop publishing software programs. An emphasis is placed on graphics for print: posters, brochures, etc. *Prerequisite or Co-requisite: CMPS 100A or CMPS 100B.This course cannot be taken by computer science students*

CMPS 106   Introduction to Web Design   (3crs)

This course introduces the application of graphic design techniques to develop effective, aesthetically, pleasant, and useful websites. It serves as an introduction to the basic principles of web design. Students will learn how to plan and develop well-designed websites that combine effective navigation techniques with the creative use of graphics and typography. They will also learn the appearance of their choices in different browsers and gain a critical eye for evaluating website design. *Prerequisite or Co-requisite: CMPS 100A or CMPS 100B.This course cannot be taken by computer science students.*

CMPS 110   Introduction to Programming   (3 crs.)

Introduction to the methodology of programming and its use in solving a variety of problems with computers. Topics include the introduction of a high level language with emphasis on procedural abstraction, adequate programming style and the concept of algorithm design. *Prerequisite or Co-requisite: CMPS 100A or CMPS 100B.*

CMPS 160   Data Abstraction   (3 crs.)

This course is a continuation of CMPS 110. It emphasizes algorithm design and programming techniques in large programs. It also includes detailed studies of data structures and data abstraction such as queues, linked lists, and trees. The course also offers an introduction to program complexity and verification. *Prerequisite: CMPS 110.*

CMPS 180   Digital System Design   (3 crs.)

This course is an introduction to the digital design of electronic circuits. Digital circuits are employed in the design and construction of systems such as digital computers, data communications, digital recordings and other applications that require digital hardware. The course provides the students with the basic tools for the design of digital circuits as well as the fundamental concepts in the design of digital systems such as combinational logic, synchronous sequential logic, programmable logic and other essential concepts. *Prerequisite: CMPS 100A or CMPS 100B.*

CMPS 200   Analysis and Design of Information Systems   (3 crs.)

This course highlights the main techniques used to model and design information systems. It differentiates between the conceptual, logical, and physical levels of modeling. Using a structured method, it presents the main phases of analysis and design, including requirement analysis, analysis, design, implementation, and testing. In this course, the student will learn the most important techniques of conceptual data modeling (e.g. entity-relation approach) and process modeling (e.g. information flow diagrams). The student will also learn the main techniques of processing design. *Prerequisite or Co-requisite: CMPS 100A or CMPS 100B.*

CMPS 205   Introduction to Multimedia Concepts   (3 crs.)

This course introduces the general concepts of multimedia. Students will learn the principles of graphics, sound, video, and animation. Topics include learning scripting techniques with the most common multimedia programs available to develop and create an interactive multimedia project. *Prerequisite: CMPS 100A or CMPS 100B.*

CMPS 210   Digital Image and Video Processing   (3 crs.)

This course introduces the basic techniques of automated (computer) processing, analysis, and understanding of image/video data. Topics include geometry and physics of image formation, image enhancement, feature extraction, video imagery, and multi-view imagery analysis. *Prerequisite: CMPS 100A or CMPS 100B.*

CMPS 215   Computer Organization with Assembly Language   (3 crs.)

This course deals with the fundamentals of computer organization using assembly language as an aid to studying computer organization. Topics include machine level representation of data, digital logic design, ALU and CPU design, memory system organization and architecture, object code, microprogramming, CISC, RISC, and parallel computers. *Prerequisite: CMPS 180.*

CMPS 230   Introduction to System Programming   (3 crs.)

This course highlights the features of the C language commonly used in systems programming, application to systems programming in a UNIX environment. Topics include C pre-processor macros, I/O, bit-manipulation facilities, timesharing system concepts, file permissions, shell script programming, make files and source code control, basic system calls like fork and exec, pointers and dynamic memory allocation, libraries and relocation and linking concepts including assembler handling of symbol tables. Prior knowledge of a programming language similar to C is presumed. *Prerequisite: CMPS 215.*

CMPS 235   Numerical Computing   (3 crs.)

This course surveys the following areas: set theory, mathematical induction, number theory, relations, functions, algebraic structures and introductory graph theory. The topics to be discussed are fundamental to most areas of and have wide applicability to computer science. *Prerequisite: MATH 370.*

CMPS 240   Analysis of Algorithms   (3 crs.)

This course examines the techniques of designing and analyzing efficient algorithms and advanced data structures. Topics include: asymptotic analysis, divide and conquer, greedy algorithms, dynamic programming, and optimization algorithms. Students will apply the techniques to problems such as searching, sorting, graphs, matrices, and set manipulation. *Co or Prerequisite: CMPS 220*. *Prerequisite: MATH 370*

CMPS 250   Computer Networks   (3 crs.)

This course discusses the foundation of computer networks. It presents a top-down view of the layered architectural elements of communication systems, focusing on the Internet and TCP/IP. Topics include client/server systems, packet switching, protocol stacks, queuing theory, application protocols, socket programming, remote service calls, reliable transport, UDP, TCP, and security. *Prerequisite: CMPS 220 and CMPS 180.*

CMPS 255   Graphical User Interface   (3 crs.)

This course deals with concepts and techniques used in the design and implementation of interactive systems. Topics include interface design guidelines, human factors, technical methods of user interface design, and the design and execution of usability studies. Students will learn how to apply various techniques through designing, creation, and testing of an interactive software application*. Prerequisite: CMPS 220*.

CMPS 260   Operating Systems   (3 crs.)

This course is an overview of operating systems. Topics include: operating system principles, scheduling and resource management, virtual memory, file systems, concurrent processing and synchronization, Deadlocks, and Disk Scheduling. Programming under UNIX is an essential part of this course with the emphasis on concurrency, and inter-process communication (IPC). *Prerequisites: CMPS 215*.

CMPS 265   Introduction to Microprocessors   (3 crs.)

This course covers the historical development of microprocessors including its internal structure, units' functions, and principles of operation. Dealing with synchronous data transfer inside the computers, the pin configuration, and pins functions are covered. The modern technologies of pipelining and parallel processing are also included. *Prerequisite: CMPS 180.*

CMPS 270   Database Systems   (3 crs.)

This course is an introduction to data modeling and various relational models (with relational algebra, and calculus) in a database system. Other topics include: the entity relationship model, SQL and integrity constraints, file organization and index files; and normalization. *Prerequisite: CMPS 220, and MATH 370.*

CMPS 280   Introduction to Internet Programming & Web Design   (3 crs.)
This course provides an introduction to programming on the internet. It covers the "nuts and bolts" of internet programming. In addition to core fundamentals, students are introduced to web page construction, HTML, managing an account on a web server, client-server model, and JavaScript programming. *Prerequisite: CMPS 160.*

CMPS 290   Introduction to Database Management   (3 crs.)
The main objective of this course is to introduce students to fundamentals of database technology by studying databases from three viewpoints: those of the database user, the database designer, and the database administrator. It teaches the use of a database management system (DBMS) by treating it as a black box, focusing only on its functionality and its interfaces. Topics include: introduction to database systems, relational database systems, database design methodology, SQL and interfaces, database application development, concept of transactions, ODBC, JDBC, database tuning, database Administration, and advanced topics (distributed databases, data warehouses, data mining). *Prerequisite: CMPS 270.*

CMPS 315   Advanced Programming in C++   (3 crs.)
This course introduces advanced programming techniques in C++. It is structured in such a way that a good theoretical knowledge and practical experiences are gained in the advanced concepts and features of object-oriented programming. The course covers: An introduction to classes and objects, class functions and constructors, overloaded constructors, public and private access to functions, operators, use of conditional and iterative control statements, accessing arrays subscripts and pointers, inheritance, inherited and overridden functions, use of the stream library functions to access files and use of user defined classes to write object-oriented programs. *Prerequisite: CMPS 160.*

CMPS 320   Introduction to Computer Security   (3 crs.)
This course is an introduction to cryptography and the security of networks and databases. Topics include classical encryption; modern encryption techniques; public key encryption; elliptic curve cryptography; message authentication, message digest functions; and methods for relational database security, including access control. *Prerequisite: MATH 370*

CMPS 340   Advanced Programming in Java   (3 crs.)
This course provides the basic theoretical understanding and the necessary practical experience of advanced Java programming. The topics include: - types, operators and expressions, control flow, IO functions and program structure, Object- Oriented software design techniques, features of the Java language and commonly used application systems programming, testing and debugging techniques, analysis, design and systems software lifecycles. *Prerequisite: CMPS 220.*

a. نبذة مختصرة عن طبيعة البرنامج :

شهد مجال تعليم الطلاب ذوي الإعاقة السمعية في العالم عدة تغيرات خلال العقدين الأخيرين، حيث تم تطبيق برامج الدمج بأشكالها المختلفة، وتقديم خدمات للطلاب ذوي الإعاقة السمعية وزارعي القوقعة، ومن المجالات التي شهدت تغيراً ملحوظاً هو مجال التعليم العالي للأشخاص ذوي الإعاقة السمعية.
إن دبلوم علوم الحاسوب هو برنامج يتكون من 60 ساعة معتمدة موزعة على مدى سنتين من الدراسة. وهدفه الكفاءة كما تتطلبه معايير صناعة تكنولوجيا المعلومات مع التركيز على المفاهيم التالية:
Computer Platforms منصات الحاسوب
System Analysis تحليل الأنظمة
Programming البرمجة
Database Design تصميم قواعد البيانات
Personal Skills Development تنمية المهارات الفردية
إن البرنامج يوازن بين النظرية والممارسة. وعلى الرغم من أنها تؤكد على التطبيق العملي، فإنها تغطي أيضاً الأسس النظرية من أجل إقامة روابط كافية مع التعليم على مستوى أعلى وإبقاء الطلاب على اطلاع دائم بالمعرفة الحالية في هذا المجال. وسوف يتمتع الطلاب بخبرة عملية في مجال معدات الحاسوب وبرامجه ومنهجيات تقييم البرمجيات وتطوير تطبيقات الحاسوب مع التركيز بقوة على تطوير مهارات البرمجة، بما في ذلك برمجة الشبكة العالمية. بالإضافة إلى ذلك، يتبع البرنامج منهج الفنون الليبرالية الحديثة من خلال تعريضه للطلاب إلى معرفة سليمة بالعلوم العامة، والفنون، ودراسة الثقافة العمانية، وإتقان مهارات الحوسبة العامة، والاستخدام الفعال للغات العربية والإنجليزية.

وعلى الرغم من أن حملة الدبلوم يمكنهم الخروج من التعليم الجامعي بهذه الدرجة، إلا أنهم سيتاح لهم أيضاً فرص مواصلة تعليمهم لاستكمال البكالوريوس في العلوم الحاسوبية إذا كانوا يستوفون شروط الالتحاق بذلك البرنامج، ثم يتم تحويل جميع الاعتمادات التي تم إكمالها بنجاح في برنامج الدبلوم إلى برنامج البكالوريوس.

b. أهداف البرنامج :

يهدف برنامج دبلوم العلوم في علوم الحاسوب للطلاب ذوي الإعاقة السمعية إلى:
1 – تعزيز التعلم الفعال من خلال تعريض الطلاب ذوي الإعاقة السمعية للخبرات النظرية والعملية التي تم تكييفها بشكل يتواءم مع خصائص الصم والتي تتطلب التفكير والممارسة.
2 – توفير تعليم متمايز من خلال اعتماد المعرفة المتقدمة في الحوسبة وغيرها من تقنيات المعلومات والاتصالات وممارسات التدريس الفعال.
3 – تقديم فرص للطلاب لتطوير وظائف في علوم الحاسوب وتكنولوجيا المعلومات.
4 – إعداد الطلاب ذوي الإعاقة السمعية للانخراط في سوق العمل.
5 – تقديم فرص للطلاب ذوي الإعاقة السمعية الحاصلين على شهادة الدبلوم العام لمتابعة التعليم العالي في علوم الحاسوب.
6 – تزويد الطلاب ذوي الإعاقة السمعية بالتعليم المناسب لهم والتدريب العملي ومهارات التعليم والتعلم والقيم المناسبة.
7 – تعزيز التعلم المستقل مدى الحياة.
8 - إكساب المتعلم العديد من مهارات الحاسوب، وتطبيقاتها العملية في مجالات الحياة المختلفة.

c. مخرجات التعلم للبرنامج :

بناء على الأهداف المذكورة، يتوقع في نهاية دراستهم للبرنامج تمكّن الطلاب ذوي الإعاقة السمعية من:
1 - إتقان المعرفة بموضوعات علوم الحاسوب الأساسية والمتقدمة.

2 - إظهار القدرة على تصميم وتنفيذ وتقييم نظام قائم على الحاسوب أو عملية أو مكون أو برنامج لتلبية الاحتياجات المطلوبة.

3 - إظهار القدرة على تحديد واستخدام المعلومات التقنية من مصادر متعددة.

4 - القدرة على استخدام التقنيات والمهارات والأدوات الحالية اللازمة لممارسات الحوسبة.

5 - الربط بين التكنولوجيا والمجتمع.

6 - القدرة على إجراء التعلم المستقل.

7 - إظهار القدرة على التواصل الفعال في ضوء أعلى إمكانيات التواصل الكلي وفق إعاقتهم.

8 – امتلاك فهم المسؤوليات المهنية والأخلاقية والاجتماعية

d. شروط القبول بالبرنامج :

1- أن يكون المتقدم للالتحاق بالبرنامج حاصلاً على شهادة دبلوم التعليم العام أو ما يعادلها.

2- إفادة من جهة حكومية تفيد أن الطالب من ذوي الإعاقة السمعية.

3- يكون قد اجتاز بنجاح اختبار تحديد المستوى.

أ- كل الطلاب المقبولين في جامعة ظفار عليهم ان يجروا اختبار تحديد مستوى من قبل وحدة البرنامج التاسيسي بهدف اختبار مستواهم في اللغة الانجليزية والرياضيات وتقنية المعلومات.

ب- بناء على نتائج اختبار تحديد المستوى ينقسم الطلاب إلى قسمين: القسم الأول الطلاب الذين أحرزوا نتائج عالية واثبتوا مستوى متقدم في اللغة الانجليزية والرياضيات وتقنية المعلومات هم مؤهلون للدخول مباشرة في أول سنة من البرنامج. القسم الثاني من الطلاب يحتاجون إلى الالتحاق بالبرنامج التاسيسي لفصل واحد على الأقل لتحقيق المستوى المطلوب اللغة الانجليزية والرياضيات وتقنية المعلومات. هناك ثلاث مستويات في اللغة الانجليزية في البرنامج التاسيسي والطلاب سوف يتم وضعهم في المستوى الذي يحدده اختبار تحديد المستوى.

4- عدم وجود إعاقة أخرى تؤثر على تحصيلهم الأكاديمي.

e. متطلبات التخرج:

أن يجتاز الطالب بنجاح جميع المقررات الدراسية الواردة في الخطة الدراسية واكمال عدد الساعات المطلوبة(60 ساعة معتمدة) كما هي موضحة في الجدول التالي:

مجموع الساعات	متطلبات التخصص		متطلبات الكلية	متطلبات الجامعة
	المتطلبات الاختيارية	المتطلبات الإجبارية		
60	0	33	3	24

f. متطلبات الجامعة:

1. ARAB 101D : الكتابة الأكاديمية باللغة العربية
2. CMPS 100D : مدخل إلى تقنيات الحاسوب للآداب
3. ENGL 101D : اللغة الانجليزية الأكاديمية التأسيسية
4. SOCS 102D : المجتمع العماني
5. ENTR 200D : ريادة الأعمال
6. ENGL102D : اللغة الانجليزية لعلوم الحاسوب 1
7. MATH 199D : التفاضل والتكامل 1

8. ENGL 203D : اللغة الانجليزية لعلوم الحاسوب 2

g. متطلبات الكلية:

مقرر اختياري العلوم الإنسانية والاجتماعية: يختار الطالب مقرراً واحداً

h. متطلبات التخصص:

1. CMPS 110D : مدخل إلى البرمجة – المستوى الأول
2. CMPS 160D : بنية البيانات
3. CMPS180D : تصميم النظم الرقمية
4. MATH 370D : الرياضيات المتقطعة
5. CMPS 215D : تنظيم الحاسوب و لغة التجميع
6. CMPS 240D : تحليل الخوارزميات
7. CMPS 245D : البرمجة كائنية التوجه
8. CMPS 250D : شبكات الحاسب الآلي
9. CMPS 260D : أنظمة التشغيل
10. CMPS 270D : نظم قواعد البيانات
11. CMPS 285D : ربط قاعدة البيانات بالويب باستخدام ASP.net

i. جدول الخطة الدراسية :

	السنة الأولى	
15ساعة	**الفصل الدراسي الأول (خريف)**	
الساعات التدريسية	عنوان المقرر	رمز ورقم المقرر
3	الكتابة الأكاديمية باللغة العربية	ARAB 101D
3	مدخل إلى تقنيات الحاسوب للعلوم	CMPS 100D
3	مدخل إلى البرمجة – المستوى الأول	CMPS 110D
3	اللغة الانجليزية الأكاديمية التأسيسية	ENGL 101D
3	التفاضل والتكامل 1	MATH 199D
15 ساعة	**الفصل الدراسي الثاني (ربيع)**	
الساعات التدريسية	عنوان المقرر	رمز ورقم المقرر
3	بنية البيانات	CMPS 160D
3	تصميم النظم الرقمية	CMPS 180D
3	اللغة الانجليزية لعلوم الحاسوب 1	ENGL 102D
3	الرياضيات المتقطعة	MATH 370D
3	المجتمع العماني	SOCS 102D
	السنة الثانية	
15ساعة	**الفصل الدراسي الثالث (خريف)**	
الساعات التدريسية	عنوان المقرر	رمز ورقم المقرر
3	تركيب الحاسوب مع لغة التجميع	CMPS 215D
3	تحليل الخوارزميات	CMPS 240D
3	اللغة الانجليزية لعلوم الحاسوب 2	ENGL 203D
3	ريادة الاعمال: الابتكار والإبداع	ENTR 200D
3	البرمجة كائنية التوجه	CMPS 245D

الفصل الرابع (ربيع)		15 ساعة
رمز ورقم المقرر	عنوان المقرر	الساعات التدريسية
CMPS 250D	شبكات الحاسوب	3
CMPS 260D	نظم التشغيل	3
CMPS 270D	نظم قواعد البيانات	3
CMPS 285D	ربط قاعدة البيانات بالويب باستخدام ASP.net	3
	مقرر اختياري عام	3
مجموع الساعات المعتمدة للبرنامج ككل		**60**

j.   توصيف المقررات الدراسية

ARAB 101D الكتابة الأكاديمية باللغة العربية

يركز هذا المساق على دراسة العناصر الأساسية في الكتابة الأكاديمية العربية، ويشمل: الجمل التامة، والفقرات، والمقالات والأبحاث الأكاديمية، والتقارير المهنية، والرسائل الرسمية. ويتوجب على الطلبة إظهار قدرات متقدمة في إنتاج وكتابة نصوص أكاديمية صحيحة.

CMPS 100D مدخل لتقنيات الحاسوب للعلوم

يتضمن هذا المساق مفاهيم البرمجة باستخدام الأداة المناسبة، حيث سيتم تعريف الطلاب بمفاهيم حلقات البرمجة (loops) والتعليمات المشروطة. كما يقوم المساق بتغطية بعض جوانب المساق CMPS100A مثل تطبيق قاعدة البيانات وتصميم صفحات الويب البسيطة، و توفير الامتداد للبرامج المعرفية كمقدمة لـHTML/Java

CMPS 110D مدخل إلى البرمجة – المستوى الأول

يتناول هذا المساق مدخلا إلى طرق البرمجة واستخدامها لحل مسائل متنوعة بالحاسوب ، ويشمل مدخلا إلى دراسة لغة برمجة متقدمة، مع التركيز على التجريد الإجرائي، وعلى أسلوب برمجة واف وعلى مفهوم التصميم الخوارزمي.

ENGL 101D Basic Academic English

Consistent with its aim of enabling first year students in the university departments to become efficient communicators in English Language, this course scaffolds with their knowledge, skills and competence developed in Level 3 of the Foundation Program and continues to build on their language and study skills. This integrated skills course is designed to develop the Sign Language-based skills of the students so that they can understand English in a range of contexts and express thoughts, opinions, and a range of language functions to users of English and other languages with sufficient clarity and accuracy of language. The course also aims at enabling the students to develop into self-dependent/autonomous learners by exposing them to a range of learning techniques and strategies, critical thinking, basic study skills in order to increase their academic, professional, and employment potential.

MATH 199D التفاضل والتكامل1

يتناول المقرر حساب التفاضل والتكامل لمتغير واحد: النهايات، والمتوالية، والاشتقاق، قاعدة التسلسل، الحد الأقصى والحد الأدنى، وتخطيطات المنحنيات، نظرية Rolle ، التكامل عن طريق الاستبدال، التكاملات المحددة مع تطبيقات في المساحة، الأحجام وطول الأقواس، النظرية الأساسية في التفاضل والتكامل، الدالات الأسية واللوغاريتمية، دوال النسب المثلثية، ومعادلات الهندسة المستوية التحليلية في الفضاء.

CMPS 160D بنية البيانات

يركز المقررعلى تصميم الخوارزميات وعلى تقنيات البرمجة للبرامج الكبيرة. كما يتضمن دراسة معمقة للمعطيات وتجريدها وطريقة بنائها كصفوف البيانات واللوائح المتصلة والتشجيرات، ويقدمّ للطلبة ايضا مدخلاً إلى تعقيد البرامج والتحقق.

CMPS180D تصميم النظم الرقمية

يوفر المساق للطلبة أدوات أساسية لتصميم دوائر رقمية، كما يوفر مفاهيم أساسية في تصميم الأنظمة الرقمية كالمنطق التجميعي والمنطق المتسلسل المتزامن، والمنطق المبرمج ومفاهيم أخرى أساسية. ويتناول المساق مدخلاً إلى التصميم الرقمي للدوائر الإلكترونية. تستخدم الدوائر الإلكترونية في تصميم وبناء أنظمة أخرى كالحواسيب الرقمية وإيصال المعطيات، والتسجيل الرقمي وتطبيقات أخرى تتطلب استخدام أدوات رقمية.

ENGL 102D English For Computer Science I

The main aim of this course is to improve students' professional communication skills for the content and tasks to which they will be exposed to in their courses related to their field of study. Scaffolding with the knowledge, skills and competence developed in ENGL 101D, this course is designed to improve specialist language knowledge and communication skills of the students studying and working in the fields of Computer Science and Information Technology and enable them to work more confidently and effectively. The course content covers topics common to the fields of Computer Science, and the classroom tasks and activities range from understanding, talking and discussing about a wide range of topics and issues related to computers, information technology and the multimedia, reflecting about changes in the fields of computers and information technology to working with a set of authentic situations and scenarios that provide problem-solving practice in the field. The course also aims at enabling the students to develop into self-dependent/autonomous learners by exposing them to a range of learning techniques and strategies, critical thinking, basic study and research skills in order to increase their academic, professional, and employment potential.

يحتوي هذا المساق على المنطق، المجموعات، العلاقات والوظائف، الحساب النمطي، الاستقراء الرياضي، علاقات التكرار ، طرق العد ، استبعاد التضمين ، نظرية ذات الحدين ، الاحتمال الأولي ، مقدمة عن الرسوم البيانية والأشجار ، الخوارزميات العودية ، وبعض الجبر البولي.

SOCS 102D المجتمع العماني

يتناول المقرر المعارف الخاصة بتاريخ سلطنة عمان القديم والمعاصر، والسمات الراهنة للمجتمع العماني، ولا سيما الهيكل الاجتماعي والفئات الاجتماعية، والثقافية، وكذلك النظام الإداري والسياسي السائد في سلطنة عمان، وعملية التغير الاجتماعي وتنمية المجتمعات المحلية.كما يتضمن الحديث فلسفة التعليم ومراحله في سلطنة عمان، وتطور التعليم والجهود المبذولة لتطوير التعليم، وتطور النظام الصحي في عمان.

CMPS 215D تنظيم الحاسوب و لغة التجميع

يتناول هذا المساق اسس تنظيم الحاسوب مستخدما لغة التجميع التي تساعد على دراسة نظام الحاسوب. تشتمل المواضيع على تقديم المعطيات على مستوى الآلة، ورسم الحاسبة الآلية الرقمية المنطقية، تصميم وحدة المعاجلة المركزية ووحدة المنطق الحسابية، وتنظيم وبناء نظام الذاكرة، والكود الكائني، والبرمجة المصغرة، والحاسوبية المعقدة الأوامر، والحاسوبية مبسطة الأوامر، واستخدام أجهزة الحاسوب المتوازية.

CMPS 240D تحليل الخوارزميات

يتناول المقرر دراسة تقنيات تصميم الخوارزميات المؤثرة وتحليلها وبنيات البيانات المتقدمة، ويشمل الموضوعات التالية:التحليل المتقارب، والتصنيف الجذري المعكوس، وخوارزميات حل المشكلات، والبرمجة الحركية ، حيث يطبق الطلبة التقنيات على مشكلات عدة، مثل: البحث والتصنيف، والرسوم، والمصفوفات، والتعامل بالمجموعات.

ENGL 203D English For Computer Science II

This course builds on the knowledge, skills and competence developed in ENGL 102 C and further continues to improve students' professional communication skills for the content and tasks to which they will be exposed to in their courses related to their field of study. The course is designed to improve specialist language knowledge and communication skills of the students studying and working in the fields of Computer Science and Information Technology and enable them to work more confidently and effectively. The course content covers topics common to the fields of Computer Science, and the classroom tasks and activities range from understanding, talking and discussing about a wide range of topics and issues related to computers, information technology and the multimedia, reflecting about changes in the fields of computers and information technology to working with a set of authentic situations and scenarios that provide problem-solving practice in the field. The course also aims at enabling the students to develop into self-dependent/autonomous learners by exposing them to a range of learning techniques and strategies, critical thinking, basic study and research skills in order to increase their academic, professional, and employment potential

ENTR 200D ريادة الأعمال: الابتكار والإبداع

يوفر هذا المقرر منهجاً يمكن الطالبات لاستكشاف ريادة الأعمال كموضوع دراسة وكذلك كممارسة، حيث أصبحت ريادة الأعمال واحدة من أقوى قوة للتغيير في العالم. يهدف المقرر إلى توفير فهم أساسي لأهم المفاهيم والعمليات ذات الصلة في مجال ريادة الأعمال بالإضافة إلى التدريب العملي، يتضمن المقرر موضوعات أهمية ريادة الأعمال، ودراسة الجدوى، ونموذج الأعمال، وخطة العمل، وفهم مفهوم الفرصة، وأنواع مختلفة من ملكية الأعمال الموجودة في سلطنة عمان، بالإضافة إلى التطبيقات العملية والزيارات الميدانية.

CMPS 245D البرمجة كائنية التوجه

يتناول هذا المساق مدخلا إلى طرق البرمجة الشيئية واستخدامها لحل مسائل متنوعة بالحاسوب، ويشمل مدخلا إلى دراسة لغة برمجة Java، مع التركيز على تعلم آليات كتابة واختبار وتصحيح البرامج الموجهة للكائنات باستخدام لغة برمجة Java

CMPS 250D شبكات الحاسب الآلي

يتناول هذا المساق مبادئ أساسيات شبكة الحاسوب. يقدّم نظرة فوقية إلى طبقة خطوط الأنظمة التواصلية المعمارية، يركّز على برتوكول اتصاالت الانترنت، يشتمل أيضا على أنظمة عميلة /الخوادم، وبروتوكول شبكة تحويل الحزم، نظرية التصفيف، وتطبيقات البروتوكولات، وبرمجة مميز الخدمة والنقل الموثوق، وبروتوكولات يو دي بي، وتي سي بي، والحماية.

CMPS 260D أنظمة التشغيل

يُعدّ المساق بمثابة النظرة العامة على أنظمة التشغيل، ويشمل مبادئ نظام التشغيل، والجدولة وإدارة الموارد، والذاكرة الظاهرية، وأنظمة الملفات، والمعالجة المتزامنة والمزامنة، وجدولة القرص. تعتبر البرمجة ضمن UNIX جزءًا أساسيًا من هذا المساق مع التركيز على الاتصالات المتزامنة والاتصالات بين العمليات IPC

CMPS 270D نظم قواعد البيانات

يُعدّ هذا المساق مقدمة لنمذجة البيانات والنماذج العلائقية المختلفة (مع الجبر العلائقي والحسبان) في نظام قاعدة البيانات، ويشمل مواضيع متعددة كنموذج علاقة الكيان، وقيود SQL والتكامل، وتنظيم الملفات وملفات الفهرس؛ والتطبيع.

CMPS 285D ربط قاعدة البيانات بالويب باستخدام ASP.net

يهدف هذا المقرر لإعداد الطلاب لاكتساب المهارات العملية لبناء تطبيقات الويب الديناميكية باستخدام ASP.NET

Department of Education

1. Personnel

Chairperson:	Sobhy Ahmed Soliman
Professor:	Nasser Abdelrasheed, Abdelkader El Sayed.
Associate Professors:	Khalid Almashikhi, Sobhy Suliman, Mosleh Almajaly, Yousef Al Barami, Raed Abdelkarim.
Assistant Professors:	Moosa Ahmed Bait Ali Suliman, Sumaya Al Barami, Said Kashoob, Alaa Ali Aladini, Mahamoud Jalambo, Hesham Abdelmageed, Sabah Alsyed, Sabah Assi, Jamila AL Jaadi.
Lecturer:	Ashraf Darwish, Fatema Ba-O
Secretary:	Muna Ahmed AL Zawamri

2. Vision

The Education Department makes every effort to provide programs of study and research contributions to qualify to be amongst the best in the Sultanate of Oman.

3. Mission

The Education Department provides its students with the knowledge and skills that qualify them to be successful teachers and educational administrators in their fields of specialization. It encourages them to conduct research in their fields, learn independently, and develop themselves as students, teachers and administrators. Moreover, it encourages them to think critically and get involved in their society's activities to participate actively in its development and progress.

4. Programs Offered

The department offers following Bachelor programs, Master programs and Postgraduate Diploma:

a) Bachelor Program

1) Bachelor of Education (B.Ed.) in:
   - Teaching English Language
   - Teaching Mathematics
   - Teaching Information Technology
   - Bachelor of Education: Teacher of Field I
   - Bachelor of Education: Teacher of Field II

b) Master Programs

1) Master of Education : Teaching English as a Foreign Language (TEFL)
2) Master of Education in Educational Leadership
3) Master of Education in Psychological Counseling
4) Master of Education in General Curriculum and Instruction

(Details of Master Programs are given in Graduate Studies Catalogue)

c) Postgraduate Diploma

    1) Teaching Diploma

    (Details of Postgraduate Diploma are given in Graduate Studies Catalogue)

5. Bachelor of Education Program

5.1. Program Overview

The Bachelor of Education (B.Ed.) curriculum includes 30 credit hours of university requirements, 6 credit hours of college requirements, and 84-86 credit hours of major requirements (depending on the choice of major), including language and technical writing courses. Administration and emphasis on Education are important elements that are integrated throughout the curriculum. It is designed to grant students the Bachelor of Education degree upon the successful completion of the four-year program.

The program offers a wide range of courses in the subject matter specialization, psychology of learning, teaching methodology, which optimize meaningful learning by students, using information and communication technologies in education and practicum in school settings.

5.2. Program Objectives

The objectives of the Education Program are to:

    1) provide students with quality education and content pedagogy that will prepare them to become productive teachers in schools and responsible professionals and citizens;

    2) prepare caring and reflective teachers who are critical thinkers, problem-solvers, and can easily adapt to the changes in the relevant fields of knowledge;

    3) prepare teachers who respect their cultural heritage, understand the main issues of modern society, and appreciate the role that both play in the lives of students;

    4) provide students with solid liberal education, training and appropriate learning skills and values; and

    5) promote life-long independent learning.

5.3. Program Learning Outcomes

By the end of their studies, students at the Education Department will be able to:

    1) teach successfully in public and private schools;

    2) carry out different activities in their schools;

    3) participate in their society's development and activities;

    4) participate in the administration of their schools and other activities related to the MOE;

    5) think critically in their lives and participate in the development of their schools;

    6) carry out research that benefits their schools and society;

    7) be aware of up-to-date pedagogy that qualifies them to be productive teachers;

    8) continue to develop themselves as life-long learners; and

    9) prepare them to become responsible and productive citizens in Oman.

5.4. Admission Requirements

The General Admission requirements for a Bachelor of Education Program are as specified in **College Section 6-a on page 50.**

Program Specific Admission Requirements

The program specific admission requirements for the Bachelor of Education Program are as per the Ministry of Higher Education, Scientific Research and Innovation regulations given below:

1. The student obtaining a General Diploma or its equivalent.
2. The student's overall GPA in the General Diploma or its equivalent should not be less than 80%.
3. Priority is given to the outputs of the General Education Diploma or its equivalent for the current academic year.
4. The applicant must be medically fit for the teaching profession.
5. Passing the personal interview conducted by the university's specialized committee.
6. Selection among applicants is based on their GPAs, starting from the highest.
7. Bachelor of Education - English Language: The student's GPA should not be less than 70% in English language (males/females).
8. Bachelor of Education – Mathmeamtics: The student's GPA should not be less than 70% in English language (males/females).
9. Bachelor of Education – Mathmeamtics: The student's GPA should not be less than 70% in in pure mathematics and the GPA should not be less thatn 65% in English language. (males/females).
10. Bachelor of Education – Teaching Information Technology: The student's GPA should not be less than 70% in in pure or applied mathematics and the GPA should not be less thatn 65% in English language.
11. Bachelor of Education – Teacher of Field I: The student's GPA should not be less than 70% in Arabic language, Islamic studies, and social studies (females).
12. Bachelor of Education – Teacher of Field II: The student's GPA should not be less than 70% in pure mathematics and the GPA should not be less thatn 70% in Chemistry, Physics and Biology. (females).

Equivalency students holding a previous academic certificate (Diploma or Bachelor's) are required to:

Hold a previous academic certificate related to the desired specialization from the educational disciplines, where some subjects can be equated according to the conditions and criteria applied by the university, provided that the equating does not exceed 50% of the requirements for obtaining the academic degree, and the GPA should not be less than 2.3 out of 4.00.

Graduation Requirements

To graduate with a Bachelor of Education Degree, students must satisfactorily complete 120-122 credit hours, depending on the specialisation, taken over four academic years, with an overall minimum average of 65 percent, and a cumulative average of 70 percent in the major courses. The university, college, and program requirements are as given in the following table.

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
30	6	69-77	9-15	120-122

5.5. University Requirements

The University requirements consist of the following ten (10) courses comprising of 30 credit hours:

1) ARAB101: Academic writing in Arabic
2) ENGL101: Basic Academic English
3) ENGL 102 A: English for Arts, Humanities and Social Sciences I
4) ENGL 203 A: English for Arts, Humanities and Social Sciences II
5) ENGL204: Advanced English for academic purposes and research
6) ENGL305: Advanced English language and communication skills
7) ENTR200: Entrepreneurship: Innovation and Creativity
8) CMPS 100A: Introduction to Technical Computing for the Arts or CMPS 100B: Introduction to Technical Computing for the Sciences (teaching Mathematics and Information Technology).
9) MATH 103: for Social Sciences I or MATH 199: Calculus I for Teaching Mathematics
10) SOCS102: Omani Society

5.6. College Requirements

The College requirement consist of following two (2) courses comprising 6 credit hours for English, Math, Science, and IT.

- One (1) course in physical/natural sciences electives (3 Cr. hrs.)
- One (1) course in humanities/social sciences electives (3 Cr. hrs.)

5.7. Program Requirements

I) Required Education Courses:

The following set of ten (10) Education courses encompassing 30 credit hours is required in all Specializations:

1) EDUC 120: Learning and Child Development
2) EDUC 150: Introduction to Foundations of Education
3) EDUC 300: Curriculum Development and Analysis
4) EDUC 320: Instructional Methods and Strategies
5) EDUC 360: Educational Systems in Oman and the GCC Countries
6) EDUC 365: Information and Communication Technologies (ICT) in Education
7) EDUC 420: Introduction to Research Methodology in Education
8) PSYC 150: Intro
9) duction to Psychology

**II)	Elective Education Courses:**

English Language, Sciences, and Information Technology specializations are required to choose two (2) courses encompassing 6 credit hours, and Math specialization is required to choose one (1), 3 Credit hours course from the list of elective education courses given below.

1)	EDUC 200: Introduction to Guidance and Counseling
2)	EDUC 205: Introduction to Special Education
3)	EDUC 210: Children's Literature
4)	EDUC 250: Education in Islam
5)	EDUC 260: Environmental Education
6)	EDUC 305: Approaches to Integration in Education
7)	EDUC 310: Visual Arts Education
8)	EDUC 355: Behavior Modification
9)	EDUC 370: Learning Difficulties
10)	EDUC 400: Professional Development in Education
11)	EDUC 425: Foundations of Health Education
12)	EDUC 430: Educational Administration
13)	EDUC 460: Senior Seminar: Issues in Education

## 5.8.	Specialization Requirements

### a)	Teaching English Language

This specialization consists of 15 Courses encompassing 48 Credit hrs distributed as follows.

**I)	Required Specialized Education Courses**

This set includes six (6) courses encompassing 21 Credit Hours as follows:

1)	EDUC 303E: School Visits and Classroom Observation in EFL & ESL
2)	EDUC 350E: Methods of Teaching EFL& ESL I
3)	EDUC 410E: Methods of Teaching EFL& ESL II
4)	EDUC 440E Assessment and Evaluation in teaching EFL& ESL
5)	EDUC 485E: Practicum in Teaching EFL& ESL
6)	EDUC 490E: Senior Project: Teaching EFL & ESL

**II)	Required Subject Courses**

This set includes eight (8) courses encompassing 24 Credit Hours chosen from the following list:

1)	ENGL 120: Grammar in Context
2)	ENGL 160: Introduction to Literature
3)	ENGL 210: Introduction to Linguistics
4)	ENGL 215: Phonetics and Phonology
5)	ENGL 230: Prose Fiction in English
6)	ENGL 270: Situational English
7)	ENGL 285: Writing Workshop
8)	ENGL 265: Culture in the Classroom

III) Elective Subject Courses

This set includes three (3) courses encompassing 9 Credit Hours chosen from the following list

1) ENGL 345: Morphology
2) ENGL 240: Introduction to Language
3) ENGL 255: Psycholinguistics
4) ENGL 260: Shakespeare
5) ENGL 275: Rhetoric
6) ENGL 280: Business English
7) ENGL 315: The Novel
8) ENGL 350: Advanced Writing for Humanities
9) ENGL 355: Sociolinguistics
10) ENGL 440: Special Topic in Literature or Language
11) TRAN 150: Introduction to Translation
12) TRAN 220: Translation Theory
13) TRAN 250: Contrastive Analysis
14) TRAN 260: Translation Techniques

b) Teaching Mathematics

This specialization consists of 18 Courses encompassing 53 Credit hrs distributed as follows**:**

I) Required Specialized Education Courses

This set includes four (6) courses encompassing 21 Credit Hours chosen from the following list

1) EDUC 303M: School Visits and Classroom Observation: Teaching Mathematics
2) EDUC 350M: Methods of Teaching I
3) EDUC 410M: Methods of Teaching II
4) EDUC 440M: Assessment and Evaluation in teaching
5) EDUC 485M: Practicum in Teaching
6) EDUC 490M: Senior Project: Teaching Mathematics

II) Required Subject Courses

This set includes twelve (12) courses encompassing 32 Credit Hours chosen from the following list

1) CHEM 130: Chemical Principles I
2) CHEM 130L: Introductory Chemistry Laboratory
3) MATH 200: Calculus II
4) MATH 205: Calculus III
5) MATH 210: Differential Equations
6) MATH 240: Computer Applications I
7) MATH 250: Probability and Statistics
8) EDUC 290: for Teacher
9) MATH 260: Numerical Analysis I
10) MATH 320: Linear Algebra I
11) PHYS 170: Fundamentals of Physics I
12) PHYS 170L: Introductory Physics Laboratory

III) Elective Subject Courses

This set includes two (2) courses encompassing 6 credit hours chosen from the following list

1) MATH 120: Geometry and Trigonometry
2) MATH 204: for Social Sciences II
3) MATH 215: Elementary Statistics for Social Sciences
4) MATH 305: Advanced Calculus
5) MATH 355: Statistical Inference
6) MATH 370: Discrete

Elective Subject Courses

This set includes two (2) courses encompassing 6 credit hours chosen from the following list

1) MATH 120: Geometry and Trigonometry
2) MATH 204: for Social Sciences II
3) MATH 215: Elementary Statistics for Social Sciences
4) MATH 305: Advanced Calculus
5) MATH 370: Discrete
6) MATH 280: Computer Applications II
7) MATH 335: Mathematics for Science and Engineering
8) MATH 390: Differential Equations II

c) Teaching Information Technology

This specialization consists of 15 Courses encompassing 48 credit hours distributed as follows.

I) Required Specialized Education Courses

This includes six (6) courses encompassing 21 credit hours chosen from the following list:

- EDUC 303C: School Visits and Classroom Observation: Teaching Information Technology
- EDUC 350C: Methods of Teaching Information Technology I
- EDUC 410C: Methods of Teaching Information Technology II
- EDUC 440C: Assessment and Evaluation in teaching Information Technology
- EDUC 485C: Practicum in Teaching Information Technology
- EDUC 490C: Senior Project: Teaching Information Technology

II) Required Subject Courses

This includes nine (9) courses encompassing 27 credit hours chosen from the following list

- EDUC 110: Introduction to Educational Technology
- EDUC 160: Introduction to Instructional Design
- EDUC 180: Instructional Computer
- EDUC 185: Learning Resources & Technology Centers
- EDUC 215: Designing and Producing Multimedia
- EDUC 220: Individualized Instruction
- CMPS 250: Computer Networks

- CMPS 260: Operating Systems
- CMPS 270: Database Systems

III) Elective Subject Courses

This includes two (2) courses encompassing 6 credit hours chosen from the following list

- CMPS 200: Analysis and Design of Information Systems
- CMPS 205: Introduction to Multimedia Concepts
- CMPS 210: Digital Image and Video Processing
- CMPS 225: Introduction to Data Communications
- CMPS 230: Introduction to System Programming
- CMPS 235: Numerical Computing
- CMPS 265: Introduction to Microprocessors
- CMPS 290: Introduction to Database Management
- CMPS 420: Internet Programming & Web Design
- EDUC 450: Distance Learning and Use of Internet

5.9. Plan of Study

I. Teaching English Language

Year I		
Semester 1 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ARAB 101	Academic Writing in Arabic	3
CMPS 100A	Introduction to Technical Computing for the Arts	3
MATH 103	for Social Sciences I	3
ENGL 101	Basic Academic English	3
ENGL 120	Grammar in Context	3
Semester 2 (Spring)		**15 Credits**
Code	**Course Title**	**Credit Hours**
EDUC 150	Introduction to Foundations of Education	3
ENGL 102A	English for Arts, Humanities & Social Science I	3
ENGL 160	Introduction to Literature	3
EDUC 120	Learning and Child Development	3
PSYC 150	Introduction to Psychology	3
Year II		
Semester 3 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 203A	English for Arts, Humanities & Social Science II	3
ENGL 210	Introduction to Linguistics	3
ENGL 215	Phonetics and Phonology	3
ENGL 230	Prose Fiction in English	3
SOCS 102	Omani Society	3

Semester 4 (Spring)		15 Credits
Code	**Course Title**	**Credit Hours**
ENGL 204	Advanced English for Academic Purposes & Research	3
ENGL 270	Situational English	3
ENGL 285	Writing Workshop	3
ENGL 265	Culture in Classroom	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3

Year III		
Semester 5 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
EDUC 300	Curriculum Development and Analysis	3
EDUC 303E	School Visits and Classroom Observation in EFL & ESL	3
EDUC 320	Instructional Methods and Strategies	3
Code	English Major Elective	3
Code	Physical/Natural Sciences Elective	3
Semester 6 (Spring)		**15 Credits**
Code	**Course Title**	**Credit Hours**
EDUC 360	Educational Systems in Oman and the GCC Countries	3
EDUC 365	Information and Communication Technologies (ICT) in Education	3
EDUC 350E	Methods of Teaching EFL & ESL I	3
Code	Major Education Elective	3
Code	English Major Elective	3
Year IV		
Semester 7 (Fall)		**18 Credits**
Code	**Course Title**	**Credit Hours**
EDUC 420	Introduction to Research Methodology in Education	3
ENGL 305	Advanced English Language and Communication Skills	3
EDUC 440E	Assessment and Evaluation in Teaching EFL & ESL	3
EDUC 410E	Methods of Teaching EFL & ESL II	3
Code	English Major Elective	3
Code	Humanities & Social Science Elective	3
Semester 8 (Spring)		**12 Credits**
Code	**Course Title**	**Credit Hours**
EDUC 485E	Practicum in Teaching EFL & ESL	6
EDUC 490E	Senior Project: Teaching EFL & ESL	3
Code	Major Education Elective	3

II. Teaching Mathematics

Year I	
Semester 1 (Fall)	**15 Credits**

Code	Course Title	Credit Hours
ARAB 101	Academic Writing in Arabic	3
CMPS 100B	Introduction to Technical Computing for the Sciences	3
EDUC 120	Learning and Child Development	3
ENGL 101	Basic Academic English	3
MATH 199	Calculus I	3

Semester 2 (Spring)		16 Credits
Code	Course Title	Credit Hours
CHEM 130	Chemical Principles I	3
CHEM 130L	Introductory Chemistry Laboratory	1
EDUC 150	Introduction to Foundations of Education	3
ENGL 102A	English for Arts, Humanities & Social Science I	3
MATH 200	Calculus II	3
PSYC 150	Introduction to Psychology	3

Year II		

Semester 3 (Fall)		16 Credits
Code	Course Title	Credit Hours
ENGL 203A	English for Arts, Humanities & Social Science II	3
MATH 205	Calculus III	3
MATH 210	Differential Equations	3
PHYS 170	Fundamentals of Physics I	3
PHYS 170L	Introductory Physics Laboratory	1
MATH 240	Computer Applications I	3

Semester 4 (Spring)		15 Credits
Code	Course Title	Credit Hours
ENGL 204	Advanced English for Academic Purposes & Research	3
MATH 250	Probability and Statistics	3
EDUC 290	for Teacher	3
MATH 260	Numerical Analysis I	3
SOCS 102	Omani Society	3

Year III		

Semester 5 (Fall)		15 Credits
Code	Course Title	Credit Hours
EDUC 300	Curriculum Development and Analysis	3
EDUC 303M	School Visits and Classroom Observation: Teaching Mathematics	3
EDUC 320	Instructional Methods and Strategies	3
MATH 320	Liner Algebra I	3
Code	Major Elective	3

Semester 6 (Spring)		15 Credits
Code	Course Title	Credit Hours
EDUC 360	Educational System in Oman and GCC Countries	3
EDUC 365	Information and Communication Technologies in Education	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3

| EDUC 350M | Methods of Teaching Mathematics I | 3 |
| Code | Major Elective | 3 |

Year IV		
Semester 7 (Fall)		**18 Credits**
Code	**Course Title**	**Credit Hours**
EDUC 420	Introduction to Research Methodology in Education	3
ENGL 305	Advanced English Language and Communication Skills	3
EDUC 440M	Assessment and Evaluation in Teaching Mathematics	3
EDUC 410M	Methods of Teaching Mathematics II	3
Code	Major Elective	3
Code	Humanities & social Science Elective	3
Semester 8 (Spring)		**12 Credits**
Code	**Course Title**	**Credit Hours**
EDUC 485M	Practicum in Teaching Mathematics	6
EDUC 490M	Senior Project: Teaching Mathematics	3
Code	Major Education Elective	3
Completion of the B. Ed. In Education - Total Credits 122		

III) Teaching Information Technology

Year I		
Semester 1 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
EDUC 120	Learning and Child Development	3
CMPS 100B	Introduction to Technical Computing for the Sciences	3
EDUC 110	Introduction to Educational Technology	3
ENGL 101	Basic Academic English	3
MATH 103	for Social Sciences I	3
Semester 2 (Spring)		**15 Credits**
Code	**Course Title**	**Credit Hours**
EDUC 150	Introduction to Foundations of Education	3
EDUC 160	Introduction to Instructional Design	3
EDUC 180	Instructional Computer	3
ENGL 102A	English for Arts, Humanities & Social Science I	3
EDUC 185	Learning Resources & Technology Centers	3
Year II		
Semester 3 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
PSYC 150	Introduction to Psychology	3
EDUC 215	Designing and Producing Multimedia	3
EDUC 220	Individualized Instruction	3
ENGL 203A	Advanced Academic English I	3
SOCS 102	Omani Society	3

Semester 4 (Spring)		15 Credits
Code	**Course Title**	**Credit Hours**
ARAB 101	Academic Writing in Arabic	3
CMPS 250	Computer Networks	3
CMPS 260	Operating Systems	3
CMPS 270	Database Systems	3
ENGL 204	Advanced English for Academic Purposes & Research	3
Year III		
Semester 5 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
EDUC 300	Curriculum Development and Analysis	3
EDUC 303C	School Visits and Classroom Observation: Teaching Information Technology	3
EDUC 320	Instructional Methods and Strategies	3
ENGL 305	Advanced English Language and Communication Skills	3
Code	Physical/Natural Sciences Elective	3
Semester 6 (Spring)		**15 Credits**
Code	**Course Title**	**Credit Hours**
EDUC 360	Educational Systems in Oman and the GCC Countries	3
EDUC 365	Information and Communication Technologies (ICT) in Education	3
EDUC 350C	Methods of Teaching Information Technology I	3
Code	Major Education Elective	3
Code	Computer Science Major Elective	3
Year IV		
Semester 7 (Fall)		15 Credits
Code	**Course Title**	**Credit Hours**
EDUC 420	Introduction to Research Methodology in Education	3
EDUC 410C	Methods of Teaching Information Technology II	3
EDUC 440C	Assessment and Evaluation in Teaching Information Technology	3
Code	Computer Science Major Elective	3
Code	Humanities and Social Science Elective	3
Semester 8 (Spring)		**15 Credits**
Code	**Course Title**	**Credit Hours**
EDUC 485C	Practicum in Teaching Information Technology	6
EDUC 490C	Senior Project: Teaching Information Technology	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3
Code	Major Education Elective	3
Completion of the B.Ed. in Information Technology - Total Credits 120		

5.10. Course Descriptions

EDUC 110   Introduction to Educational Technology   (3 credits)

This course includes the concepts of educational technology, its theoretical and philosophical foundations, the components of the field of educational technology, and the roles and function of each component. In addition, this course covers the historical development of the field of educational technology, the elements that contributed to its application; and highlights the professional ethics of the practice of educational technology.

EDUC 120   Learning and Child Development   (3 credits)

Introduction to theories of instruction, intelligence, child development, learning and behavior management. Implications of these theories for classroom teaching.

EDUC 150   Introduction to Foundations of Education   (3 credits)

Brief history of major factors that influenced the development of modern education. The philosophical, psychological, and social backgrounds of education with focus on the Arabic culture and the goals of the educational systems in the Sultanate of Oman and the GCC countries.

EDUC 160   Introduction to Instructional Design   (3 credits)

This course aims to familiarize students with the methods of educational programs. The course provides an overview about the concept and importance of educational programs and their relationship to the educational theories. It also gives an introduction to system approach and it compares a range of educational methods for educational program design by analyzing their main components such as needs analysis, leaner need analysis, concept and task analysis and by selecting the teaching strategies and the summative evaluation of the educational materials.

EDUC 180   Instructional Computer   (3 credits)

The course introduces students to the various applications of computers in education; and reviews the historical developments of the process of using educational computer applications in a variety of settings. The course also discusses the role of computers as a tool for the development of critical and creative thinking; collaborative computer work and the study of computer learning environments are emphasized in detail.

EDUC 185   Learning Resources & Technology Centers   (3 credits)

The course aims at preparing students to manage, enhance, and improve the quality of the services in Learning Resources & Technology Centers. It also explains in detail the different types of management of these centers. The course also discusses different ways to encourage teachers to adopt modern technology in teaching and student learning.

EDUC 200   Introduction to Guidance and Counseling   (3 credits)

An introduction to school guidance and counseling. Emphasis is on the role of guidance counselors in school and community settings. *Prerequisite: EDUC 120.*

EDUC 205   Introduction to Special Education   (3 credits)

An introduction to the various types of exceptionality. Educational characteristics of children with learning disabilities, emotional disturbance, mental retardation, speech, visual, and hearing impairment, and giftedness. *Prerequisite: EDUC 120.*

EDUC 210   Children's Literature   (3 credits)

Survey of the classics and contemporary children's literature of various genres. Topics include child development in relation to children's literature, poetry, fairy tales, epics, myths and legends, fantasy, fiction, nursery rhymes, ABC/counting and picture books. Using children's literature as an effective means to encourage reading enjoyment and self-expression is particularly stressed.

EDUC 215   Designing and Producing Multimedia   (3 credits)

The course reviews the characteristics of the software, and emphasizes the principles of design, production, selection, applications and assessment. Also, it discusses multimedia learning projects, and examines authoring programs such as Authorware, Hyper card, Tool box. It also compares and analyzes some of the multimedia educational software systems where students design and produce interactive programs as course requirements. Prerequisite: EDUC 160

EDUC 220   Individualized Instruction   (3 credits)

The course covers the definition of individual Instruction, its importance and types, with emphasis on programed learning, personal systems of education, games and educational simulation, personal programed tutoring, audio learning systems, collaborative learning, self-study programs and their applications in the learning process.

EDUC 250   Education in Islam   (3 credits)

This course examines the approach of Islam to education and the history of educational systems in Islamic societies.

EDUC 260   Environmental Education   (3 credits)

The basic concepts of the environment from economic, cultural, and religious point of views. The need to preserve the environment locally and internationally to secure continuity of the human race. The local environmental problems and suggested solutions. The role of schools and educational systems to spread environmental awareness and improve environment friendly behaviors.

EDUC 290: Math for Teachers   (3 credits)

The course aims to provide the students with basic skills of school. The course includes the following topics: Mathematical logic principles, methods of proof, groups and relationships, groupings, loops, fields, applications and binary operations, geometric transformations, coordinates, vectors: circle, ellipse, parabola, etc., space geometry.

EDUC 300   Curriculum Development and analysis   (3 credits)

Principles of curriculum development and techniques to analyze and select curricula that is appropriate to stated goals and objectives. Focus is on the Omani curriculum at its various stages. *Prerequisite: EDUC 320.*

EDUC 303   School Visit and Classroom Observation   (3 credits)

Visiting schools and getting acquainted with various aspects of school organization, structure, administration, teachers' duties, and the relationship between teachers and administrators. Students will be distributed in groups according to their area of specialization. *Prerequisite: One Methods Course*.

EDUC 305   Approaches to Integration in Education   (3 credits)

Approaches to the integrated curriculum and construction of integrated thematic units. Building, analyzing, and critiquing models of integration are emphasized. Developing interdisciplinary units of learning; involving parents and community; communicating effectively with children within their unique stages of development.

EDUC 310   Visual Arts Education   (3 credits)

Teaching visual art in the elementary school with focus on the techniques of teaching painting, drawing, paste modeling, and constructing visual products out of various media. Focus is on leading children to develop their creative thinking. The course includes observation and practice in actual classrooms.

EDUC 320   Instructional Methods and Strategies   (3 credits)

Exploration of known strategies and techniques of teaching, and learning. Essential teaching skills with focus on developing thinking abilities. Discussing the most commonly known theories and models such as Social Interaction Model, the Inductive Model, the Problem based Learning, Cooperative Learning, and Direct-Instruction Model. *Prerequisite: EDUC 150.*

EDUC 350E   Methods of Teaching EFL & ESL I   (3 credits)

Theoretical background and supervised teaching of English as a foreign language at the elementary and intermediate levels. Focus is on developing competencies in material development, instructional planning, classroom management, and methodology of teaching English as a foreign language in the elementary school. The course includes observation and application of these competencies in field settings. Micro teaching is an integral component. *Prerequisite or co-requisite: EDUC 320.*

EDUC 350M   Methods of Teaching I   (3 credits)

Theoretical background and supervised teaching of in the elementary school. Focus is on developing competencies in instructional material development, instructional planning, classroom management, and methodology of teaching. The course includes observation and application of these competencies in field settings. Microteaching is an integral component. *Prerequisite or co-requisite: EDUC 320.*

EDUC 350C   Methods of Teaching Information Technology I   (3 credits)

Theoretical background and supervised teaching of Information Technologyat the intermediate level. Focus is on developing competencies in material development, instructional planning, classroom management, and methodology of teaching science. The course includes observation and application of these

competencies in field settings. Microteaching is an integral component. *Prerequisite or co-requisite: EDUC 320.*

EDUC 355   Behavior Modification   (3 credits)

The meaning and psychological concepts that are associated with behavior. The distinction between normal and abnormal behaviors. The theoretical framework of behavior modifications in light of analytical and cognitive models with focus on the most common behavioral problems such as shyness, aggression, drug abuse, adolescent delinquency, and the role of family and school in this regard.

EDUC 360   Educational Systems in Oman and the GCC   (3 credits)
**   Countries**

An in-depth analysis of the educational systems in Oman and the GCC, its components and philosophy with special emphasis on input quality standards and the process of output transmission to the markets equipped with the necessary skills to complete at regional and international levels. Case studies and applied examples are used. *The course may be offered in Arabic.*

EDUC 365   Information and Communication Technologies   (3credits)
**   (ICT) in Education**

An introduction of how to use technology in the classroom. Focuses on teaching and managing classroom activities using Information and Communication Technologies (ICT), evaluating the effectiveness of educational software, integrating the Internet in teaching, and developing basic educational applications such as digital presentations and educational websites.

EDUC 370   Learning Difficulties   (3 credits)

The basic concept and the foundations of classifying learning difficulties from biological and cognitive points of views. Focus is on the most common learning difficulties in the classroom such as speech irregularities and difficulties in writing and self-expression.

EDUC 400   Professional Development in Education   (3 credits)

Models of professional development in educational settings. Topics include theories of professional development in education, continuous improvement in teaching, expanded leadership roles for all teachers, providing peer assistance, and supervision for professional growth. Designing and evaluating a professional development plan.

EDUC 410E   Methods of Teaching EFL& ESL II   (3 credits)

A further development of the methods of teaching English as a second language at the elementary and intermediate levels that were studied in EDUC 350A. Focus is on curriculum analysis and the selection and evaluation of relevant textbooks and other support materials including computer software, and audio-visual materials. *Prerequisite: EDUC 350E.*

EDUC 410M   Methods of Teaching II   (3 credits)

A further development of the methods of teaching at the elementary and intermediate levels that were studied in EDUC 350B. Focus is on curriculum

analysis and the selection and evaluation of relevant textbooks and other support materials including computer software, and audio-visual materials. *Prerequisite: EDUC 350M.*

EDUC 410C   Methods of Teaching Information Technology II   (3 credits)
A further development of the methods of teaching Information Technology at the elementary and intermediate levels that were studied in EDUC 350C. Focus is on curriculum analysis and the selection and evaluation of relevant textbooks and other support materials including computer software, and audio-visual materials. *Prerequisite: EDUC 350C.*

EDUC 420   Introduction to Research Methodology in Education   (3 credits)
The importance of research in education. The basic qualitative and quantitative research methods that are suitable to education. Classroom-based research (Action Research) and its importance in improving classroom practices. The basic data collection techniques. Data types and basic data analysis techniques including frequency distributions, cross-tabulations, correlation, and hypothesis testing.

EDUC 425   Foundations of Health Education   (3 credits)
The foundation for improving health through modification of daily habits. Analysis of nutrition, exercise, and environmental health is emphasized. The characteristics of a healthy environment and health curriculum in schools.

**EDUC 430   Educational Administration and Classroom   (3 credits)
                 Management**
The school structure and its relationship with central educational administration. Educational supervision and leadership with focus on the Omani environment in light of some international experiences. Classroom management and teacher relationship with the school administration.

EDUC 440E   Assessment and Evaluation in Teaching EFL& ESL   (3 credits)
Principles and procedures of assessment of learning English as a second language at the elementary and intermediate levels. Focus is on types of test items such as multiple choice, fill-in the blank, true and false, short answers, and essays in norm- and criterion referenced assessment; standardized tests and how to construct and administer tests. In addition, the course covers observation techniques, performance measures and alignment of assessment and instruction along with related current issues and controversies. Prerequisite: EDUC 320.

EDUC 440M   Assessment and Evaluation in Teaching   (3 credits)

Principles and procedures of assessment of learning at the intermediate level. Focus is on types of test items such as multiple choice, fill-in the blank, true and false, short answers, and essays in norm- and criterion-referenced assessment; standardized tests and how to construct and administer tests. In addition, the course covers observation techniques, performance measures and alignment of assessment and instruction along with related current issues and controversies. *Prerequisite: EDUC 320.*

EDUC 440C   Assessment and Evaluation in Teaching   (3 credits)
Information Technology

Principles and procedures of assessment of learning Information Technology at the elementary and intermediate levels. Focus is on types of test items such as multiple choice, fill-in the blank, true and false, short answers, and essays in norm- and criterion-referenced assessment; standardized tests and how to construct and administer tests. In addition, the course covers observation techniques, performance measures and alignment of assessment and instruction along with related current issues and controversies. *Prerequisite: EDUC 320.*

EDUC 450   Distance Learning and Use of Internet   (3 credits)

The course aims to introduce students to the basics of distance learning. Also, it focuses on the importance, objectives and requirements that are conceded as important aspects in this course. In addition, this course reviews the design process of distance learning materials, as well as the introduction of teleconferencing technology. The course also covers the objectives, principles, and structure of the network applications and historical development of teaching/learning process. The course also explains other issues, such as: the principles of web page design, and the various approaches to shaping, managing, and evaluating web-based learning materials.

EDUC 460   Senior Seminar: Issues in Education   (3 credits)

A seminar intended for majors in elementary education focusing on one or more current issues in elementary education. *Senior Standing*.

EDUC 485E   Practicum in Teaching EFL& ESL   (6 credits)

Experience in classroom settings under the supervision of university instructors and cooperating schoolteachers. *Prerequisite: EDUC 410E*

EDUC 485M   Practicum in Teaching   (6 credits)

Experience in classroom settings under the supervision of university instructors and cooperating schoolteachers. *Prerequisite: EDUC 410M*

EDUC 485C   Practicum in Teaching Information Technology   (6 credits)

Experience in classroom settings under the supervision of university instructors and cooperating schoolteachers. *Prerequisite: EDUC 410C*

EDUC 490   Senior Project   (3 credits)

Methods and concepts of action research. Action research is presented as a reflective process used by practicing classroom teachers to identify and solve problems of importance in the classroom. The course includes an action research project. The course should be taken only in the spring semester of the fourth year.

6. Bachelor of Education: Teacher of Field I

6.1- نظرة عامة على البرنامج

يعد تخصص المجال الأول من التخصصات الرئيسة في الصفوف (1- 4) بمدارس التعليم الأساسي في سلطنة عُمان، إذ يتضمن تدريس منهاج اللغة العربية، والتربية الإسلامية، والدراسات الاجتماعية، ويتضمن الكثير من المهارات والمعارف التي تجعل المتعلم هو محور العملية التعليمية، وإكسابه مهارات القرن الواحد والعشرين واكسابه القدرة على التعلم مدى الحياة.

وفي ضوء نتائج دراسة الجدوى توضح الإحصائيات حاجة وزارة التربية والتعليم بشكل عام ومحافظة ظفار بشكل خاص لمعلمات المجال الأول لتزويد المدارس بمعلمات في تخصص المجال الأول نظرا لانخفاض نسبة التعمين في هذا التخصص، وعدم استقرار الهيئة التدريسية الوافدة في المدارس بسبب التنقلات وانتهاء فترة الإعارة أو التعاقد، مما يتسبب في هدر جهود وزارة التربية والتعليم فيما يتعلق بتدريب هؤلاء المعلمات على مستجدات الحقل التربوي وتطلعاته، وهو ما ينعكس سلبيا على المستوى التحصيلي للمتعلمين في المجال الأول. من هنا رأت الجامعة أهمية إدراج برنامج المجال الأول في جامعة ظفار بكلية الآداب والعلوم التطبيقية (قسم التربية) لتلبية حاجة وطنية في إثراء الحقل التربوي بمعلمات متخصصات في هذا المجال ليحملن رسالة سامية في تعليم الجيل الواعد الذي سوف يحافظ على نهضة عُمان ويكمل مسيرة التنمية في هذا الوطن الغالي. وقد حرصت الجامعة عند إعدادها برنامج (بكالوريوس التربية: معلم مجال أول)، على مراعاة المتطلبات والمحاور المعمول بها في مثل هذه البرامج. يتضمن البرنامج عدداً من المقررات تنحصر في 42 مقررا بواقع 132 ساعة معتمدة، موزعة ما بين المقررات الأكاديمية، والتربوية، والثقافية. جاء هذا البرنامج تلبية لرغبة قطاع كبير من خريجي شهادة دبلوم التعليم العام في الالتحاق بهذا التخصص.

6.2- أهداف البرنامج

يهدف البرنامج إلى:

1) رفد سوق العمل بكوادر تعليمية في المجال الأول للتدريس في الحلقة الأولى من التعليم الأساسي.

2) إعداد معلم مجال أول قادر على تحمل المسؤولية والتطوير الذاتي، ويمتلك القيم الجوهرية، والسلوك المهني والأخلاقي لمهنة التعليم في سلطنة عمان.

3) إكساب المتعلم المعارف والخبرات الأكاديمية والتربوية في مجالات اللغة العربية، والتربية الإسلامية، والدراسات الاجتماعية، بما يحقق له ممارسات مهنية وتربوية فعالة في الحلقة الأولى من التعليم الأساسي.

4) تزويد المتعلم باستراتيجيات وأساليب القياس والتقويم المناسبة لمجالات اللغة العربية، والتربية الإسلامية، والدراسات الاجتماعية في الحلقة الأولى من التعليم الأساسي.

5) إكساب المتعلم أساسيات البحث التربوي في مجالات اللغة العربية، والتربية الإسلامية، والدراسات الاجتماعية، لتطوير العملية التعليمية في الحلقة الأولى من التعليم الأساسي.

6) تمكين المتعلم من توظيف تكنولوجيا التعليم في تدريس اللغة العربية، والتربية الإسلامية، والدراسات الاجتماعية في الحلقة الأولى من التعليم الأساسي.

7) تزويد المتعلم بسيكولوجية الأطفال، وسماتهم الشخصية، وأساليب التعامل معهم، وكذلك صعوبات التعلم التي يواجهونها في تلك المرحلة العمرية

8) امتلاك المتعلم لمهارات القرن الحادي والعشرين والتطورات المستقبلية العالمية ذات الصلة بالمواد الدراسية للمجال الأول.

9) تزويد المتعلم بأهم الأسس التي تقوم عليها فلسفة التعليم والتشريعات والقوانين والأنظمة التربوية في سلطنة عمان، خاصة فيما يتعلق بالحلقة الأولى من التعليم الأساسي.

10) تعزيز الاتجاهات الإيجابية لدى المتعلم بما يتوافق مع متطلبات التطوير التربوي المعاصر في الحلقة الأولى من التعليم الأساسي.

6.3- مخرجات التعلم للبرنامج

من المتوقع بعد نهاية البرنامج أن يكون الخريج قادراً على:

1. توظيف المعلومات والمعارف والخبرات الخاصة بالمقررات الدراسية في تدريس مواد المجال الأول بالحلقة الأولى من التعليم الأساسي.
2. توظيف نظريات التعلم، وطرائق واستراتيجيات التدريس المناسبة للمواد الدراسية في المجال الأول بالحلقة الأولى من التعليم الأساسي.
3. تحليل وتطوير المناهج المدرسية في مجالات اللغة العربية، والتربية الإسلامية، والدراسات الاجتماعية، بما يتماشى مع الاتجاهات المحلية والعالمية المعاصرة.
4. توظيف وبناء أساليب وأدوات القياس والتقويم المناسبة لمجالات اللغة العربية، والتربية الإسلامية، والدراسات الاجتماعية في الحلقة الأولى من التعليم الأساسي.
5. إجراء البحوث الإجرائية لمعالجة مشكلات التعليم والتعلم في الحلقة الأولى من التعليم الأساسي، متبعاً في ذلك الأساليب العلمية والمنهجية الصحيحة.
6. توظيف المستحدثات التعليمية في تدريس اللغة العربية، والتربية الإسلامية، والدراسات الاجتماعية في الحلقة الأولى من التعليم الأساسي بما يحقق التواصل بينه وبين طلابه، وتحقيق الإنجاز المطلوب.
7. تحديد سيكولوجية الأطفال، وسماتهم الشخصية، وصعوبات التعلم التي يواجهونها في تلك المرحلة العمرية، والتغلب عليها بشكل فعال.
8. ممارسة مهارات القرن الحادي والعشرين والتطورات المستقبلية العالمية ذات الصلة بالمواد الدراسية للمجال الأول.
9. ممارسة كافة المهام والأنشطة التعليمية وغير التعليمية في مدارس الحلقة الأولى من التعليم الأساسي.
10. الاستمرار في تحمل المسؤولية، والتطوير الذاتي كمتعلم مدى الحياة.
11. المشاركة في تنمية المجتمع العماني لتحقيق المواطنة الفاعلة.
12. ممارسة أخلاقيات مهنة التعليم، والقيم الجوهرية في الحياة المهنية والعامة.

6.4- متطلبات القبول

1. أن لا يقل معدل الطالب في دبلوم التعليم العام أو ما يعادله عن 80% .
2. حصول الطالب على معدل 70% في المواد التالية: التربية الاسلامية، اللغة العربية، الدراسات الاجتماعية.
3. ألا يزيد عمر المتقدم في الأول من سبتمبر من العام الاكاديمي الذي سيتقدم فيه بالطلب عن (30) ثلاثين سنة.
4. اجتياز البرنامج التأسيسي.
5. اجتياز المقابلة الشخصية من قبل اللجنة المختصة في الجامعة.

علماً بأن آلية التقدم للبرنامج خاضعة لسياسة القبول والتسجيل واشتراطات وزارة التعليم العالي والبحث العلمي والابتكار.

6.5- متطلبات التخرج

متطلبات الجامعة	متطلبات الكلية	متطلبات التخصص		مجموع الساعات
		المتطلبات الإجبارية	المتطلبات الاختيارية	
15	6	108	3	132

6. 6- متطلبات الجامعة:

1. ARAB 101 : الكتابة الأكاديمية باللغة العربية
2. CMPS 100A : مدخل إلى تقنيات الحاسوب للآداب
3. ENGL 101 : اللغة الإنجليزية التأسيسية الأكاديمية - المستوى الأول
4. SOCS 102 : المجتمع العماني
5. ENTR 200 : ريادة الأعمال

6.7- متطلبات الكلية:

1. مقرر اختياري العلوم الإنسانية والاجتماعية: يختار الطالب مقرراً واحداً
2. مقرر اختياري العلوم الفيزيائية والطبيعية: يختار الطالب مقرراً واحداً

6.8- متطلبات التخصص:

أولا: متطلبات التخصص الاجبارية:

1. EDUC 120 : التعلم وتطور الطفل
2. SOST 150 : مدخل لتاريخ عمان والوطن العربي
3. ARAB 102 : قواعد اللغة العربية
4. ISLAM 150 : القرآن الكريم (الحفظ والتجويد والتفسير)
5. EDUC 150 : أسس التربية
6. ARAB 103 : مقدمة في الأدب العربي
7. ISLAM 160 : مدخل لعلوم الحديث والسيرة النبوية
8. EDUC 170 : علم النفس التربوي
9. ISLAM 270 : مدخل إلى العقيدة الإسلامية
10. SOST 260 : جغرافية عمان والوطن العربي
11. EDUC 250 : التربية في الإسلام
12. ARAB 202 : نحو 1
13. ISLAM 280 : الأخلاق والأسرة في الإسلام
14. SOST 270 : قضايا عالمية معاصرة
15. ARAB 205: المعجم والمصطلحات
16. ARAB 206 : البلاغة العربية
17. ISLAM 290 : فقه العبادات
18. EDUC 300F1 : تطوير وتحليل المناهج الدراسية – مجال أول
19. EDUC 375 : تكنولوجيا التعليم
20. EDUC 320 : إجراءات تقديمية
21. EDUC 301 : الاضطرابات السلوكية والانفعالية عند الطفل
22. EDUC 350F1 : طرائق واستراتيجيات تدريس المجال الأول -1
23. EDUC 353F1 : التدريس المصغر- مجال أول
24. EDUC 355F1 : تربية عملية1 – مجال أول
25. EDUC 360 : نظام التعليم في عمان ودول مجلس التعاون الخليجي
26. EDUC 380 : أخلاقيات مهنة التعليم
27. EDUC 430 : الإدارة التربوية وإدارة الصف
28. EDUC 420F : البحث الإجرائي

29. EDUC 440F1 : القياس والتقويم في التربية- مجال أول
30. EDUC 450F1 : طرائق واستراتيجيات تدريس المجال الأول- 2
31. EDUC 455F1 : تربية عملية 2- مجال أول
32. EDUC 460F1 : طرائق واستراتيجيات تدريس المجال الأول- 3
33. EDUC 485F1 : تربية عملية 3 – مجال أول
34. EDUC 490F1 :مشروع التخرج – مجال أول

ثانيا متطلبات التخصص الاختيارية:

مقرر اختياري تربية: يختار الطالب مقرراً واحداً من المقررات التالية:

1. EDUC 200 : مدخل إلى التوجيه والإرشاد
2. EDUC 205 : مدخل الى التربية الخاصة
3. EDUC 210: أدب الأطفال
4. EDUC 260: التربية البيئية
5. EDUC 305: مداخل التكامل في التربية
6. EDUC 310: التعليم البصري
7. EDUC 355: تعديل السلوك
8. EDUC 370: صعوبات التعلم
9. EDUC 400: التطوير المهني في التربية
10. EDUC 425: أسس التربية الصحية
11. EDUC 460: حلقة نقاش: قضايا في التربية

6.9-الخطة الدراسية

الساعات التدريسية المعتمدة	عنوان المقرر	رمز المقرر
السنة الدراسية الأولى (33 ساعة)		
15	الفصل الدراسي الأول	
3	الكتابة الأكاديمية باللغة العربية	ARAB 101
3	مدخل إلى تقنيات الحاسوب للآداب	CMPS 100A
3	التعلم وتطور الطفل	EDUC 120
3	اللغة الانجليزية الأكاديمية التأسيسية	ENGL 101
3	مدخل لتاريخ عمان والوطن العربي	SOST 150
18	الفصل الدراسي الثاني	
3	قواعد اللغة العربية	ARAB 102
3	القرآن الكريم (الحفظ والتجويد والتفسير)	ISLAM 150
3	أسس التربية	EDUC 150
3	مقدمة في الأدب العربي	ARAB 103
3	مدخل لعلوم الحديث والسيرة النبوية	ISLAM 160
3	علم النفس التربوي	EDUC 170

	السنة الدراسية الثانية (36 ساعة)	
18	الفصل الدراسي الثالث	
3	مدخل إلى العقيدة الإسلامية	ISLAM 270
3	جغرافية عمان والوطن العربي	SOST 260
3	التربية في الإسلام	EDUC 250
3	نحو 1	ARAB 202
3	الأخلاق والأسرة في الإسلام	ISLAM 280
3	المجتمع العماني	SOCS 102
18	**الفصل الدراسي الرابع**	
3	قضايا عالمية معاصرة	SOST 270
3	المعجم والدلالة	ARAB 205
3	البلاغة العربية	ARAB 206
3	فقه العبادات	ISLAM 290
3	ريادة الأعمال	ENTR 200
3	اختياري/ العلوم الإنسانية والاجتماعية	Code
	السنة الدراسية الثالثة (33 ساعة)	
15	الفصل الدراسي الخامس	
3	تطوير وتحليل المناهج الدراسية – مجال أول	EDUC 300F1
3	تكنولوجيا التعليم	EDUC 375
3	نظريات واستراتيجيات التدريس العامة	EDUC 320
3	الاضطرابات السلوكية والانفعالية عند الطفل	EDUC 301
3	اختياري/ العلوم الطبيعية والفيزيائية	Code
18	الفصل الدراسي السادس	
3	طرائق واستراتيجيات تدريس المجال الأول 1-	EDUC 350F1
3	التدريس المصغر- مجال أول	EDUC 353F1
3	تربية عملية1 – مجال أول	EDUC 355F1
3	نظام التعليم في عمان ودول مجلس التعاون الخليجي	EDUC 360
3	أخلاقيات مهنة التعليم	EDUC 380
3	الإدارة التربوية وإدارة الصف	EDUC 430
	السنة الدراسية الرابعة (30 ساعة)	
15	الفصل الدراسي السابع	
3	البحث الإجرائي	EDUC 420F

3	القياس والتقويم في التربية- مجال أول	EDUC 440F1
3	طرائق واستراتيجيات تدريس المجال الأول- 2	EDUC 450F1
6	تربية عملية 2- مجال أول	EDUC 455F1
15	الفصل الدراسي الثامن	
3	طرائق واستراتيجيات تدريس المجال الأول- 3	EDUC 460F1
6	تربية عملية 3 – مجال أول	EDUC 485F1
3	مشروع التخرج – مجال أول	EDUC 490F1
3	اختياري/ تربية	Code
مجموع الساعات: 132 ساعة معتمدة		

6.10-توصيف المقررات

ARAB 101 الكتابة الأكاديمية باللغة العربية   (3ساعات معتمدة)

يركز هذا المساق على دراسة العناصر الأساسية في الكتابة الأكاديمية العربية، ويشمل: الجمل التامة، والفقرات، والمقالات والأبحاث الأكاديمية، والتقارير ث، والرسائل الرسمية. ويتوجب على الطلبة إظهار قدرات متقدمة في إنتاج نصوص أكاديمية صحيحة.

CMPS100A مدخل لتقنيات الحاسوب للعلوم   (3ساعات معتمدة)

يقدم هذا المساق المعرفة التقنية الحاسوبية. من المتوقع أن يتعلم الطلاب كيف تؤثر أجهزة الكمبيوتر على طريقة حياتنا وعملنا. سيصبح الطلاب على دراية بتطبيقات البرامج النموذجية مثل تطبيق قواعد البيانات وتصميم صفحات الويب وبرامج النشر. بالإضافة إلى ذلك ، كما سيغطي المقر أساسيات ومفاهيم الوسائط المتعددة. هذا المقرر مُتاح لطلاب الآداب / الهندسة فقط.

EDUC 120 التعلم وتطور الطفل   (3ساعات معتمدة)

يحتوى المقرر على مقدمة حول مفهوم النمو ومراحله، والنظريات المرتبطة بالتدريس والذكاء والتطور النمائي للأطفال مع التركيز على جوانب نظريات التعلم وإدارة السلوك وتأثيراتها على عملية التعليم داخل الصف.

Basic Academic English ENGL 101   (3ساعات معتمدة)

Consistent with its aim of enabling first year students in the university departments to become efficient communicators in English Language, this course scaffolds with their knowledge, skills and competence developed in Level 3 of the Foundation Program and continues to build on their language and study skills. This integrated skills course is designed to develop the listening, speaking, reading and writing skills of the students so that they can understand English in a range of contexts and express thoughts, opinions, arguments and a range of language functions to speakers of English and other languages with sufficient clarity and accuracy of language and pronunciation. The course also aims at enabling the students to develop into self-dependent/autonomous learners by exposing them to a range of learning techniques and strategies, critical thinking, basic study and research skills in order to increase their academic, professional, and employment potential.

SOST150 مدخل لتاريخ عُمان والوطن العربي　　　(3ساعات معتمدة)

يتناول هذا المقرر تاريخ العرب قبل الميلاد والهجرات السامية، والحضارات العربية الجنوبية، الديانات العربية القديمة، العلاقات التاريخية بين العرب والأمم الأخرى، الدور الحضاري للعرب، دور العرب في الحضارة الإنسانية. كما يتضمن تعريف الطالبات بتاريخ العماني الحديث والمعاصر بكل متغيراته وأوضاعه السياسية والاجتماعية والفكرية والثقافية وأثرة على الحضارة الإسلامية وأفريقيا وحتى الاستقلال. وتاريخ العرب الحديث والمعاصر بدءاً من السيطرة العثمانية على الوطن العربي عام 1516-1517م، والأوضاع السياسية والاقتصادية والاجتماعية والفكرية والثقافية، واليقظة العربية، وسقوط الدولة العثمانية، وتاريخ الجزيرة العربية (السعودية، الكويت، البحرين، قطر، إمارات ساحل عمان) منذ بداية الحماية البريطانية حتى الاستقلال، وتاريخ المغرب العربي منذ بداية الاستعمار الأوروبي (الفرنسي، الإيطالي، الإسباني) وحتى الاستقلال

ARAB 102 قواعد اللغة العربية　　　(3ساعات معتمدة)

يتناول هذا المقرر المبادئ الأساسية في قواعد اللغة العربية، فيعرف الطالب بمستويات اللغة بصورة عامة كالمستوى الصوتي والمستوى الصرفي والمستوى النحوي والمستوى الدلالي. ثم يتناول مبادئ علم الصرف من خلال التركيز على الميزان الصرفي وأوزان الفعل ومعاني الزيادة. أما في علم النحو فيركز بصورة أساسية على دروس أقسام الكلام والمبني والمعرب وعلامات الإعراب الأصلية والفرعية والممنوع من الصرف والعدد.

ISLAM 150 القرآن الكريم (الحفظ والتجويد والتفسير)　　　(3ساعات معتمدة)

يهدف هذا المساق إلى أن تتناول الطالبات الجزء المحدد من القرآن الكريم، وتلاوته وتجويده بطريقة صحيحة خالية من اللحون الجلية والخفية، وحفظ الصور المطلوبة باتقان، وتعرف معاني الألفاظ الجديدة والغريبة في الأجزاء المحفوظة والتدريب على أحكام التجويد والتلاوة، مما يعينهن على فهم القرآن الكريم، وأن يقف على مظاهر عظمة القرآن، ويدلل على حفظ القرآن وسلامته من أي تبديل، ويقدر جهود العلماء في خدمة القرآن الكريم والتفسير، وأن يتعرف مناهج التفسير، واتجاهات التفسير في القرآن الكريم.

EDUC150 مقدمة في أسس التربية　　　(3ساعات معتمدة)

يركز المقرر على تاريخ موجز للعوامل الرئيسية التي أثرت على تطوير التعليم الحديث، مع التركيز على الخلفيات الفلسفية والنفسية والاجتماعية للتعليم مع التركيز على الثقافة العربية وأهداف النظم التعليمية في سلطنة عمان ودول مجلس التعاون الخليجي.

ARAB 103 مقدمة في الأدب العربي　　　(3ساعات معتمدة)

يسعى المقرر إلى إيضاح مفهوم كلمة الأدب عبر العصور، واستعراض المراحل التي مر بها الأدب العربي منذ الجاهلية إلى بداية العصر الحديث ثم دراسة تاريخ الأدب العربي والتعرف إلى أبرز معالمه وقضاياه وإدراك بعض أعلامه مع دراسة نماذج شعرية ونثرية؛ لإكساب الطلاب مهارات التذوق الأدبي.

متطلب سابق > ARAB 101

ISLAM 160 مدخل لعلوم الحديث والسيرة النبوية　　　(3ساعات معتمدة)

يتناول المقرر طائفة من الأحاديث النبوية التي تعتبر المصدر الثاني بعد القرآن للتشريع والتي تبرز الهدى النبوي في تربية النبي لأمته على مدى الأجيال المتعاقبة بما فيها من معاني هادفة بناءة كما يتناول المقرر القواعد التي تم من خلالها جمع سنة النبي، حتى وصلت إلينا والتفريق بين الصحيح منها والسقيم كما يبرز المقرر أهمية السنة ومكانتها من التشريع. وتعلم سيرة النبي صلى الله عليه وسلم على الوجه الصحيح، وكيف يستفيد من هذا التعلم في حياته وواقع مجتمعه.

EDUC 170 علم النفس التربوي　　　(3ساعات معتمدة)

يهدف المقرر إلى تزويد المتعلمين بالمعرفة النفسية المرتبطة بكافة جوانب العملية التربوية والتركيز على الأسس النفسية لعمليات التعليم والتعلم لدى الأطفال، وتطبيق علم النفس في الميدان التربوي في إطار مهارة الاستيعاب لمعنى العملية التعليمية والتعلم ونظرياته وشروطه ومفاهيم التذكر والنسيان وانتقال أثر التدريب

والتعزيز والعقاب. فيه يتعرف المتعلم على علم النفس التربوي والإطار المفاهيمي لعملية التعلم، وشروط عملية التعلم والأهداف التربوية ودورها في عمليتي التعليم والتعلم. كما يهدف الى تعريف الطالب بالفروق الفردية،

ISLAM 270 مدخل على العقيدة الإسلامية   (3ساعات معتمدة)

يهدف هذا المساق إلى التعريف بعقيدة أهل السنة والجماعة من حيث خصائصها وأصولها وبيان تفصيلي بمنهج السلف في فهم العقيدة الإسلامية. (المتطلب السابق ISLAM 160 + ISLAM 150).

SOST 260 جغرافية عمان والوطن العربي   (3ساعات معتمدة)

يتضمن هذا المساق دراسة الجغرافية الطبيعية، والسكانية، والاقتصادية، للوطن العربي وعُمان، والأبعاد المكانية للوطن العربي، وموقعه وأهميته الاستراتيجية المميزة. والمظاهر الطبيعية للوطن العربي، من النواحي الجيولوجية، السطح، المناخ، التربة، النبات الطبيعي. والسكان في الوطن العربي، والتعرف على الأحوال السكانية في الوطن العربي. والتعرف على الخصائص السكانية لسلطنة عمان. والأنشطة الاقتصادية في الوطن العربي، وأهمية التكامل الاقتصادي بين أقطاره، مع التطبيق على تجربة مجلس التعاون الخليجي. وجغرافية سلطنة عُمان، من حيث الموقع الاستراتيجي، وأهميته، والملامح الطبيعية والاقتصادية فيها. والسكان والنشاط البشري في عُمان.

EDUC 250 التربية في الإسلام   (3ساعات معتمدة)

يتناول المقرر مفهوم التربية في الاسلام وأهميتها وطبيعتها ومبادئ تعلمها وأساليبها ووسائطها، ويركز على الخلفيات النظرية والعملية للتربية فى الاسلام والتي يمكن للطلاب تطبيقها والاستفادة منها في مجال تخصصهم، مما يجعلهم أكثر وعياً وقدرة على مواجهة مشكلاتهم الحياتية بوجه عام، والتربوية بوجه خاص ومعالجتها بطريقة علمية موضوعية بما يتماشى مع القواعد الاسلامية الصحيحة، بالإضافة الى التعرف على نظم التعليم في المجتمعات الاسلامية.

ARAB 202   النحو (1)   (3ساعات معتمدة)

يستند هذا المقرر على المعرفة التي اكتسبها الطلبة في عرب 102؛ إذ سيتناول قواعد تركيب الجملة في العربية من خلال تناول أنواع الجملة وأركانها بقدر من التفصيل، بالإضافة إلى المنصوبات، مثل المفعول به والمفعول فيه والمفعول لأجله والحال والتمييز. ويستعين في ذلك كله بنصوص يوضح من خلالها آلية تركيب جمل سليمة نحويًا(متطلب سابق عربي 102N)

ISLAM 280 الاخلاق والأسرة في الإسلام   (3ساعات معتمدة)

يهدف هذا المساق إلى التعريف بالقيم الأخلاقية في القرآن الكريم والسنة النبوية الشريفة، وأثرها في إصلاح الفرد والمجتمع، وأهمية الأسرة في الإسلام، ودور الأسرة في تربية الأبناء من منظور إسلامي، ودور الأسرة في تعليم الأبناء تطبيق القيم الإسلامية.

SOCS 102 المجتمع العماني   (3ساعات معتمدة)

يعد هذا المساق متطلبا جامعيا اجباريا لكل طلبة الجامعة ويتضمن المقرر التعريف بالمجتمع العماني التقليدي ونظمه وإجراء المقارنات بينها والنظم المعاصرة والأسس التي قام عليها. والتعرف إلى مراحل التخطيط الاستراتيجي للتنمية العمانية في كافة النواحي . والتعرف إلى نماذج من صور التطور التي شهدها المجتمع العماني والتغيرات الإيجابية فيه . والتعريف إلى خصائصه ونظمه الإدارية والسياسية والتعليمية والاقتصادية والأسرية والثقافية والصحية المعاصرة وإجراء المقارنات بينها وبين النظم التقليدية للسلطنة

SOST 270 قضايا عالمية معاصرة   (3ساعات معتمدة)

يتضمن هذا المساق دراسة عرض وتحليل لأهم المشكلات العالمية المعاصرة: المواطنة الرقمية- المشكلة السكانية ـ موارد المياه العذبة، والتلوث البيئي -التصحر -الطاقة -العولمة، مع حلول مقترحة لهذه المشاكل.

ARAB 205 ARAB المعجم والمصطلحات (3ساعات معتمدة)

يتعرض الطالب في هذا المقرر لدراسة تاريخ المعاجم العربية وأسباب نشأتها، وأهم المدارس المعجمية بدءًا بمدرسة التقليبات الصوتية للخليل الفراهيدي مرورا بمدرسة التقفية في معاجم لسان العرب لابن منظور والصحاح للجوهري وتاج العروس للزبيدي، وصولا إلى المدرسة الألفبائية الحديثة في معجم أساس البلاغة للزمخشري والمصباح المنير للفيومي ومعجمي (الوسيط والوجيز) لمجمع اللغة العربية. يصاحب هذا السرد التاريخي تدريب الطالب على مهارة الكشف في هذه المعاجم وفق المنهجية المتبعة فيها، فضلا عن تقديم سرد تاريخي مدعما بالأمثلة حول كعاجم المعاني وأهميتها والفروق بينها وبين معاجم الألفاظ. علاوة على ذلك سوف يتعرض الطالب إلى لمحة سريعة حول مصطلح الدلالة والمعنى والفرق بينهما مع الاطلاع على جهود العرب والغرب في علم الدلالة. متطلب سابق > + > ARAB 103 > ARAB 102N

ISLAM 290 فقه العبادات (3ساعات معتمدة)

يهدف هذا المقرر إلى تعريف الطالب بأحكام الطهارة بالتفصيل، وأحكام الصلاة بالتفصيل، وأحكام بعض النوازل المتعلقة بالطهارة والصلاة، وعرض مواضع الاتفاق والخلاف بين الأئمة في المسائل المهمة وأدلة كل قول والراجح فيها. (المتطلب السابق ISLAM 160 + ISLAM 150) .

ENTR 200 ريادة الأعمال والابتكار والإبداع (3ساعات معتمدة)

يوفر هذا المقرر منهجاً يمكن الطالبات لاستكشاف ريادة الأعمال كموضوع دراسة وكذلك كممارسة، حيث أصبحت ريادة الأعمال واحدة من أقوى قوة للتغيير في العالم. يهدف المقرر إلى توفير فهم أساسي لأهم المفاهيم والعمليات ذات الصلة في مجال ريادة الأعمال بالإضافة إلى التدريب العملي، يتضمن المقرر موضوعات أهمية ريادة الأعمال، ودراسة الجدوى، ونموذج الأعمال، وخطة العمل، وفهم مفهوم الفرصة، وأنواع مختلفة من ملكية الأعمال الموجودة في سلطنة عمان، بالإضافة إلى التطبيقات العملية والزيارات الميدانية.

EDUC 300F1 تطوير وتحليل المناهج الدراسية – المجال الأول (3ساعات معتمدة)

يتناول المقرر مبادئ تطوير المناهج وتقنيات تحليلها واختيار ما يناسب منها مع الأهداف والغايات العامة، يتم التركيز على المنهج العماني ومراحل بنائه المختلفة.

EDUC 375 تكنولوجيا التعليم (3ساعات معتمدة)

يهدف المقرر إلى كيفية استخدام التكنولوجيا المعتمدة على الحاسوب في التدريس، حيث يتضمن المقرر موضوعات تتناول تكنولوجيا التعليم بين الأهمية والخصائص، والمستحدثات التكنولوجية في مجال التعليم، مفهوم مراكز مصادر التعلم ووظائفها في اثراء العملية التعليمية، الوسائط المتعددة والتطبيقات العملية لها، أدوات الجيل الثاني من التعليم الإلكتروني وبعض تطبيقاتها في إدارة الأنشطة الصفية، انتاج بعض البرمجيات البسيطة التفاعلية وتقييم فعاليتها، بالإضافة إلى التعرف على كيفية حماية البيانات والمعلومات.

EDUC 320 نظريات واستراتيجيات التدريس العامة (3ساعات معتمدة)

يهدف المقرر إلى تزويد الطلبة بالخلفيات النظرية والعملية لأساليب وطرائق واستراتيجيات التدريس العامة، وما يرتبط بها من وسائل تعليمية داعمة، وتدريبهم عليها، وكذلك تنمية مهاراتهم في التخطيط للدروس اليومية، وكيفية توفير بيئة تعليمية مناسبة قائمة على مبادئ التعلم النشط، الأمر الذي يسمح لهم بإدارة جيدة للصف وممارسة العديد من الأنشطة الصفية واللاصفية. لذا يركز هذا المقرر على الموضوعات التالية: مفهوم التدريس وأهميته قديماً وحديثاً وخصائص كل منهما، وتصنيفات طرائق واستراتيجيات التدريس، ومتطلبات كل منها، ومراحل استخدامها في التدريس، وطبيعة عمليتي التعليم والتعلم، ونظريات التعليم والتعلم المرتبطة بالتدريس، مع التركيز على النظريات والنماذج الأكثر شيوعًا مثل نموذج التفاعل الاجتماعي، والنموذج الاستقرائي، والتعلم القائم على حل المشكلات، والتعلم التعاوني ونموذج التدريس المباشر. المتطلب السابق EDUC 150

EDUC 301 الاضطرابات السلوكية والانفعالية عند الطفل (3ساعات معتمدة)

يهدف المقرر إلى تزويد المتعلمين بالمعلومات الأساسية حول مفهوم الاضطرابات السلوكية والانفعالية لدى تلاميذ الحلقة الأولى بمدارس التعليم الأساسي، وخصائصهم ومظاهر الاضطرابات لديهم وكيفية التعامل معها.

EDUC 360 نظام التعليم في عمان ودول مجلس التعاون الخليجي (3ساعات معتمدة)

يتناول المقرر تحليل متعمق للأنظمة التعليمية في عمان ودول مجلس التعاون من حيث عناصرها والفلسفة التي بنى عليها، مع التركيز بشكل خاص على معايير جودة المدخلات والمخرجات ومقارنتها بالمعايير الدولية والإقليمية لتحديد متطلبات سوق العمل. يتضمن المقرر دراسة حالة وأمثلة واقعية.

EDUC 350F1 طرائق واستراتيجيات التدريس المجال الأول I (3ساعات معتمدة)

يهدف المقرر إلى تزويد الطلبة بالخلفيات النظرية والعملية لمناهج وطرق تدريس مواد المجال الأول (اللغة العربية، والدراسات الإسلامية، والدراسات الاجتماعية) في المستوى الأول، وتحليل تلك المناهج وتقييم واختيار الكتب والوسائل التعليمية الداعمة لها كبرامج الحاسوب والوسائل السمعية والبصرية المختلفة، مما يسهم في تعريف الطالب بطبيعة تخصصه، وكيفية تخطيط وتنفيذ وتقويم الدروس اليومية في هذا المجال، بالإضافة إلى توفير بيئة تعليمية مناسبة قائمة على مبادئ التعلم النشط. لذا يركز المقرر على الموضوعات التالية: المفاهيم والمبادئ الأساسية في تعليم وتعلم مواد المجال الأول، طبيعة مواد المجال الأول، والبناء العلمي (بنية المناهج) لها، عناصر أو مكونات منظومة مناهج مواد المجال الأول، الأهداف التعليمية وصياغتها في مجال تعليم وتعلم مواد المجال الأول، التخطيط للتدريس بما يناسب مواد المجال الأول، طرائق واستراتيجيات التدريس المناسبة لتدريس مواد المجال الأول. المتطلب السابق EDUC 320 .

EDUC 353F1 التدريس المصغر -مجال اول (3ساعات معتمدة)

تعرف الطالب بمفهوم التدريس المصغر، مراحله، خصائصه، استخداماته، ويتناول التدريس من حيث ماهيته، مراحله، مهاراته، والتخطيط للتدريس ، اختيار محتوى الدرس، تحليل المحتوى، تحديد الانشطة، تحديد أدوار التلاميذ، تحديد أساليب التقويم البنائي والنهائي، والتركيز على مهارات تنفيذ الدرس من حيث التمهيد، الحوار، التساؤل، إلقاء السؤال، تلقى إجابات المتعلمين، الوسائل التعليمية، إدراك بيئة التعلم إدراك الوقت، تلخيص الدرس، تنويع المثيرات، مع اكتساب مهارات ادارة الفصل من تنظيم حجرة الدراسة بما يتناسب مع الاستراتيجية المستخدمة، تحديد أدوار المتعلمين وفقاً للاستراتيجية المستخدمة، مهارات تقويم نواتج التعلم، تدريس دروس مصغرة مستخدماً مهارات التخطيط والتنفيذ والتقويم. (المتطلب السابق EDUC 320)

EDUC 355FI 1 التربية العملية1 -مجال اول (3ساعات معتمدة)

يستهدف المقرر القيام بزيارات ميدانية للمدارس والاحاطة بمختلف الجوانب التنظيمية والإدارية بالمدرسة إلى جانب المهام المطلوبة من المعلم، والعلاقة بينه وبين الإدارة، ويتم التركيز على المشاهدات الصفية ومناقشة الجوانب الإيجابية والسلبية لعمليتي التعليم والتعلم.   (المتطلب السابق EDUC 320)

EDUC 430 الإدارة التربوية وإدارة الصف (3ساعات معتمدة)

يركز المقرر على الجوانب المختلفة للإدارة التربوية من حيث: المفهوم، الأنماط، الوظائف، بالإضافة الى عمليات الاشراف التربوي الخاصة بالتدريس، مع التركيز على الإدارة الصفية والعوامل المؤثرة في التعلم الصفي والبيئة الصفية والتفاعل الصفي، ودور المعلم في إدارة الصف، ومعالجة المشكلات الصفية باستخدام الاستراتيجيات المناسبة.

EDUC 380 أخلاقيات مهنة التعليم (3ساعات معتمدة)

تعريف الطالبات بأخلاقيات مهنة التعليم ومكانتها في الإسلام وتطبيقاتها في الحضارة الإسلامية، وفي أنظمة سلطنة عمان؛ لتعزيز التزام الطالب بها في نفسه وبيئة عمله، ولكونها من أهم أسباب النجاح في عمله وحياته، مع إكساب الطالبات مهارة تحليل الظواهر الأخلاقية المحدثة في محيط العمل ويستطيع التنبؤ بآثارها وتحديد موقفه منها، ويتعلم وسائل ترسيخ الأخلاقيات الحميدة، ووسائل حل ما يواجه تطبيقها من عقبات.

EDUC F 420 البحث الإجرائي (3ساعات معتمدة)

يهدف المقرر التركيز على تطوير عمليتي التعليم والتعلم، من خلال حل المشكلات الصفية والتدريسية في سياق المجتمع الصفي في ضوء تطوير العمليات التعليمية التعلمية، وذلك من خلال التركيز على جمع البيانات اليومية للتطبيقات الصفية وتحليلها عن طريق تخطيط الدرس- تنفيذ الدرس- الملاحظة المستمرة - التأمل فيما تم إنجازه مع تحديد المشكلة و الأسئلة البحثية وكذلك نوع البيانات إضافة الى المتغيرات الجديدة و تحليل النتائج وتفسيرها.

EDUC 450F1 طرائق واستراتيجيات التدريس المجال الأول II (3ساعات معتمدة)

يتضمن هذا المقرر تطويراً إضافياً لطرائق واستراتيجيات تدريس مواد المجال الأول فى الحلقة الأولى من التعليم الأساسي (اللغة العربية، والدراسات الإسلامية، والدراسات الاجتماعية) والتي تمت دراستها فى المقرر السابق EDUC 350F1. يركز المقرر على الخلفيات النظرية والعملية لتعليم وتعلم مواد المجال الأول في الحلقة الأولى من التعليم الأساسي، مما يساهم فى تعريف الطالب بطبيعة تلك المواد، وأهميتها، وأهداف تدريسها، وكيفية تخطيط دروسها، واختيار الكتب والوسائل التعليمية الداعمة لها كبرامج الحاسوب والوسائل السمعية والبصرية المختلفة، وتوظيف الطرائق والاستراتيجيات المناسبة لتدريسها، وكيفية توفير بيئة تعليمية مناسبة قائمة على مبادئ التعلم النشط. المتطلب السابق EDUC 350F1.

EDUC 440F1 1 القياس والتقويم في التربية- مجال أول (3ساعات معتمدة)

يركز المقرر على الخلفيات النظرية والعملية للقياس والتقويم لتعلم طلاب المجال الأول. يتناول المقرر طبيعة عملية التقويم وأهدافها وأهميتها، والتركيز على أساليب التقويم المختلفة ذات العلاقة بالتقويم التكويني المستمر وتطبيقاتها. كما يتضمن أيضاً تدريب المتعلمين تدريباً مكثفاً على بناء الأدوات والوسائل المستخدمة وتطبيقها في قياس تعلم الطلاب في المجال الأول. (المتطلب السابق EDUC 320)

EDUC455 FI تربية عملية2 ـمجال اول (6ساعات معتمدة)

يستهدف المقرر اكساب المتعلمين الخبرة التدريسية من خلال التطبيق العملي لمهارات واستراتيجيات التدريس في البيئة الصفية بالحلقة الأولى بمدارس التعليم الأساسي تحت إشراف أساتذة الجامعات والمعلمين المتعاونين في المدرسة. (المتطلب السابق EDUC 355F1)

EDUC 460F1 طرائق واستراتيجيات التدريس المجال الأول III (3ساعات معتمدة)

يتضمن هذا المقرر تطويراً إضافياً لتطبيق طرائق واستراتيجيات تدريس مواد المجال الأول. يركز المقرر على الخلفيات الممارسات الفعلية للنظريات وعمليات التعلم المختلفة في مواد المجال الأول، مما يساهم فى تعريف المتعلمين بطبيعة تلك المواد، وأهميتها، وأهداف تدريسها، وكيفية تخطيط دروسها، واختيار الكتب والوسائل التعليمية الداعمة لها كبرامج الحاسوب والوسائل السمعية والبصرية المختلفة، وتوظيف الطرائق والاستراتيجيات المناسبة لتدريسها، وكيفية توفير بيئة تعليمية مناسبة قائمة على مهارات القرن الحادي والعشرين. المتطلب السابق EDUC 450F1.

EDUC 485F1 تربية عملية3 ـ مجال اول (6ساعات معتمدة)

يهدف هذا المقرر الى استكمال اكساب المتعلمين الخبرة التدريسية من خلال التطبيق العملي لمهارات واستراتيجيات التدريس في البيئة الصفية بالحلقة الأولى بمدارس التعليم الأساسي تحت إشراف أساتذة الجامعات والمعلمين المتعاونين في المدرسة. (المتطلب السابق EDUC 455F1)

EDUC 490F1 مشروع التخرج – المجال الأول (3ساعات معتمدة)

يركز المقرر على تطبيق مهارات البحث الإجرائي من خلال قيام المتعلم بعمل مشروع بحثي يتناول تحديد المشكلة – بناء الفرضيات- أسئلة البحث- جمع البيانات- تحليل النتائج وتفسيرها، حيث يتم تقديم البحث الإجرائي كعملية تأملية يطبقها المتعلمون في الفصل الدراسي لتحديد وحل المشكلات التعليمية ذات الأهمية أثناء التدريس. (المتطلب السابق EDUC 420F + EDUC 455FI + EDUC 450FI)

7. Bachelor of Education: Teacher Field II

7.1- نظرة عامة على البرنامج

يعتبر برنامج بكالوريوس التربية معلم مجال ثان فريداً من نوعه في محافظة ظفار، حيث يتناول إعداد معلم المجال الثاني للعمل بمدارس الحلقة الأولى من التعليم الأساسي في سلطنة عمان، تلك المرحلة التي تشكل البناء العقلي والمعرفي والاجتماعي للطفل. يتضمن البرنامج عدداً من المقررات تنحصر في 44 مقرراً بواقع 132 ساعة معتمدة، موزعة ما بين المقررات الأكاديمية، والتربوية، والثقافية. جاء هذا البرنامج تلبية لرغبة قطاع كبير من خريجي شهادة دبلوم التعليم العام في الالتحاق بهذا التخصص، والارتقاء بمهاراتهم التخصصية والتربوية، كذلك نتيجة لتوجه وزارة التعليم العالي ووزارة التربية والتعليم لسد فجوة نقص المعلمات بالحلقة الأولى بمرحلة التعليم الأساسي. ومما يدعم فكرة استحداث هذا البرنامج هو عدم توفر برامج مشابهة له في محافظة ظفار، فضلاً على عدم وجود جامعة منافسة لجامعة ظفار بالمحافظة، مما يتيح للجامعة استيعاب عدد كبير من المتقدمين، وتلبية احتياجات سوق العمل من خريجي هذا البرنامج. مع العلم بأن خريجي هذا البرنامج ستكون لهم فرصة كبيرة إن لم تكن مضمونة في تحسين أوضاعهم المادية والوظيفية، وتطوير أدائهم داخل المدارس التي يعملون بها، ومن ثم تطوير العملية التعليمية بها، مما يعود بالنفع عليهم وعلى المؤسسات التي يعملون بها. متوسط أجور خريجي هذا البرنامج سيكون مماثلاً للأجور التي تدفع للمعلمين العاملين في حقل التربية حسب لوائح وزارة التربية والتعليم. البيانات التفصيلية مفصلة في بقية النقاط الأخرى ضمن الاستمارة الحالية. علماً بأن متطلبات استكمال الدرجة الأكاديمية والتخرج تتمثل في اجتياز الطالب جميع المقررات الدراسية بنجاح بمعدل تراكمي لا يقل عن 2 وفقاً لأساليب التقويم المتبعة لنظام الساعات المعتمدة.

7.2- أهداف البرنامج

تتحدد أهداف البرنامج فيما يلي:

1. رفد سوق العمل بكوادر تعليمية في المجال الثاني للتدريس في الحلقة الأولى من التعليم الأساسي.

2. إعداد معلم مجال ثان قادر على تحمل المسؤولية والتطوير الذاتي، ويمتلك القيم الجوهرية، والسلوك المهني والأخلاقي لمهنة التعليم في سلطنة عمان.

3. إكساب المتعلم المعارف والخبرات الأكاديمية والتربوية في مجالات العلوم، والرياضيات، والدراسات الاجتماعية، بما يحقق له ممارسات مهنية وتربوية فعالة في الحلقة الأولى من التعليم الأساسي.

4. تزويد المتعلم باستراتيجيات وأساليب القياس والتقويم المناسبة لمجالات العلوم، والرياضيات، والدراسات الاجتماعية في الحلقة الأولى من التعليم الأساسي.

5. إكساب المتعلم أساسيات البحث التربوي في مجالات العلوم، والرياضيات، والدراسات الاجتماعية، لتطوير العملية التعليمية في الحلقة الأولى من التعليم الأساسي.

6. تمكين المتعلم من توظيف تكنولوجيا التعليم في تدريس العلوم، والرياضيات، والدراسات الاجتماعية في الحلقة الأولى من التعليم الأساسي.

7. تزويد المتعلم بسيكولوجية الأطفال، وسماتهم الشخصية، وأساليب التعامل معهم، وكذلك صعوبات التعلم التي يواجهونها في تلك المرحلة العمرية.

8. امتلاك المتعلم لمهارات القرن الحادي والعشرين والتطورات المستقبلية العالمية ذات الصلة بالمواد الدراسية للمجال الثاني.

9. تزويد المتعلم بأهم الأسس التي تقوم عليها فلسفة التعليم والتشريعات والقوانين والأنظمة التربوية في سلطنة عمان، خاصة فيما يتعلق بالحلقة الأولى من التعليم الأساسي.

10. تعزيز الاتجاهات الإيجابية لدى المتعلم بما يتوافق مع متطلبات التطوير التربوي المعاصر في الحلقة الأولى من التعليم الأساسي.

7.3- مخرجات التعلم للبرنامج

من المتوقع بعد نهاية البرنامج أن يكون الخريج قادراً على:

1. توظيف المعلومات والمعارف والخبرات الخاصة بالمقررات الدراسية في تدريس مواد المجال الثاني بالحلقة الأولى من التعليم الأساسي.

2. توظيف نظريات التعلم، وطرائق واستراتيجيات التدريس المناسبة للمواد الدراسية في المجال الثاني بالحلقة الأولى من التعليم الأساسي.

3. تحليل وتطوير المناهج المدرسية فى مجالات العلوم والرياضيات، بما يتماشى مع الاتجاهات المحلية والعالمية المعاصرة.

4. توظيف وبناء أساليب وأدوات القياس والتقويم المناسبة لمجالات العلوم والرياضيات في الحلقة الأولى من التعليم الأساسي.

5. إجراء البحوث الإجرائية لمعالجة مشكلات التعليم والتعلم في الحلقة الأولى من التعليم الأساسي، متبعاً في ذلك الأساليب العلمية والمنهجية الصحيحة.

6. توظيف المستحدثات التعليمية فى تدريس العلوم والرياضيات في الحلقة الأولى من التعليم الأساسي بما يحقق التواصل بينه وبين طلابه، وتحقيق الإنجاز المطلوب.

7. تحديد سيكولوجية الأطفال، وسماتهم الشخصية، وصعوبات التعلم التي يواجهونها في تلك المرحلة العمرية، والتغلب عليها بشكل فعال.

8. ممارسة مهارات القرن الحادي والعشرين والتطورات المستقبلية العالمية ذات الصلة بالمواد الدراسية للمجال الثاني.

9. ممارسة كافة المهام والأنشطة التعليمية وغير التعليمية في مدارس الحلقة الأولى من التعليم الأساسي.

10. الاستمرار في تحمل المسؤولية، والتطوير الذاتي كمتعلم مدى الحياة.

11. المشاركة في تنمية المجتمع العماني لتحقيق المواطنة الفاعلة.

12. ممارسة أخلاقيات مهنة التعليم، والقيم الجوهرية في الحياة المهنية والعامة.

7.4- متطلبات القبول

1. أن لا يقل معدل الطالب في دبلوم التعليم العام أو ما يعادله عن 80% .

2. حصول الطالب على معدل 70% في المواد التالية: الرياضيات البحتة، الفيزياء، الكيمياء، الأحياء.

3. ألا يزيد عمر المتقدم في الأول من سبتمبر من العام الاكاديمي الذي سيتقدم فيه بالطلب عن (30) ثلاثين سنة.

4. اجتياز البرنامج التأسيسي.

5. اجتياز المقابلة الشخصية من قبل اللجنة المختصة في الجامعة.

علماً بأن آلية التقدم للبرنامج خاضعة لسياسة القبول والتسجيل واشتراطات وزارة التعليم العالي والبحث العلمي والابتكار.

7.5- متطلبات التخرج

مجموع الساعات	متطلبات التخصص		متطلبات الكلية	متطلبات الجامعة
	المتطلبات الاختيارية	المتطلبات الإجبارية		
132	3	108	6	15

7.6- متطلبات الجامعة:

ARAB 101 : الكتابة الأكاديمية باللغة العربية

CMPS 100A : مدخل إلى تقنيات الحاسوب للآداب

ENGL 101 : اللغة الانجليزية الأكاديمية التأسيسية

SOCS 102 : المجتمع العماني

ENTR 200 : ريادة الأعمال

7.7- متطلبات الكلية:

- مقرر اختياري العلوم الإنسانية والاجتماعية: يختار الطالب مقرراً واحداً
- مقرر اختياري علوم- رياضيات: يختار الطالب مقرراً واحداً

7.8- متطلبات التخصص:

7.8.1-أولا: متطلبات التخصص الاجبارية:

التعلم وتطور الطفل	EDUC 120	1.
الهندسة وحساب المثلثات	MATH 120	2.
مبادئ الكيمياء- المستوى الأول	CHEM 130	3.
مقدمة في معمل الكيمياء	CHEM 130L	4.
أسس التربية	EDUC 150	5.
التفاضل والتكامل	MATH 199	6.
أساسيات الفيزياء - المستوى الأول	PHYS 170	7.
مقدمة في معمل الفيزياء	PHYS 170L	8.
علم النفس التربوي	EDUC 170	9.
مقدمة في علم الأحياء	BIOL 120	10.
مقدمة في معمل الأحياء	BIOL 120L	11.
التربية في الإسلام	EDUC 250	12.
مبادئ الكيمياء- المستوى الثاني	CHEM 170	13.
تطبيقات الحاسوب في الرياضيات	MATH 240	14.
موضوعات حديثة في علم الأحياء	BIOL 160	15.
الاحتمالات والإحصاء	MATH 250	16.
الرياضيات للمعلمين	EDUC 290	17.
التحليل العددي	MATH 260	18.
أساسيات الفيزياء- المستوى الثاني	PHYS 210	19.
تطوير وتحليل المناهج الدراسية – مجال	EDUC 300FII	20.
الاضطرابات السلوكية والانفعالية عند الطفل	EDUC 301	21.
نظريات واستراتيجيات التدريس العامة	EDUC 320	22.
الجبر الخطي	MATH 320	23.
طرائق واستراتيجيات تدريس المجال الثاني	EDUC 350FII	24.
التدريس المصغر- مجال2	EDUC 353FII	25.
تربية عملية1 - مجال2	EDUC 355FII	26.
نظام التعليم في عمان ودول مجلس التعاون الخليجي	EDUC 360	27.
تكنولوجيا التعليم	EDUC 375	28.
أخلاقيات مهنة التعليم	EDUC 380	29.
البحث الإجرائي	EDUC 420FII	30.
الإدارة التربوية وإدارة الصف	EDUC 430	31.
القياس والتقويم في التربية- مجال2	EDUC 440FII	32.
طرائق واستراتيجيات تدريس المجال الثاني -	EDUC 450FII	33.
تربية عملية 2- مجال2	EDUC 455FII	34.
طرائق واستراتيجيات تدريس المجال الثاني - 3	EDUC 460FII	35.

36. EDUC 485FII تربية عملية 3 – مجال 2
37. EDUC 490FII مشروع التخرج – مجال 2

7.8.2-ثانيا متطلبات التخصص الاختيارية:
مقرر اختياري تربوي: يختار الطالب مقرراً واحداً من المقررات التالية:
38. EDUC 200 : مدخل إلى التوجيه والإرشاد
39. EDUC 205: مدخل الى التربية الخاصة
40. EDUC 210: أدب الأطفال
41. EDUC 260: التربية البيئية
42. EDUC 305: مداخل التكامل في التربية
43. EDUC 310: التعليم البصري
44. EDUC 355: تعديل السلوك
45. EDUC 430: صعوبات التعلم
46. EDUC 400: التطوير المهني في التربية
47. EDUC 425: أسس التربية الصحية
48. EDUC 460: حلقة نقاش: قضايا في التربية

7.9- الخطة الدراسية

رمز المقرر	عنوان المقرر	الساعات التدريسية المعتمدة
السنة الدراسية الأولى (30 ساعة)		
الفصل الدراسي الأول		15
ARAB 101	الكتابة الأكاديمية باللغة العربية	3
CMPS 100B	مدخل إلى تقنيات الحاسوب للعلوم	3
EDUC 120	التعلم وتطور الطفل	3
ENGL 101	اللغة الانجليزية الأكاديمية التأسيسية	3
MATH 120	الهندسة وحساب المثلثات	3
الفصل الدراسي الثاني		15
CHEM 130	مبادئ الكيمياء- المستوى الأول	2
CHEM 130L	مقدمة في معمل الكيمياء	1
EDUC 150	أسس التربية	3
MATH 199	التفاضل والتكامل	3
PHYS 170	أساسيات الفيزياء - المستوى الأول	2
PHYS 170L	مقدمة في معمل الفيزياء	1
EDUC 170	علم النفس التربوي	3
السنة الدراسية الثانية (33 ساعة)		
الفصل الدراسي الثالث		18
BIOL 120	مقدمة في علم الأحياء	2
BIOL 120L	مقدمة في معمل الأحياء	1

3	التربية في الإسلام	EDUC 250	
3	مبادئ الكيمياء- المستوى الثاني	CHEM 170	
3	تطبيقات الحاسوب في الرياضيات	MATH 240	
3	المجتمع العماني	SOCS 102	
3	اختياري/ تربية	Code	
18	**الفصل الدراسي الرابع**		
3	موضوعات حديثة في علم الأحياء	BIOL 160	
3	الاحتمالات والإحصاء	MATH 250	
3	الرياضيات للمعلمين	EDUC 290	
3	التحليل العددي	MATH 260	
3	ريادة الأعمال	ENTR 200	
3	أساسيات الفيزياء- المستوى الثاني	PHYS 210	
السنة الدراسية الثالثة (33 ساعة)			
15	الفصل الدراسي الخامس		
3	تطوير وتحليل المناهج الدراسية – مجال2	EDUC 300FII	
3	الاضطرابات السلوكية والانفعالية عند الطفل	EDUC 301	
3	نظريات واستراتيجيات التدريس العامة	EDUC 320	
3	الجبر الخطي	MATH 320	
3	اختياري/ العلوم الإنسانية والاجتماعية	Code	
18	الفصل الدراسي السادس		
3	طرائق واستراتيجيات تدريس المجال الثاني - 1	EDUC 350FII	
3	التدريس المصغر- مجال2	EDUC 353FII	
3	تربية عملية1 - مجال2	EDUC 355FII	
3	نظام التعليم في عمان ودول مجلس التعاون الخليجي	EDUC 360	
3	تكنولوجيا التعليم	EDUC 375	
3	أخلاقيات مهنة التعليم	EDUC 380	
السنة الدراسية الرابعة (36 ساعة)			
18	الفصل الدراسي السابع		
3	البحث الإجرائي	EDUC 420FII	
3	الإدارة التربوية وإدارة الصف	EDUC 430	

3	القياس والتقويم في التربية- مجال2	EDUC 440FII
3	طرائق واستراتيجيات تدريس المجال الثاني - 2	EDUC 450FII
6	تربية عملية 2- مجال2	EDUC 455FII
15	الفصل الدراسي الثامن	
3	طرائق واستراتيجيات تدريس المجال الثاني - 3	EDUC 460FII
6	تربية عملية 3 – مجال 2	EDUC 485FII
3	مشروع التخرج – مجال 2	EDUC 490FII
3	اختياري/ علوم- رياضيات	Code
مجموع الساعات: 132 ساعة معتمدة		

7.10-توصيف المقررات

ARAB 101   الكتابة الأكاديمية باللغة العربية   (3ساعات معتمدة)

يركز هذا المساق على دراسة العناصر الأساسية في الكتابة الأكاديمية العربية، ويشمل: الجمل التامة، والفقرات، والمقالات والأبحاث الأكاديمية، والتقارير ث، والرسائل الرسمية. ويتوجب على الطلبة إظهار قدرات متقدمة في إنتاج نصوص أكاديمية صحيحة.

CMPS100B مدخل لتقنيات الحاسوب للعلوم   (3ساعات معتمدة)

يتضمن هذا المساق مفاهيم البرمجة باستخدام الأداة المناسبة، حيث سيتم تعريف الطلاب بمفاهيم البرمجة والتعريف بالمتغيرات و حلقات البرمجة(loops) والتعليمات المشروطة. كما يقوم المساق بتغطية بعض جوانب المساق CMPS100A مثل تطبيق قاعدة البيانات وتصميم صفحات الويب البسيطة، و توفير الامتداد للبرامج المعرفية كمقدمة لـ Python / HTML/Java.

EDUC 120 التعلم وتطور الطفل   (3ساعات معتمدة)

يحتوي المقرر على مقدمة حول مفهوم النمو ومراحله، والنظريات المرتبطة بالتدريس والذكاء والتطور النمائي للأطفال مع التركيز على جوانب نظريات التعلم وإدارة السلوك وتأثيراتها على عملية التعليم داخل الصف.

Basic Academic English ENGL 101   (3ساعات معتمدة)

Consistent with its aim of enabling first year students in the university departments to become efficient communicators in English Language, this course scaffolds with their knowledge, skills and competence developed in Level 3 of the Foundation Program and continues to build on their language and study skills. This integrated skills course is designed to develop the listening, speaking, reading and writing skills of the students so that they can understand English in a range of contexts and express thoughts, opinions, arguments and a range of language functions to speakers of English and other languages with sufficient clarity and accuracy of language and pronunciation. The course also aims at enabling the students to develop into self-dependent/autonomous learners by exposing them to a range of learning techniques and strategies, critical thinking,

basic study and research skills in order to increase their academic, professional, and employment potential.

Geometry and Trigonometry MATH 120 (3ساعات معتمدة)

The course is designed to teach students the fundamentals of Geometry and Trigonometry.

Trigonometry: Radian measure, Pythagorean Theorem and application of theorem, trigonometric functions and inverse functions, graphs, identities, equations, applications (law of sines and law of cosines), Coordinate systems, distances. Geometry: Areas and volumes of different shapes used in mensuration, writing equations of Lines, Circles, Ellipses, Parabolas, and study of different properties for same. Drawing of lines, circles, ellipse, parabola and hyperbola for given information.

Chemical principles I   CHEM130 I (2 ساعات معتمدة)

An introduction to chemical principles covering atomic structure, chemical bonding, stoichiometry, thermodynamics, net ionic equations, aqueous reaction and gas laws with emphasis on examples and problems to illustrate the applications of chemistry to engineering disciplines. [Credit hours 3]

Introductory to chemistry Laboratory CHEM130L (1 ساعات معتمدة)

Weekly introductory lab sessions for Chemical Principles I which includes an introduction to chemical principles covering atomic structure, chemical bonding, stoichiometry, gas laws, chemical equilibrium including acid-base and solubility equilibrium, electrochemistry, introductory kinetics and thermodynamics. Prerequisite or co-requisite: CHEM 130.

EDUC150 مقدمة في أسس التربية (3ساعات معتمدة)

يركز المقرر على تاريخ موجز للعوامل الرئيسية التي أثرت على تطوير التعليم الحديث، مع التركيز على الخلفيات الفلسفية والنفسية والاجتماعية للتعليم مع التركيز على الثقافة العربية وأهداف النظم التعليمية في سلطنة عمان ودول مجلس التعاون الخليجي.

MATH 199 التفاضل والتكامل (3ساعات معتمدة)

الاقترانات، المجال و المدى، العمليات(هندسية وجبرية)، رسم الاقترانات، الاقترانات المثلثية، الاقترانات المثلثية حساب النهايات لبعض الاقترانات، النهايات عند اللانهاية، النهايات اللانهائية، المحاذيات الأفقية و العمودية . الاتصال   نهايات الاقترانات المثلثية واتصالها .المشتقة :تعريف المشتقة وقواعد الاشتقاق، مشتقات الاقترانات المثلثية، قاعدة السمسمة، الاشتقاق الضمني .تحليل الاقترانات :التزايد والتناقص، التقعر، القيم القصوى ، رسم المنحنيات .تطبيقات على الاشتقاق.

Fundamentals of Physics PHYS 170 I (2 ساعات معتمدة)

An introduction to physics principals (3 credits). This course is designed for students who typically have little scientific background. No formal knowledge of physical science is required. A working knowledge of high school algebra, however, is assumed. The course covers basic physics concepts and principles related to everyday life. The major aim will be to give students an appreciation and understanding of the physical universe. A conceptual rather than a mathematical point of view is emphasized. Topics to be covered include: Linear

motion, Newton's laws of motion, momentum, work and energy, gravity, and rotational motion.

Introductory Physics Laboratory PHYS 170L (ساعات معتمدة 1)

A lab experience is an integral part of your exploration of the physical universe. The laboratory is a hands-on, active environment. Working in teams, you will carry out experiments which will allow you to apply, verify, or discover concepts and laws in physics. If you have a question, comment, or complaint please let me know. Even an anonymous note under my door is fine.

EDUC 170 علم النفس التربوي (ساعات معتمدة3)

يهدف المقرر إلى تزويد المتعلمين بالمعرفة النفسية المرتبطة بكافة جوانب العملية التربوية والتركيز على الأسس النفسية لعمليات التعليم والتعلم لدى الأطفال، وتطبيق علم النفس في الميدان التربوي في إطار مهارة الاستيعاب لمعنى العملية التعليمية والتعلم ونظرياته وشروطه ومفاهيم التذكر والنسيان وانتقال أثر التدريب والتعزيز والعقاب. فيه يتعرف المتعلم على علم النفس التربوي والإطار المفاهيمي لعملية التعلم، وشروط عملية التعلم والأهداف التربوية ودورها في عمليتي التعليم والتعلم. كما يهدف الى تعريف الطالب بالفروق الفردية،

Introductory Biology   BIOL 120 (ساعات معتمدة 2)

An introduction to biological principles at the ecosystem, population, organism and organ system level using an investigative and problem-based approach. Exploration of cellular processes including metabolism and inheritance from an evolutionary perspective in an investigative, problem-based format.

Introductory Biology Laboratory BIOL 120L (ساعات معتمدة 1)

Weekly introductory lab sessions for Biology, which includes an introduction to biological principles covering the material taught in BIOL 120.

EDUC 250 التربية في الإسلام (ساعات معتمدة3)

يتناول المقرر مفهوم التربية في الاسلام وأهميتها وطبيعتها ومبادئ تعلمها وأساليبها ووسائطها، ويركز على الخلفيات النظرية والعملية للتربية فى الاسلام والتي يمكن للطلاب تطبيقها والاستفادة منها في مجال تخصصهم، مما يجعلهم أكثر وعياً وقدرة على مواجهة مشكلاتهم الحياتية بوجه عام، والتربوية بوجه خاص ومعالجتها بطريقة علمية موضوعية بما يتماشى مع القواعد الاسلامية الصحيحة، بالإضافة الى التعرف على نظم التعليم في المجتمعات الاسلامية.

Chemical Principles CHEM 170 II (ساعات معتمدة3)

An introductory theoretical formulation of physical and analytical chemistry including the periodic table, properties of solutions, chemical equilibrium, acid-base equilibrium, electrochemistry, and an introduction to organic chemistry.

and computer application MATH 240 (ساعات معتمدة3)

This course is a 3-credit course and it covers the following topics: Working with the MATLAB user interface, Entering commands and creating variables, writing a function, Visualizing extreme values. Analyzing vectors and matrices, Visualizing vector and matrix data. Solving system of linear equations. Calling function. Working with data files and data types.

SOCS 102 المجتمع العماني (3ساعات معتمدة)

يعد هذا المساق متطلبا جامعيا اجباريا لكل طلبة الجامعة ويتضمن المقرر التعريف بالمجتمع العماني التقليدي ونظمه وإجراء المقارنات بينها والنظم المعاصرة والأسس التي قام عليها. والتعرف إلى مراحل التخطيط الاستراتيجي للتنمية العمانية في كافة النواحي . والتعرف إلى نماذج من صور التطور التي شهدها المجتمع العماني والتغيرات الإيجابية فيه . والتعريف إلى خصائصه ونظمه الإدارية والسياسية والتعليمية والاقتصادية والأسرية والثقافية والصحية المعاصرة وإجراء المقارنات بينها وبين النظم التقليدية للسلطنة

Contemporary Issues in Biology BIOL 160 (3ساعات معتمدة)

Focus on the scientific background to some of the current topics in biology. Students will get an in-depth treatment issues such as genetic and molecular biology, as well as topics related to environment

Probability and Statistics MATH 250 (3ساعات معتمدة)

The course is designed to teach students the fundamentals of descriptive statistics and probability. The course will reflect the importance of these branches and how they can be used to describe raw data and measure uncertainty of events. The content of the course includes topics that are essential in descriptive statistics and probability. Namely, these topics are: Organizing data (frequency distribution), graphs (histogram, bar chart and pie chart) and distribution shapes, measures of central tendency, measures of dispersion, partition values, basic concepts in probability, probability types, types of events, probability rules, Bayes theorem, random variables, probability distributions, mathematical expectations, moment generating functions, and theoretical probability distributions.

EDUC 290 الرياضيات للمعلمين (3ساعات معتمدة)

يهدف المقرر إلى إكساب الطالب أساسيات ومهارات الرياضيات المدرسية بشكل عميق، لذا يتضمن المقرر الموضوعات التالية: الاعداد والعمليات عليها، الهندسة، القياس، معالجة البيانات، الجبر، حل المشكلات في الصفوف(1-10) . المتطلب السابق: MATH 120

Numerical Analysis MATH 260 (3ساعات معتمدة)

The course is designed to teach students the broad range of numerical methods. Finding roots of nonlinear functions, interpolation methods, numerical differentiation and integration, numerical methods for initial value problems: one step methods, multi-step methods.

ENTR 200 ريادة الأعمال والابتكار والإبداع (3ساعات معتمدة)

يوفر هذا المقرر منهجاً يمكن الطالبات لاستكشاف ريادة الأعمال كموضوع دراسة وكذلك كممارسة، حيث أصبحت ريادة الأعمال واحدة من أقوى قوة للتغيير في العالم. يهدف المقرر إلى توفير فهم أساسي لأهم المفاهيم والعمليات ذات الصلة في مجال ريادة الأعمال بالإضافة إلى التدريب العملي، يتضمن المقرر موضوعات أهمية ريادة الأعمال، ودراسة الجدوى، ونموذج الأعمال، وخطة العمل، وفهم مفهوم الفرصة، وأنواع مختلفة من ملكية الأعمال الموجودة في سلطنة عمان، بالإضافة إلى التطبيقات العملية والزيارات الميدانية.

Fundamentals of Physics PHYS 210II (3ساعات معتمدة)

An introduction to physics principals (3 credits). This course is designed for The students are required to understand the basic physics concepts and principles related to everyday life, to know the purpose of an appreciation and understanding of the physical universe. A conceptual rather than a mathematical

point of view is emphasized. Topics to be covered include: This course is an introduction to electricity and magnetism. Many concepts integral to the study of classical physics involve theories and laws that describe the relationships that hold for electricity and magnetism and the interactions between them. Also to apply Coulomb's Law, Faraday's Law, Ohm's Law, Kirchhoff's rules and Lenz's Law to solve problems in electromagnetism. Further experiments and calculations in physics to calculate current, potentials, resistances, and electromotive forces for simple AC and DC circuits. Describe the magnetic fields, forces, and potentials involved in the interaction of point charges and of currents. Therefore, to describe how devices such as inductors, capacitors, resistors, and measurement devices such as ammeters, ohmmeters, and galvanometers are used. In view of the range of knowledge involving the analysis of the motion of an object in terms of its position, velocity, and acceleration as a function of time by using the different techniques in calculus to solve the physical problems

EDUC 300FII تطوير وتحليل المناهج الدراسية – المجال الثاني (3ساعات معتمدة)

يتناول المقرر مبادئ تطوير المناهج وتقنيات تحليلها واختيار ما يناسب منها مع الأهداف والغايات العامة، يتم التركيز على المنهج العماني ومراحل بنائه المختلفة.

EDUC 301 الاضطرابات السلوكية والانفعالية عند الطفل (3ساعات معتمدة)

يهدف المقرر إلى تزويد المتعلمين بالمعلومات الأساسية حول مفهوم الاضطرابات السلوكية والانفعالية لدى تلاميذ الحلقة الأولى بمدارس التعليم الأساسي، وخصائصهم ومظاهر الاضطرابات لديهم وكيفية التعامل معها.

EDUC 320 طرائق واستراتيجيات التدريس العامة (3ساعات معتمدة)

يهدف المقرر إلى تزويد الطلبة بالخلفيات النظرية والعملية لأساليب وطرائق واستراتيجيات التدريس العامة، وما يرتبط بها من وسائل تعليمية داعمة، وتدريبهم عليها، وكذلك تنمية مهاراتهم في التخطيط للدروس اليومية، وكيفية توفير بيئة تعليمية مناسبة قائمة على مبادئ التعلم النشط، الأمر الذي يسمح لهم بإدارة جيدة للصف وممارسة العديد من الأنشطة الصفية واللاصفية. لذا يركز هذا المقرر على الموضوعات التالية: مفهوم التدريس وأهميته قديماً وحديثاً وخصائص كل منهما، وتصنيفات طرائق واستراتيجيات التدريس، ومتطلبات كل منها، ومراحل استخدامها في التدريس، وطبيعة عمليتي التعليم والتعلم، ونظريات التعليم والتعلم المرتبطة بالتدريس، مع التركيز على النظريات والنماذج الأكثر شيوعًا مثل نموذج التفاعل الاجتماعي، والنموذج الاستقرائي، والتعلم القائم على حل المشكلات، والتعلم التعاوني ونموذج التدريس المباشر. المتطلب السابق EDUC 150

Linear Algebra MATH 320 (3ساعات معتمدة)

The course is designed to teach students the fundamentals of descriptive statistics and probability. The course will reflect the importance of these branches and how they can be used to describe raw data and measure uncertainty of events. The content of the course includes topics that are essential in descriptive statistics and probability. Namely, these topics are: Organizing data (frequency distribution), graphs (histogram, bar chart and pie chart) and distribution shapes, measures of central tendency, measures of dispersion, partition values, basic concepts in probability, probability types, types of events, probability rules, Bayes theorem, random variables, probability distributions, mathematical expectations, moment generating functions, and theoretical probability distributions.

EDUC 350FII طرائق واستراتيجيات التدريس المجال الثاني- 1 (3ساعات معتمدة)

يهدف المقرر إلى تزويد الطلبة بالخلفيات النظرية والعملية لمناهج وطرق تدريس مواد المجال الثاني (الرياضيات والعلوم) في المستوى الأول، وتحليل تلك المناهج وتقييم واختيار الكتب والوسائل التعليمية الداعمة لها كبرامج الحاسوب والوسائل السمعية والبصرية المختلفة، مما يسهم فى تعريف الطالب بطبيعة تخصصه، وكيفية تخطيط وتنفيذ وتقويم الدروس اليومية فى هذا المجال، بالإضافة إلى توفير بيئة تعليمية مناسبة قائمة على مبادئ التعلم النشط. لذا يركز المقرر على الموضوعات التالية: المفاهيم والمبادئ الأساسية فى تعليم وتعلم مواد المجال الثاني، طبيعة مواد المجال الثاني، والبناء العلمى (بنية المناهج) لها، عناصر أو مكونات منظومة مناهج مواد المجال الثاني، الأهداف التعليمية وصياغتها في مجال تعليم وتعلم مواد المجال الثاني، التخطيط للتدريس بما يناسب مواد المجال الثاني، طرائق واستراتيجيات التدريس المناسبة لتدريس مواد المجال الثاني. المتطلب السابق EDUC 320 .

EDUC 353FII التدريس المصغر -مجال ثان (3ساعات معتمدة)

تعرف الطالب بمفهوم التدريس المصغر، مراحله، خصائصه، استخداماته، ويتناول التدريس من حيث ماهيته، مراحله، مهارته، والتخطيط للتدريس ، اختيار محتوى الدرس، تحليل المحتوى، تحديد الانشطة، تحديد أدوار التلاميذ، تحديد أساليب التقويم البنائي والنهائي، والتركيز على مهارات تنفيذ الدرس من حيث التمهيد، الحوار، التساؤل، إلقاء السؤال، تلقى إجابات المتعلمين، الوسائل التعليمية، إدراك بيئة التعلم إدراك الوقت، تلخيص الدرس، تنويع المثيرات، مع اكتساب مهارات ادارة الفصل من تنظيم حجرة الدراسة بما يتناسب مع الاستراتيجية المستخدمة، تحديد أدوار المتعلمين وفقاً للاستراتيجية المستخدمة، مهارات تقويم نواتج التعلم، تدريس دروس مصغرة مستخدماً مهارات التخطيط والتنفيذ والتقويم. المتطلب السابق EDUC 320

EDUC 355FII التربية العملية -مجال ثان (3ساعات معتمدة)

يستهدف المقرر القيام بزيارات ميدانية للمدارس والإحاطة بمختلف الجوانب التنظيمية والإدارية بالمدرسة إلى جانب المهام المطلوبة من المعلم، والعلاقة بينه وبين الإدارة، حيث يتم تقسيم الطالبات إلى مجموعات بحسب تخصصهم . المتطلب السابق EDUC 320

EDUC 360 نظام التعليم في عمان ودول مجلس التعاون الخليجي (3ساعات معتمدة)

يتناول المقرر تحليل متعمق للأنظمة التعليمية في عمان ودول مجلس التعاون من حيث عناصرها والفلسفة التى بنى عليها، مع التركيز بشكل خاص على معايير جودة المدخلات والمخرجات ومقارنتها بالمعايير الدولية والإقليمية لتحديد متطلبات سوق العمل. يتضمن المقرر دراسة حالة وأمثلة واقعية.

EDUC 375 تكنولوجيا التعليم (3ساعات معتمدة)

يهدف المقرر إلى كيفية استخدام التكنولوجيا المعتمدة على الحاسوب في التدريس، حيث يتضمن المقرر موضوعات تتناول تكنولوجيا التعليم بين الأهمية والخصائص، والمستحدثات التكنولوجية فى مجال التعليم، مفهوم مراكز مصادر التعلم ووظائفها فى اثراء العملية التعليمية، الوسائط المتعددة والتطبيقات العملية لها، أدوات الجيل الثاني من التعليم الإلكتروني وبعض تطبيقاتها فى إدارة الأنشطة الصفية، انتاج بعض البرمجيات البسيطة التفاعلية وتقييم فعاليتها، بالإضافة إلى التعرف على كيفية حماية البيانات والمعلومات.

EDUC 380 أخلاقيات مهنة التعليم (3ساعات معتمدة)

تعريف الطالبات بأخلاقيات مهنة التعليم ومكانتها في الإسلام وتطبيقاتها في الحضارة الإسلامية، وفي أنظمة سلطنة عمان؛ لتعزيز التزام الطالب بها في نفسه وبيئة عمله، ولكونها من أهم أسباب النجاح في عمله وحياته، مع إكساب الطالبات مهارة تحليل الظواهر الأخلاقية المحدثة في محيط العمل ويستطيع التنبؤ بآثارها وتحديد موقفه منها، ويتعلم وسائل ترسيخ الأخلاقيات الحميدة، ووسائل حل ما يواجه تطبيقها من عقبات.

EDUC F 420 البحث الإجرائي (3ساعات معتمدة)

يهدف المقرر التركيز على تطوير عمليتي التعليم والتعلم، من خلال حل المشكلات الصفية والتدريسية في سياق المجتمع الصفي في ضوء تطوير العمليات التعليمية التعلمية، وذلك من خلال التركيز على جمع البيانات اليومية للتطبيقات الصفية وتحليلها عن طريق تخطيط الدرس- تنفيذ الدرس- الملاحظة المستمرة -

التأمل فيما تم إنجازه مع تحديد المشكلة و الأسئلة البحثية وكذلك نوع البيانات إضافة الى المتغيرات الجديدة و تحليل النتائج وتفسيرها.

EDUC 430 الإدارة التربوية وإدارة الصف　　　　　　　　(3ساعات معتمدة)

يركز المقرر على الجوانب المختلفة للإدارة التربوية من حيث: المفهوم، الأنماط، الوظائف، بالإضافة الى عمليات الاشراف التربوي الخاصة بالتدريس، مع التركيز على الإدارة الصفية والعوامل المؤثرة في التعلم الصفي والبيئة الصفية والتفاعل الصفي، ودور المعلم في إدارة الصف، ومعالجة المشكلات الصفية باستخدام الاستراتيجيات المناسبة.

EDUC 440FII القياس والتقويم في التربية- المجال الثاني　　　　(3ساعات معتمدة)

يركز المقرر على الخلفيات النظرية والعملية للقياس والتقويم لتعلم طلاب المجال الثاني. يتناول المقرر طبيعة عملية التقويم وأهدافها وأهميتها، والتركيز على أساليب التقويم المختلفة ذات العلاقة بالتقويم التكويني المستمر وتطبيقاتها. كما يتضمن أيضاً تدريب المتعلمين تدريباً مكثفاً على بناء الأدوات والوسائل المستخدمة وتطبيقها في قياس تعلم الطلاب في المجال الثاني.

EDUC 450FII طرائق واستراتيجيات التدريس المجال الثاني- 2　　　(3ساعات معتمدة)

يتضمن هذا المقرر تطويراً إضافياً لطرائق واستراتيجيات تدريس مواد المجال الثاني فى الحلقة الأولى من التعليم الأساسي (الرياضيات، العلوم) والتى تمت دراستها فى مقرر طرائق واستراتيجيات التدريس المجال الثاني- 1. يركز المقرر على الخلفيات النظرية والعملية لتعليم وتعلم مواد المجال الثاني في الحلقة الأولى من التعليم الأساسي، مما يساهم فى تعريف الطالب بطبيعة تلك المواد، وأهميتها، وأهداف تدريسها، وكيفية تخطيط دروسها، واختيار الكتب والوسائل التعليمية الداعمة لها كبرامج الحاسوب والوسائل السمعية والبصرية المختلفة، وتوظيف الطرائق والاستراتيجيات المناسبة لتدريسها، وكيفية توفير بيئة تعليمية مناسبة قائمة على مبادئ التعلم النشط. المتطلب السابق EDUC 350FII.

EDUC 455FII تربية عملية 2- مجال2　　　　　　　　　(6ساعات معتمدة)

يستهدف المقرر اكساب الطالبات الخبرة في البيئات الصفية بالحلقة الأولى بمدارس التعليم الأساسي تحت إشراف أساتذة الجامعات والمتعاونين في المدرسة. المتطلب السابق EDUC 303FII

EDUC 460FII طرائق واستراتيجيات التدريس المجال الثاني- 3　　　(3ساعات معتمدة)

يتضمن هذا المقرر تطويراً إضافياً لطرائق واستراتيجيات تدريس مواد المجال الثاني فى الحلقة الأولى من التعليم الأساسي (الرياضيات، العلوم) والتى تمت دراستها فى مقرر طرائق واستراتيجيات التدريس المجال الثاني- 2. يركز المقرر على الخلفيات النظرية والعملية لتعليم وتعلم مواد المجال الثاني في الحلقة الأولى من التعليم الأساسي، مما يساهم فى تعريف الطالب بطبيعة تلك المواد، وأهميتها، وأهداف تدريسها، وكيفية تخطيط دروسها، واختيار الكتب والوسائل التعليمية الداعمة لها كبرامج الحاسوب والوسائل السمعية والبصرية المختلفة، وتوظيف الطرائق والاستراتيجيات المناسبة لتدريسها، وكيفية توفير بيئة تعليمية مناسبة قائمة على مبادئ التعلم النشط. المتطلب السابق EDUC 450FII.

EDUC 485FII تربية عملية 3 – مجال ثان　　　　　　　(6ساعات معتمدة)

يستهدف المقرر اكساب الطالبات الخبرة في البيئات الصفية بالحلقة الأولى بمدارس التعليم الأساسي تحت إشراف أساتذة الجامعات والمتعاونين في المدرسة. المتطلب السابق EDUC 455FII

EDUC 490FII مشروع التخرج – المجال الثاني　　　　　　(3ساعات معتمدة)

يركز المقرر على تطبيق مهارات البحث الإجرائي من خلال قيام المتعلم بعمل مشروع بحثي يتناول تحديد المشكلة – بناء الفرضيات- أسئلة البحث- جمع البيانات- تحليل النتائج وتفسيرها، حيث يتم تقديم البحث الإجرائي كعملية تأملية يطبقها المتعلمون في الفصل الدراسي لتحديد وحل المشكلات التعليمية ذات الأهمية أثناء التدريس.

Department of English Language and Literature

1. Personnel

Chairperson: Abdulwahid Qasem Ghaleb Al Zumor

Professor: Karim Sadeghi

Associate Professors: Abdelrahman Abdalla Salih Ahmed, Abdulwahid Al Zumor, Amer Ahmed, Awad Alhassan, Farah Mohammad Amin Ghaderi, Iryna Lenchuk, Yasser Sabtan

Assistant Professors: Ali ALgryani, Lamis Ismail Omar, Liaquat A. Channa, M. Ikbal Ahmad M. Alosman, Osman Erdem yapar, Rasha Ibrahim Ahmad Maqableh, Sani Uba, Syahro Syerina Binti Syahrin, Thomas Baby Kappalumakkel

Lecturers: Anjum Khan, Muhammad Amir Saeed, Ehsan Elahi, Faical Ben Khalifa

Secretary: Mediha Younis

2. Vision

The Department of English Language and Literature strives to be a well-established high-ranked centre of languages and translation studies and research.

3. Mission

The Department of English Language and Literature is committed to provide a conducive learning environment for effective oral, written, conversational skills and also effective study, research and critical thinking skills in the fields of English Language, Arabic Language and Translation that are necessary for a self-sufficient, self-reliant individual to grow, develop, and contribute in a competitive world, to survive and flourish in the local and global job market, and to serve the Omani Society. The department's motto is "success through systematic planning and continuous hard work".

4. Programs Offered

The department offers the following Diploma and Bachelor programs:

a) Diploma Program

1) Diploma in English Language

b) Bachelors Program

1) BA in English Language
2) BA in Translation

5. Bachelor of Arts in English Language

5.1. Program Overview

The Bachelor of Arts (B.A.) in English Language is a four-year program encompassing 120 credit hours. It includes 30 credit hours of University Requirements, 15 credit hours of College Requirements, 48 credit hours of major Core Courses, and 27 Credit hours of Major Elective Courses. Hands-on experience in practice and emphasis on application-oriented activities and exercises are important elements that are integrated throughout the curriculum.

5.2. Program Objectives

The objectives of the Program are to:

1) Help the students develop a high level of linguistic competence in English and Arabic through combining theoretical knowledge and extensive practice;
2) Prepare students for careers that need the use of English language such as teaching, editing, writing, publishing, and public relations, or for pursuing their education in English language beyond the undergraduate level;
3) Prepare students for careers in translation from Arabic into English and from English into Arabic, interpretation, teaching, editing, writing, publishing, and public relations, or for pursuing their education in translation beyond the undergraduate level;
4) Raise students' awareness regarding the importance of language structure and familiarizing them with the social, historical, and cultural contexts in which languages are used;
5) Provide students with a solid liberal education, training, and appropriate learning skills;
6) Prepare graduates to become responsible professionals and citizens with high ethical values; and
7) Promote life-long independent learning.

5.3. Program Learning Outcomes

Graduates of the English Language Program (Diploma and Bachelor) will be able to:

1) Use listening skills to understand English in a range of contexts with speakers of their own and other languages and with native speakers of English.
2) Demonstrate speaking skills in order to express thoughts, opinions, arguments and a range of language functions to speakers of English and other languages with sufficient clarity and accuracy of language and pronunciation.
3) Apply a range of reading skills and strategies to cope with authentic texts in a range of contexts.
4) Demonstrate writing skills to express thoughts, opinions, arguments and a range of language functions in styles appropriate to the task.
5) Demonstrate the acquired ability to make effective use of grammatical devices and lexical resources of the language for the purposes of efficient communication.

6) Show informed awareness of linguistic systems of English language and demonstrate the acquired ability to identify and analyze the structure and functions of the language.
7) Show informed awareness of different literary genres and demonstrate the acquired ability to critically examine different literary texts in English.
8) Show the ability of independent/autonomous learning by using a range of learning techniques and strategies.
9) Apply study, research and presentation skills in order to increase academic, professional, and employment potential.

5.4. Admission Requirements

Admission requirements for a Bachelor of Arts in English Language Program are as specified in **College Section 6-a on page 50.**

5.5. Graduation Requirements

To graduate with a Bachelor of Arts in English Language, students must satisfactorily complete 120 credits taken over four academic years, with an overall minimum average of 65 percent, and a cumulative average of 70 percent in the major courses. The university, college, and program requirements are as given in the following table.

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
30	15	48	27	120

5.6. University Requirements

The University requirements consist of the following ten (10) courses encompassing 30 credit hours:

1) ARAB 101: Academic Writing in Arabic
2) CMPS 100A: Introduction to Technical Computing for the Arts
3) ENGL 101: Basic Academic English
4) ENGL 102A: English for Arts, Humanities and Social Sciences I
5) ENGL 203A: English for Arts, Humanities and Social Sciences II
6) ENGL 204: Advanced English for Academic Purposes and Research
7) ENGL 305: Advanced English Language and Communication Skills
8) ENTR 200: Entrepreneurship: Innovation and Creativity
9) MATH 103: for Social Sciences I
10) SOCS 102: Omani Society

5.7. College Requirements

The college requirements consist of the following five (5) courses encompassing 15 credit hours:

- One (3-credit hours) course in Physical/Natural Sciences elective
- One (3-credit hours) course in Humanities/Social Sciences elective
- Three (9-credit hours) courses in any other major

5.8. Program Requirements

The program requirements consist of 25 courses encompassing 75 Credit Hours distributed as follows.

I) Major Core Courses:

This set includes the following 16 Courses encompassing 48 Credit hours:

1) ENGL 120: Grammar in Context
2) ENGL 160: Introduction to Literature
3) ENGL 210: Introduction to Linguistics
4) ENGL 215: Phonetics and Phonology
5) ENGL 220: Morphology
6) ENGL 230: Prose and Fiction in English
7) ENGL 270: Situational English
8) ENGL 285: Writing Workshop
9) ENGL 290: Poetry
10) ENGL 310: Syntax
11) ENGL 320: Introduction to Creative Writing
12) ENGL 335: Discourse Analysis
13) ENGL 340: Semantics
14) ENGL 375: Drama
15) ENGL 420: Models of Second Language Acquisition
16) ENGL 465: Advanced Reading

II) Major Elective Courses:

This set consists of 9 courses encompassing 27 Credit hours chosen from the following list:

1) ENGL 225: Modern Literature
2) ENGL 240: Introduction to Language
3) ENGL 255: Psycholinguistics
4) ENGL 260: Shakespeare
5) ENGL 265: Culture in the Classroom
6) ENGL 275: Rhetoric
7) ENGL 280: Business English
8) ENGL 300: Foundations of Linguistic Theory
9) ENGL 315: The Novel
10) ENGL 330: The Victorian Age
11) ENGL 350: Advanced Writing for Humanities
12) ENGL 355: Sociolinguistics
13) ENGL 360: Advanced Writing for Professional Fields
14) ENGL 365: Advanced Creative Writing
15) ENGL 405: World Literature
16) ENGL 410: Literary Criticism
17) ENGL 415: The Romantic Movement
18) ENGL 440: Special Topic in Literature or Language
19) ENGL 455: Language and Gender

20) ENGL 460: Politics of Language
21) ENGL 470: History of the English Language
22) EDUC 320: Instructional Methods and Strategies
23) TRAN 250: Contrastive Analysis
24) TRAN 330: Special Topic in Translation
25) TRAN 365: English Literature in Arabic Translations
26) TRAN 410: Arabic Literature in English Translation

5.9. Plan of Study: BA in English Language

Year I		
Semester 1 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
CMPS 100A	Introduction to Technical Computing for the Arts	3
ENGL 101	Basic Academic English	3
ENGL 120	Grammar in Context	3
MATH 103	for Social Sciences I	3
Code	Humanities/Social Sciences Elective	3
Semester 2 (Spring)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ARAB 101	Academic Writing in Arabic	3
ENGL 102A	English for Arts, Humanities and Social Sciences I	3
ENGL 160	Introduction to Literature	3
SOCS 102	Omani Society	3
Code	Physical/ Natural Sciences Elective	3
Year II		
Semester 3 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 203A	English for Arts, Humanities and Social Sciences II	**3**
ENGL 210	Introduction to Linguistics	**3**
ENGL 215	Phonetics and Phonology	**3**
ENGL 220	Morphology	**3**
ENGL 230	Prose and Fiction in English	**3**
Semester 4 (Spring)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 204	Advanced English for Academic Purposes & Research	**3**
ENGL 270	Situational English	**3**
ENGL 285	Writing Workshop	**3**
ENGL 290	Poetry	**3**
ENTR 200	Entrepreneurship: Innovation and Creativity	**3**

Year III		
Semester 5 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 310	Syntax	3
EGNL 320	Introduction to Creative Writing	3
ENGL 335	Discourse Analysis	3
Code	Major Elective	3
Code	Major Elective	3
Semester 6 (Spring)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 340	Semantics	3
ENGL 375	Drama	3
Code	Major Elective	3
Code	Major Elective	3
Code	Major Elective	3
Year IV		
Semester 7 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 420	Models of Second Language Acquisition	3
ENGL 465	Advanced Reading	3
Code	Major Elective	3
Code	Major Elective	3
Code	General Elective	3
Semester 8 (Spring)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 305	Advanced English Language and Communication Skills	3
Code	Major Elective	3
Code	General Elective	3
Code	Major Elective	3
Code	General Elective	3
Completion of the BA in English Language - Total Credits 120		

5.10. Course Descriptions

ENGL 101   Basic Academic English   (3 Credits)

Consistent with its aim of enabling first year students in the university departments to become efficient communicators in English Language, this course scaffolds with their knowledge, skills and competence developed in Level 3 of the Foundation Program and continues to build on their language and study skills. This integrated skills course is designed to develop the listening, speaking, reading and writing skills of the students so that they can understand English in a range of contexts and express thoughts, opinions, arguments and a range of language functions to speakers of English and other languages with sufficient clarity and accuracy of language and pronunciation. The course also aims at enabling the students to develop into self-dependent/autonomous learners by exposing them to a range of learning techniques and strategies, critical thinking,

basic study and research skills in order to increase their academic, professional, and employment potential.

ENGL 101 - A   Basic Academic English IA   (3 credits)

This is an integrated course that focuses on improving reading skills and comprehension and developing compositional competency. Participants are guided through the processes of reading and composing various types of short essays i.e., descriptive, narrative, opinion, and comparison and contrast. Listening and speaking skills as well as grammar and vocabulary building are also enhanced. This three credit-hour course also includes 2 additional hours per week of Lab training in which students further practice the skills targeted for the course.

ENGL 102 A   English for Arts, Humanities and Social Sciences I   (3 Credits)

The main aim of this course is to improve students' professional communication skills for the content and tasks to which they will be exposed to in their courses related to their field of study. Scaffolding with the knowledge, skills and competence developed in ENGL 101, this course is designed to improve specialist language knowledge and communication skills of the students studying and working in the fields of Arts and Human Sciences and enable them to work more confidently and effectively. The course focuses on topics common to the fields of Arts, Humanities and Social Sciences. The course also aims at enabling the students to develop into self-dependent/autonomous learners by exposing them to a range of learning techniques and strategies, critical thinking, basic study and research skills in order to increase their academic, professional, and employment potential. Prerequisite: ENGL 101

ENGL 102 B   English for Business I   (3 Credits)

The main aim of this course is to improve students' professional communication skills for the content and tasks to which they will be exposed to in their courses related to their field of study. Scaffolding with the knowledge, skills and competence developed in ENGL 101, this course is designed to improve specialist language knowledge and communication skills of the students studying and working in the fields of Commerce and Business Administration and enable them to work more confidently and effectively. The course content covers topics common to the fields of Business and Management, and the classroom tasks and activities range from understanding, talking and discussing about a wide range of topics and issues related to Business and Commerce, reflecting about changes in the world's business and economic environments to working with a set of case studies that provide problem-solving practice in authentic Business and Management scenarios. The course also aims at enabling the students to develop into self-dependent/autonomous learners by exposing them to a range of learning techniques and strategies, critical thinking, basic study and research skills in order to increase their academic, professional, and employment potential. Prerequisite: ENGL 101/101A

ENGL 102 C   English for Computer Science I   3 Credits

The main aim of this course is to improve students' professional communication skills for the content and tasks to which they will be exposed to in their courses related to their field of study. Scaffolding with the knowledge, skills and

competence developed in ENGL 101, this course is designed to improve specialist language knowledge and communication skills of the students studying and working in the fields of Computer Science and Information Technology and enable them to work more confidently and effectively. The course content covers topics common to the fields of Computer Science, and the classroom tasks and activities range from understanding, talking and discussing about a wide range of topics and issues related to computers, information technology and the multimedia, reflecting about changes in the fields of computers and information technology to working with a set of authentic situations and scenarios that provide problem-solving practice in the field. The course also aims at enabling the students to develop into self-dependent/autonomous learners by exposing them to a range of learning techniques and strategies, critical thinking, basic study and research skills in order to increase their academic, professional, and employment potential. Prerequisite: ENGL 101/101A

ENGL 102 E   English for Engineering and Sciences I   (3 Credits)

The main aim of this course is to improve students' professional communication skills for the content and tasks to which they will be exposed to in their courses related to their field of study. Scaffolding with the knowledge, skills and competence developed in ENGL 101, this course is designed to improve specialist language knowledge and communication skills of the students studying and working in the fields of Engineering and Sciences and enable them to work more confidently and effectively. The course content covers topics common to the fields of Engineering and Sciences and the classroom tasks and activities range from describing technical problems and solutions to working with drawings and a set of case studies that provide problem-solving practice in authentic Engineering and Scientific scenarios. The course also aims at enabling the students to develop into self-dependent/autonomous learners by exposing them to a range of learning techniques and strategies, critical thinking, basic study and research skills in order to increase their academic, professional, and employment potential. Prerequisite: ENGL 101/101A

ENGL 120   Grammar in Context   (3 credits)

This course offers basics of English Grammar and is designed to make students use correct and creative structures of English in realistic situations. Topics include auxiliaries, time and tense, subject-verb agreement, pronoun antecedent agreement, passive, conditionals, co-ordination and articles.

ENGL 160   Introduction to Literature   (3 credits)

This course is designed to acquaint students with the various literary genres. Without being comprehensive, the course emphasizes inquiry into works of major authors in poetry, drama, and prose. Through the study of thematically related texts, the course provides insights into the historical, political, and cultural contexts that influenced the work of these authors. It also introduces important literary concepts, such as character, plot, narrative, and imagery.

ENGL 203 A   English for Arts, Humanities and Social Sciences II   (3 Credits)

This course builds on the knowledge, skills and competence developed in ENGL 102 A and further continues to improve students' professional communication

skills for the content and tasks to which they will be exposed to in their courses related to their field of study. The course is designed to improve specialist language knowledge and communication skills of the students studying and working in the fields of Arts and Human Sciences and enable them to work more confidently and effectively. The course is a further exploration of topics introduced in ENGL102A, which are common to the fields of Arts, Humanities and Social Sciences. The course also aims at enabling the students to develop into self-dependent/autonomous learners by exposing them to a range of learning techniques and strategies, critical thinking, basic study and research skills in order to increase their academic, professional, and employment potential. Prerequisite: ENGL 102 A

ENGL 203 B   English for Business II   (3 Credits)
This course builds on the knowledge, skills and competence developed in ENGL 102 B and further continues to improve students' professional communication skills for the content and tasks to which they will be exposed to in their courses related to their field of study. The course is designed to improve specialist language knowledge and communication skills of the students studying and working in the fields of Commerce and Business Administration and enable them to work more confidently and effectively. The course content covers topics common to the fields of Business and Management, and the classroom tasks and activities range from understanding, talking and discussing about a wide range of topics and issues related to Business and Commerce, reflecting about changes in the world's business and economic environments to working with a set of case studies that provide problem-solving practice in authentic Business and Management scenarios. The course also aims at enabling the students to develop into self-dependent/autonomous learners by exposing them to a range of learning techniques and strategies, critical thinking, basic study and research skills in order to increase their academic, professional, and employment potential. Prerequisite: ENGL 102 /ENGL 102 B

ENGL 203 C   English for Computer Science II   (3 Credits)
This course builds on the knowledge, skills and competence developed in ENGL 102 C and further continues to improve students' professional communication skills for the content and tasks to which they will be exposed to in their courses related to their field of study. The course is designed to improve specialist language knowledge and communication skills of the students studying and working in the fields of Computer Science and Information Technology and enable them to work more confidently and effectively. The course content covers topics common to the fields of Computer Science, and the classroom tasks and activities range from understanding, talking and discussing about a wide range of topics and issues related to computers, information technology and the multimedia, reflecting about changes in the fields of computers and information technology to working with a set of authentic situations and scenarios that provide problem-solving practice in the field. The course also aims at enabling the students to develop into self-dependent/autonomous learners by exposing them to a range of learning techniques and strategies, critical thinking, basic study and research skills in order to increase their academic, professional, and employment potential. Prerequisite: ENGL 102/ ENGL 102C

ENGL 203 E   English for Engineering and Sciences II   (3 Credits)
This course builds on the knowledge, skills and competence developed in ENGL 102 E and further continues to improve students' professional communication skills for the content and tasks to which they will be exposed to in their courses related to their field of study. The course is designed to improve specialist language knowledge and communication skills of the students studying and working in the fields of Engineering and Sciences and enable them to work more confidently and effectively. The course content covers topics common to the fields of Engineering and Sciences and the classroom tasks and activities range from describing technical problems and solutions to working with drawings and a set of case studies that provide problem-solving practice in authentic Engineering and Scientific scenarios. The course also aims at enabling the students to develop into self-dependent/autonomous learners by exposing them to a range of learning techniques and strategies, critical thinking, basic study and research skills in order to increase their academic, professional, and employment potential. Prerequisite: ENGL 102/ENGL 102 E

ENGL 204   Advanced English for Academic Purposes and Research   (3 Credits)
The main objective of this course is to activate, enrich, and strengthen students' English for Academic purposes and prepare them for research. It aims at developing a take-off level proficiency in advanced academic reading and writing skills, study and research skills, along with aural-oral skills. The course is also designed to promote self-study habits among students. In this course, the students continue to increase and develop their comprehension, analysis, and synthesis skills of a variety of extended academic texts about issues across curriculum. Students will also learn how to conduct and write independent research. The course content covers different stages of writing process and elements of writing, and introduces and practices writing modes such as case studies, literature reviews, reports and surveys. Particular attention will be given to issues around academic vocabulary, plagiarism, and reference skills. Prerequisite: ENGL 203/ENGL 203 A/ENGL 203 B/ENGL 203 C/ENGL 203 E

ENGL 210   Introduction to Linguistics   (3 credits)
This course investigates the nature of human language through a survey of some of the major findings and research results in linguistics. Topics include the biological basis of human language, the structure of sounds, phrases, and meaning, language evolution, writing systems, linguistic variation, language acquisition, and computer analyses of speech.

ENGL 211   Language Acquisition and Literacy   (3 credits)
This course explores the differences between first language acquisition and second language learning in relation to literacy. Students will be asked to explore different aspects of literacy and its relationship to the linguistic and cognitive development of younger learners. Topics may include the definition of literacy, digital literacy, literacy and bilingualism, literacy in the situation of diglossia and multiculturalism, as well as the role of child's first language in the development of literacy in additional languages. Prerequisite: ENGL 210.

ENGL 212   Teaching EFL for Younger Learners: Principles   (3 credits)
**   and Practices**

This course builds on the knowledge acquired by students in ENGL 215N. This course is practical in nature, as it explores how the theoretical concepts, ideas of language learning and literacies are reflected in the methodology and pedagogy of teaching younger learners. Pre-requisite ENGL211.

ENGL 215   Phonetics and Phonology   (3 credits)

This course is an overview of English phonetics and phonology. Topics include the articulatory process, stress, and intonation. Students will learn how to transcribe spoken English into phonetic script and explore the range of variation found in English. This course will also help students recognize the differences among diverse sound systems.

ENGL 220   Morphology   (3 credits)

This course trains students to analyze and describe word constituents by means of authentic language data from a wide variety of languages. Students will learn how to correctly use common linguistic terms relating to morphology, organize data and perform morphological analyses, and write clear and adequate descriptions of the patterns discovered in the analyses.

ENGL 225   Modern Literature   (3 credits)

This course examines some of the substantial twentieth- and twenty-first century English voices. Major poems and other works of writing by the most important modern writers will be considered, emphasizing especially the period between post-WWI disillusionment and early internationalism. Genres studied will include nonfiction essays, diaries, editorials, fictional short stories, novel excerpts, and an array of poetry. Prerequisite: ENGL 160.

ENGL 230   Prose and Fiction in English   (3 credits)

This course covers a range of Anglo-American prose genres, including short stories, autobiographical writing and essays, in order to introduce some of the themes and literary techniques prevalent in British and American writing today. The course will focus on the individual and the family and will raise questions of identity and tradition. Prerequisite: ENGL 160.

ENGL 235   Children and Young Adult Literature   (3 credits)

The class will introduce students to the historical, cultural and critical aspects of literature written for children and young adults. Students will learn how to evaluate books in terms of their linguistic difficulty and artistic merit. A variety of genres will be presented including stories, poetry, fairy tales and myths; in addition, students will review picture books for younger learners. As children's literature opens the door to life-long learning, students will examine methods to promote young people's reading and writing skills. Prerequisite: ENGL 160

ENGL 240   Introduction to Language   (3 credits)

The aim of this course is to introduce the study of language to both non-specialists and those who are interested in language-related careers. Areas covered are human communication, the meaning and function of language, language and culture, language and thought, language acquisition, languages of the world, and the evolution of language.

ENGL 255   Psycholinguistics   (3 credits)
This course introduces students to the psychological processes that underlie linguistic behavior. Topics include theories of the language-thought relationship, language processing, language production, language comprehension, language and the brain, language acquisition, theories of language learning, and bilingualism. Prerequisite: ENGL 210

ENGL 256   Teaching and Learning through the Fine Arts   (3 credits)
In this course students are invited to explore the main types of fine arts, such as painting, music, theater and film in relation to the cognitive, emotional and creative development of younger learners. This course will be practical in nature where students will create their own art and explore different types of pedagogical techniques, which facilitate the environment conducive to the development of children's critical thinking, creativity and imagination.

ENGL 260   Shakespeare   (3 credits)
In this course, students will read representative plays by Shakespeare and one play of his contemporaries. Attention will be given to theatrical conventions, as well as social, cultural, and intellectual history of the period. Prerequisite: ENGL 160.

ENGL 265   Culture in the Classroom   (3 credits)
This course will acquaint students with the important issues related to culture in the classroom. Course topics include definitions of culture, the relationship between culture and language, teaching culture, designing culturally responsive lessons and curricula, and enhancing the cultural elements in specific English language lessons.

ENGL 270   Situational English   (3 credits)
This course is a hands-on workshop designed to offer students opportunities to speak English in diverse situations. Drawing on objectives learned in the Sounds of English, the student will apply the theories and knowledge to actually practice and hone their oral language abilities. Multiple role-playing scenarios will be practiced.

ENGL 275   Rhetoric   (3 credits)
This course focuses on developing students' ability to think critically and analytically, using language in a logical, purposeful and persuasive manner. Students will have the opportunity to improve their writing, listening and speaking skills in a series of structured debates.

ENGL 280   Business English   (3 credits)
This course focuses on diverse types of written business communication required in commercial areas. Among these types are business memos, letters, reports, and curriculum vitae.

ENGL 285   Writing Workshop   (3 credits)
This course is designed to practice writing in English. Formats for diverse genres of writing will be reviewed followed by writing clinics. The students will be required to write several drafts of each assignment under close scrutiny by their teacher and peers. Prerequisite: ENGL 203/ENGL 203 A/ENGL 203B/ENGL 203C/ENGL 203E.

ENGL 290   Poetry   (3 credits)

This course involves reading texts critically, particularly selected to elucidate the nature of poetic genres and modes. It also exposes students to critical theory and relevant aspects of social and political history. Prerequisite: ENGL 160.

ENGL 300   Foundations of Linguistic Theory   (3 credits)

This course concentrates on linguistic theories that have shaped 20th-century linguistics. This course is on theories propounded by Structural lists (e.g. Bloomfield), Transformation lists (e.g. Chomsky), Systemic Grammarians (e.g. Halliday) and Case Grammarians (e.g. Fillmore). This course also includes recurrent themes and descriptive practices. Prerequisite: ENGL 210.

ENGL 305   Advanced English Language and Communication Skills   (3 Credits)

This course is designed with a dual purpose of helping students succeed on their current courses and to prepare them for their career. Geared towards students' success in the standardized test IELTS (International English Language Testing System) with a target of minimum band 5, the course builds on the student's knowledge, skills and competence developed in ENGL 101 through ENGL 204. The course content covers comprehension of advanced reading texts from a wide range of disciplines and listening comprehension in social, educational and training contexts. Interactive speaking practice involves oral interviews on general/familiar topics and also prompted particular topics leading to a discussion of more abstract issues and concepts thematically linked to the prompted topics. Writing includes composing essays and reports, interpreting visual information and graphics, outlining and presenting a solution, justifying an opinion and evaluating ideas and evidence etc. Simultaneously, training in effective time management, critical thinking and study skills will also be provided in order to increase their academic, professional, and employment potential. Prerequisite: ENGL 204

ENGL 310   Syntax   (3 credits)

This course is an introduction to syntactic analysis. Topics include lexical and functional categories, morphosyntactic features, theta-roles and argument structure, the structure of phrases, constituency, clause types, and syntactic relationships within the clause. Emphasis is placed on cross-linguistic variation, as well as language universals. Prerequisite: ENGL 210.

ENGL 315   The Novel   (3 credits)

This course introduces students to characteristics of the novel form such as narrative structure, voice, point of view, plot and characters. Students will study and analyze one novel in detail and consider the social, cultural and political forces that shape it. Prerequisite: ENGL 160.

ENGL 320   Introduction to Creative Writing   (3 credits)

This course offers opportunities for the students to experiment with various forms of creative writing. Students also explore literary devices used in contemporary literary texts and apply them to their own writing. Classes are conducted as workshops where students share their writing with each other and learn to revise their work. Prerequisite: ENGL 203/ENGL 203 A/ENGL 203B/ENGL 203C/ENGL 203E.

ENGL 330   The Victorian Age   (3 credits)
This course studies the works of major writers of the Victorian era and emphasizes their social, cultural, and philosophical background. Students will read and analyze primary literary texts in various genres like prose, poetry, and fiction. Prerequisite: ENGL 160.

ENGL 335   Discourse Analysis   (3 credits)
This course investigates human discourse as a means to understand the nature of language and language use. It examines different forms of discourse using various approaches including speech act theory, pragmatics, conversational analysis, and ethnography of communication.

ENGL 340   Semantics   (3 credits)
This course focuses on Semantics, Pragmatics and the relationship between linguistic meaning, structure, and context. Students will explore various approaches to word meaning, phrase and sentence meaning, and observe the effects of context and background information on interpretation. ENGL 210

ENGL 350   Advanced Writing for Humanities   (3 credits)
This course, intended for students majoring in the Social Sciences, prepares students to write and present papers related to their fields of study. It includes individual and/or group preparation of reports, term papers, multimedia presentations, and other specialized forms of writing. This class is equivalent to ENGL 360 and is offered in spring semesters. Prerequisite: ENGL 204.

ENGL 355   Sociolinguistics   (3 credits)
This course explores the role of language in society, and introduces the students to research methodologies applied in sociolinguistics. Topics include multilingualism and language choice, Pidgins and Creoles, regional and social variation, conventions of conversation and politeness, and interactions between languages and identity, language and social class, language and culture, and language and thought.

ENGL 360   Advanced Writing for Professional Fields   (3 credits)
This course, intended for students majoring in English or Education, prepares students to write and present papers related to their fields of study. It includes individual and/or group preparation of reports, term papers, multimedia presentations, and other specialized forms of writing. This course is equivalent to ENGL 350 and is offered in fall semesters. Prerequisite: ENGL 204.

ENGL 365   Advanced Creative Writing   (3 credits)
This course is a sequel to English 320 with the objective of refining students' creative writing skills by introducing them to several texts, while emphasizing one of the following genres: fiction, nonfiction, poetry, or drama. Prerequisite: ENGL 320.

ENGL 375   Drama   (3 credits)
This course emphasizes theoretical definition of dramatic form, changes in the conception of dramatic genres, and the nature of the genre as it influences the expectations of the reader. Prerequisite: ENGL 160.

ENGL 405   World Literature   (3 credits)

This course examines the literature of various cultures, including Middle-Eastern, African, Asian and European, in order to come to some conclusions about how literature is used to represent the fears, wishes, and dreams of different cultures. Through this study, students will improve their analytical skills, as well as see the ways their own struggles and hopes are intimately connected to those of others. Prerequisite: ENGL 160.

ENGL 410   Literary Criticism   (3 credits)

The course introduces students to ongoing literary debates about: what is the nature, function, and value of literature? What criteria do we use to determine a work's "greatness"? What is the function of the artist, the critic, and of criticism and theory itself? How do we account for multiple interpretations of a text? The major schools of 20th and 21st century literary criticism and theory will be presented, including structuralism, New Criticism, Post-Structuralism, reader-response theory, and cultural studies. The debates surrounding multiculturalism, political correctness, textual authority, and the literary canon will also be discussed. ENGL 230/ ENGL 290/ENGL 315/ENGL 375

ENGL 415   The Romantic Movement   (3 credits)

This course is an introduction to the literature of the Romantic period in Britain. Students will be asked to read and analyze a selection of poems and prose texts by representative authors such as Wordsworth, Blake, Coleridge, Keats, Byron, and Mary Shelley. Reference will be made to the cultural contexts of literature. Prerequisite: ENGL 160.

ENGL 420   Models of Second Language Acquisition   (3 credits)

This course introduces students to the study of second language acquisition and provides them with training in the collection, analysis, and interpretation of representative learner language data in second language contexts. Course topics include universals of language acquisition, major theoretical models of second language acquisition, and individual differences in second language acquisition. Implications for language teaching are also addressed.

ENGL 440   Special Topic in Literature or Language   (3 credits)

This course introduces students to independent research on a topic decided by the professor. Students will use texts by important authors or on subjects of importance to the subject of English language as a basis for their own investigations and explorations of current literary and language theory. The students' work will be shared with the class in a formal research paper and multimedia presentations. Prerequisite: ENGL 204.

ENGL 455   Language and Gender   (3 credits)

This course surveys and evaluates the research that has been done on gender differences in language use. Topics include power and solidarity, gender differences in turn-taking, choice of topic, and communicative styles, and anthropological work on men and women's speech genres. Students should complete the course with enhanced awareness of the role of language in relation to issues of inequality and sexual politics.

ENGL 460   Politics of Language   (3 credits)

This course explores the relation between politics in language. It focusses on how language can be used to achieve political ends by examining political discourse, language in the media, etc. It also studies the political dimension of standardization, multilingualism, and language choice by examining the role of public institutions in the regulation of language use.

ENGL 465   Advanced Reading   (3 credits)

This course aims to help student**s** to improve reading skills necessary for academic success in undergraduate degree programs. The course draws on a range of topics and texts from various genres to help students understand and communicate academic content and ideas. Emphasis is placed on strengthening language and critical thinking skills in reading that promote students' engagement with a range of texts relevant to academic studies. Prerequisite: ENGL 204

ENGL 470   History of the English Language   (3 credits)

This course is a survey of the history of the English language from its earliest Indo-European origins to the present day. The nature and changes of the language are presented by reviewing the shifts that have occurred from Indo-European, Germanic, Old English, Middle English, up to Early and Modern English.

6. Diploma in English Language

6.1. Program Overview

The Diploma in English Language Program is a two-year program encompassing 60 credit hours. It includes 27 credit hours of University Requirements, 6 credit hours of College Requirements, 21 credit hour s of Major Core Courses and 6 credit hours of Major Elective Courses. The course requirements for the program are described below.

6.2. Program Objectives

Refer to Bachelor of Arts in English Language Program Sections 5.2.

6.3. Program Learning Outcomes

Refer to Bachelor of Arts in in English Language Program section 5.3.

6.4. Admission Requirements

Admission requirements for a Diploma in English Language Program are as specified in College **Section 6-a on page 50**.

6.5. Graduation Requirements

To graduate with a Diploma in English, students must satisfactorily complete 60 credits taken over two academic years, with an overall minimum average of 65 percent, and a cumulative average of 70 percent in the major courses. The university, college, and program requirements are as given in the following table.

University Requirement	College Requirement	Major Requirement		Total Credit Hours
		Core	Elective	
27	6	24	3	60

Detailed distribution is tabulated below:

Category	Courses/Credits	Total Credits
University Requirement	9 Courses * 3 Credits	27
College Requirement	2 Course * 3 Credits	6
Major Requirement (Core Courses)	8 Courses * 3 Credits	24
General Elective	1 Courses * 3 Credits	3
Total	**20 Courses * 3 Credits**	**60 Credits**

6.6. University Requirements

The University requirements consist of the following nine (9) courses encompassing 27 Credit Hours:

1) ARAB 101:   Academic Writing in Arabic
2) CMPS 100A: Introduction to Technical Computing for the Arts
3) ENGL 101:   Basic Academic English
4) ENGL 102A: English for Arts, Humanities and Social Sciences I
5) ENGL 203A: English for Arts, Humanities and Social Sciences II
6) ENGL 204:   Advanced English for Academic Purposes and Research
7) MATH 103:   for Social Sciences I
8) ENTR 200:   Entrepreneurship: Innovation and Creativity
9) SOCS 102:   Omani Society

6.7. College Requirements

The college requirements include the following (2) courses encompassing 6 Credit Hours:

- One-3-credit hours course in physical/natural sciences elective
- One- 3-credit hours course in humanities and social sciences elective

6.8. Program Requirements

The program requirements consist of nine (8) courses encompassing 24 credit hours distributed as follows.

I)   Major Core Courses:

This set includes the following seven (8) courses encompassing 24 credit hours

1) ENGL 120: Grammar in Context
2) ENGL 160: Introduction to Literature
3) ENGL 210: Introduction to Linguistics
4) ENGL 211: Language Acquisition and Literacy
5) ENGL 212: Teaching EFL for Younger Learners: Principles and Practices
6) ENGL 235: Children and Young Adult Literature

7) ENGL 256: Teaching and Learning through the Fine Arts
8) ENGL 270: Situational English

II) Major Elective Courses:

This set includes two (2), 6-credit hour courses chosen from the followi

1) ENGL 230: Prose and Fiction in English
2) ENGL 225: Modern Literature
3) ENGL 240: Introduction to Language
4) ENGL 265: Culture in the Classroom
5) ENGL 275: Rhetoric
6) ENGL 280: English for the Workplace
7) ENGL 285: Writing Workshop
8) ENGL 290: Poetry

Admission criteria

For admission to any of the undergraduate programs offered by CAAS, a student must have:

- A General Education Certificate or its equivalent, and
- Passed FP from DU or any other HEI recognized by MoHERI or be exempted from FP English, Maths and IT courses based on placement tests conducted by DU Foundation Program

6.9. Plan of Study: Diploma in English Language

Year I		
Semester 1 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
CMPS 100B	Introduction to Technical Computing for the Sciences	3
ENGL 101	Basic Academic English	3
ENGL 120	Grammar in Context	3
MATH 103	Mathematics for Social Sciences I	3
EDUC 120	Humanities/Social Sciences Elective	3
Semester 2 (Spring)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ARAB 101	Academic Writing in Arabic	3
ENGL 102A	English for Arts, Humanities and Social Sciences I	3
ENGL 160	Introduction to Literature	3
SOCS 102	Omani Society	3
ENGL 210	Introduction to Linguistics	3
Year II		
Semester 3 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 203A	English for Arts, Humanities and Social Sciences II	**3**
ENGL 215N	Language acquisition & literacy	**3**

Code	Course Title	Credit Hours
ENGL 235	Children & Young Adult Literature	**3**
Code	Physical/Natural sciences elective	**3**
Code	English Major Elective	**3**
Semester 4 (Spring)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 204	Advanced English for Academic Purposes & Research	**3**
ENGL 170	Situational English	**3**
ENGL 256	Teaching and Learning through the Fine Arts	**3**
ENGL 211	Teaching for Younger Learners: Principles and Practices	**3**
ENTR 200	Entrepreneurship: Innovation and Creativity	**3**

6.10. Course Description

Refer to Bachelor in English Language Program Sections 5.10.

7. Bachelor of Arts in Translation

7.1. Program Overview

The Bachelor of Arts (B.A.) in Translation curriculum includes 30 credit hours of University Requirements, 12 credit hours of College Requirements, and 51 credit

hours of Major Core Courses and 27 credit hours of Major Elective Courses. Hands-on experience in practical training and emphasis on application-oriented activities and exercises are important elements that are integrated throughout the curriculum. It is designed to grant students the Bachelor of Arts degree upon the successful completion of the four-year program.

7.2. Program Objectives

The objectives of the Program are to:
1) Help the students develop a high level of linguistic competence in English and Arabic through combining theoretical knowledge and extensive practice;
2) Prepare students for careers that need the use of English language such as teaching, editing, writing, publishing, and public relations, or for pursuing their education in English language beyond the undergraduate level;
3) Prepare students for careers in translation from Arabic into English and from English into Arabic, interpretation, teaching, editing, writing, publishing, and public relations, or for pursuing their education in translation beyond the undergraduate level;
4) Raise students' awareness regarding the importance of language structure and familiarizing them with the social, historical, and cultural contexts in which languages are used;
5) Provide students with a solid liberal education, training, and appropriate learning skills;

6) Prepare graduates to become responsible professionals and citizens with high ethical values; and
7) Promote life-long independent learning.

7.3. Program Learning Outcomes

Graduates of the Translation Program will be able to:

1) Demonstrate the ability to understand proper approach to translation issues be it socio- and psycholinguistic, pragmatic, semantic, etc.
2) Show the ability to carry out comparative and contrastive analysis between the two languages.
3) Demonstrate the understanding of useful strategies needed to achieve equivalence at different levels between English and Arabic.
4) Apply the skills of translating/interpreting different text types.
5) Show the ability to identify the special linguistic and stylistic characteristics of each text type.
6) Demonstrate the ability to identify the tools and techniques of generic and discourse analyses.
7) Demonstrate skills of effective use of specialized dictionaries and glossaries in various fields to find closest matches of senses of translation units.
8) Show awareness of the complexities of cultural differences when rendering and interpreting different text types
9) Show the ability of independent/autonomous learning by using a range of learning techniques and strategies.
10) Apply study, research and presentation skills in order to increase academic, professional, and employment potential.

7.4. Admission Requirements

Admission requirements for a Bachelor of Arts in Translation Program are as specified in College **Section 6-a on page 50**.

7.5. Graduation Requirements

To graduate with a Bachelor of Arts in Translation, students must satisfactorily complete 120 credits taken over four academic years, with an overall minimum average of 65 percent, and a cumulative average of 70 percent in the major courses. The university, college, and program requirements are as given in the following table.

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
30	12	51	27	120

7.6. University Requirements

The University requirements consist of the following ten (10) course encompassing 30 credit hours:

1) ARAB 101:   Academic Writing in Arabic
2) CMPS 100A: Introduction to Technical Computing for the Arts

3) ENGL 101:   Basic Academic English
4) ENGL 102A: English for Arts, Humanities and Social Sciences I
5) ENGL 203A: English for Arts, Humanities and Social Sciences II
6) ENGL 204: Advanced English for Academic Purposes and Research
7) ENGL 305: Advanced English Language and Communication Skills
8) ENTR 200: Entrepreneurship: Innovation and Creativity
9) MATH 103: for Social Sciences
10) SOCS 102: Omani Society

7.7. College Requirements

The college requirements consist of the following four (4) courses encompassing 12 Credit hours:

- One course in physical/ natural sciences electives (3 Cr. hrs.)
- One course in humanities/social sciences electives (3 Cr. hrs.)
- Two courses in any other majors (6 Cr. hrs.)

7.8. Program Requirements

The program requirement includes the following 26 courses encompassing 78 credit hours:

I)   Major Core Courses:

This set consists of the following 17 Courses encompassing 51 Credit hours:

1) ARAB 102: Arabic Grammar
2) ARAB 308: Morphology
3) ENGL 120: Grammar in Context
4) ENGL 210: Introduction to Linguistics
5) ENGL 215: Phonetics and Phonology
6) ENGL 335: Discourse Analysis
7) TRAN 150: Introduction to Translation
8) TRAN 220: Translation Theory
9) TRAN 250: Contrastive Analysis
10) TRAN 260: Translation Techniques
11) TRAN 300: Translating Business Texts
12) TRAN 310: Translating Journalistic Texts
13) TRAN 355: Technology-Assisted Translation
14) TRAN 360: Translating Scientific Texts
15) TRAN 420: Translating Legal Documents
16) TRAN 435: Lexicography and Terminology
17) TRAN 480: External Practicum

II)   Major Elective Courses:

This set includes nine courses encompassing 27 credit hours distributed as follows:

a) Four Translation Elective courses encompassing 12 credit hours chosen from the following list

   1) TRAN 225: Introduction to Interpreting
   2) TRAN 235: French Language I
   3) TRAN 330: Special Topic in Translation
   4) TRAN 345: French Language
   5) TRAN 365: English Literature in Arabic Translations
   6) TRAN 370: Medical Translation
   7) TRAN 375: Audiovisual Translation
   8) TRAN 410: Arabic Literature in English Translations
   9) TRAN 425: Contrastive Rhetoric and Stylistics
  10) TRAN 465: Critical Analysis of Translation Texts

b) Two Arabic Language Elective courses encompassing 6 credit hours chosen from the following list:

   1) ARAB 103: Introduction to Arabic Literature
   2) ARAB 208: Special Topic in Literature
   3) ARAB 250: Writing for the Media
   4) ARAB 305: Sociolinguistics
   5) ARAB 401: Modern Arabic Poetry
   6) ARAB 402: Syntax 2
   7) ARAB 406: Modern Arabic Novel
   8) ARAB 409: Special Topicin Language

c) Three English Language Elective courses encompassing 9 credit hours selected from the following list:

   1) ENGL 220: Morphology
   2) ENGL 240: Introduction to Language
   3) ENGL 285: Writing Workshop
   4) ENGL 320: Introduction to Creative Writing
   5) ENGL 340: Semantics
   6) ENGL 350: Advanced Writing for Humanities
   7) ENGL 355: Sociolinguistics
   8) ENGL 360: Advanced Writing for Professional Purposes
   9) ENGL 365: Advanced Creative Writing
  10) ENGL 440: Special Topic in Literature or Language
  11) ENGL 460: Politics of Language
  12) ENGL 470: History of the English Language

7.9. Plan of Study: BA in Translation

Year I		
Semester 1 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ARAB 101	Academic Writing in Arabic	3
CMPS 100A	Introduction to Technical Computing for the Arts	3
ENGL 101	Basic Academic English	3
MATH 103	for Social Science I	3
Code	Humanities/Social Sciences Elective	3
Semester 2 (Spring)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ARAB 102	Arabic Grammar	3
ENGL 102A	English for Arts, Humanities and Social Sciences I	3
ENGL 120	Grammar in Context	3
TRAN 150	Introduction to Translation	3
Code	Physical/ Natural Sciences Elective	3
Year II		
Semester 3 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 203A	English for Arts, Humanities and Social Sciences II	3
ENGL 210	Introduction to Linguistics	3
ENGL 215	Phonetics and Phonology	3
TRAN 220	Translation Theory	3
Code	Major Translation Elective	3
Semester 4 (Spring)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 204	Advanced English for Academic Purposes & Research	3
TRAN 250	Contrastive Analysis	3
TRAN 260	Translation Techniques	3
Code	English Language Elective	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3
Year III		
Semester 5 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 335	Discourse Analysis	3
TRAN 300	Translating Business Texts	3
TRAN 310	Translating Journalistic Texts	3
SOCS 102	Omani Society	3
Code	Arabic Elective	3
Semester 6 (Spring)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ARAB 308	Morphology	3
TRAN 355	Technology-Assisted Translation	3
TRAN 360	Translating Scientific Texts	3
Code	Major Translation Elective	3
Code	General Elective	3

Year IV		
Semester 7 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
TRAN 420	Translating Legal Documents	3
ENGL 305	Advanced English Language & Communication Skills	3
TRAN 435	Lexicography and Terminology	3
Code	English Language Elective	3
Code	General Elective	3
Semester 8 (Spring)		**15 Credits**
Code	**Course Title**	**Credit Hours**
TRAN 480	External Practicum	3
Code	English Language Elective	3
Code	Major Translation Elective	3
Code	Major Translation Elective	3
Code	Arabic Elective	3
Completion of the BA in Translation - Total Credits 120		

7.10. Course Descriptions

TRAN 150   Introduction to Translation   (3 credits)

This course introduces the preliminaries of translation as both a process and a product. It covers the main issues that are involved in producing a translation, the standards for acceptable translations, the cultural issues involved in translation, and the general rules that govern the translation of texts from English into Arabic and vice versa.

TRAN 220   Translation Theory   (3 credits)

This course introduces students to the history and theories of translation. The purpose of the course is to make students aware of the main theoretical debates that have surrounded translation throughout history and more particularly in the 20th century, in order to enable them to see the relevance of theory to the practice of translation.

TRAN 225   Introduction to Interpreting   (3 credits)

The aim of this course is to provide students with basic knowledge in the field of interpretation from English into Arabic and vice versa. Practical training in listening and oral skills is central to this course. Both theoretical and practical perspectives are integrated.

TRAN 250   Contrastive Analysis   (3 credits)

This course introduces students to the cross-cultural aspects of discourse organization for different genres and different purposes, focusing on a comparison between Arabic and English languages/cultures. Students will become acquainted with the problems of Arabic speakers in learning English and will be able to describe similarities and differences between Arabic and English.

TRAN 260   Translation Techniques   (3 credits)

This course provides students with general training in translation of a variety of text types. Students will become aware of the various methods that can be used

to tackle challenging texts and will perform annotated translations with commentaries, editing exercises, and textual analyses, enabling them to draw conclusions concerning the purpose of the original message and the role of the translator as communicator.

TRAN 300   Translating Business Texts   (3 credits)
This course provides students with training in reading, analyzing, and translating business, finance, and economics reports and articles. Students will compile a special topics portfolio of translated business texts, annotated translations with commentaries, textual analyses, and editing exercises. Prerequisite: TRAN 260.

TRAN 310   Translating Journalistic Texts   (3 credits)
This course provides students with training in reading, analyzing, and translating journalistic texts. Students will compile a special topics portfolio of translated journalistic texts, annotated translations with commentaries, textual analyses, and editing exercises. Prerequisite: TRAN 260.

TRAN 330   Special Topic in Translation   (3 credits)
This course is broad and flexible enough to accommodate the ongoing changes and developments in the field of translation. Such course would help students keep abreast with the dynamic and developments in the field of translation and interpreting. Possible topics to be covered in the course: latest advancements in technology-mediated translation and interpreting- quality assurance issues in translation-globalization and mobility and the evolving role of translators and interpreters-social responsibility of translators and interpreters–latest developments in corpus linguistics and the applications of parallel corpora (written and spoken) in translation and interpreting, etc. Most importantly, the implications of these trends and topics will be connected to the student translator/interpreter training and professional development.

TRAN 355   Technology-Assisted Translation   (3 credits)
This course introduces students to the most recent developments in the use of technology to help translators in their work. This covers a number of topics including machine translation, computer-assisted translation and the use of electronic dictionaries and corpora. The course offers students training in these technologically related topics.

TRAN 360   Translating Scientific Texts   (3 credits)
This course provides students with training in reading, analyzing, and translating scientific, technical, and technological texts. Students will compile a special topics portfolio of translated scientific and technical texts, annotated translations with commentaries, textual analyses, and editing exercises. Prerequisite: TRAN 250.

TRAN 365   English Literature in Arabic Translations   (3 credits)
This course deals with the metamorphosis of English literary texts in Arabic translations. Students will be familiar with the problems of literary translation, especially in terms of transplanting English texts into Arabic context. Issues like faithful, literal, free translation and cultural adaptation are dealt with extensively. Students will also be exposed to techniques of literary translation.

TRAN 370   Medical Translation   (3 credits)

This course is designed to provide students with a solid background in medical translation so as to be future translators in settings such as hospitals, physicians' offices and clinics. Emphasis is placed on the development of medical terminology. Upon completion, students should be able to translate a variety of medical texts from and into Arabic.

TRAN 375   Audiovisual Translation   (3 credits)

Audiovisual Translation is an exciting new field in Translation Studies for which there is a growing professional demand, and the need for professionals in this field has grown exponentially in the new era. The course is designed to introduce students to different areas of translation of the audiovisual material, including subtitling and dubbing. Upon completion of this course, students will acquire a basic understanding of the techniques for subtitling and dubbing of movies, documentaries and programs. In addition, the students will be able to differentiate between different modes of audiovisual translation including subtitling, dubbing and voice-over. In addition, they will be trained on translating audiovisual materials from and into Arabic, taking account of the linguistic and cultural problems that face screen translators.

TRAN 410   Arabic Literature in English Translations   (3 credits)

This course deals with the metamorphosis of Arabic literary texts in English translations. Students will become familiar with the problems of literary translation, especially in terms of transplanting Arabic texts into English context. Issues like faithful, literal, free translation and cultural adaptation are dealt with extensively. Students will also be exposed to techniques of literary translation.

TRAN 420   Translating Legal Documents   (3 credits)

This course focuses on the theory and practice of translating legal instruments (such as certificates and contracts) from and into English and Arabic. Attention is paid to linguistic features of documentary texts (such as constitutions, charters and protocols) and the nature of the translational equivalence in the two languages. *Prerequisite:* TRAN 260.

TRAN 425   Contrastive Rhetoric and Stylistics   (3 credits)

This course introduces students to a higher level of contrastive analysis between Arabic and English. The purpose of the course is to equip students with a firm knowledge of different styles of the two languages including idioms, figures of speech, metaphors, and so forth in order to utilize such knowledge in translating English and Arabic texts. A special focus will be on idiomatic and metaphoric styles, and the influence of cultural settings on the production and transfer of stylistic forms from Arabic to English and vice versa.

TRAN 435   Lexicography and Terminology   (3 credits)

This course focuses on the problems of equivalences and variability of terminologies. The phenomena of terminology banks and databases are studied, as well as the role of Arabic language academies in the creation and standardization of terminologies in Arabic.

TRAN 465   **Critical Analysis of Translated Texts**   **(3 credits)**

This course presents a functional pragmatic approach to the peculiarities of situational linguistics, their sources and their targets; and then assesses the results of the situation. The students will be required to write a critique of a translated work.

TRAN 470   **Machine Translation**   **(3 credits)**

This course offers training in machine translation and it focuses on the differences between human translation/ interpretation and machine translation.

TRAN 480   **External Practicum**   **(3 credits)**

This course offers an opportunity for supervised translation in a commercial or government office. Periodic reports will be a part of the requirement for this practicum course.

1. أعضاء الهيئة التدريسية والإدارية:

رئيس القسم : د. سعيد بيت مبارك

أستاذ مشارك: د. أحمد بن عبدالرحمن بالخير

أستاذ مساعد: د. سالم بن محاد المعشني، ، د. مراد الحاجي، د. شفيق طه النوباني. د. مرتضى فرح وداعة, د. بسام الشارني

محاضر: أ. سعيد المعشني

2. الرؤية:

التميّز و الرّيادة في تقديم العربية وآدابها محلياً وإقليمياً وعالمياً.

3. الرسالة:

تقديم العربية وآدابها بجودة عالية تقديماً يعزّز الهوية الإسلامية ويحافظ على لغة القرآن ويعد كفاءات متميزة علمياً و مهارياً و بحثياً قادرة على مواكبة مستجدات العصر و متطلبات سوق العمل وفق ثقافة المجتمع و الهوية العربية.

4. البرامج المطروحة:

يطرح القسم برامج البكالوريوس والماجستير:

أ- البكالوريوس:

– بكالوريوس اللغة العربية وآدابها

ب- الماجستير:

– ماجستير الدراسات اللغوية

– ماجستير الدراسات الأدبية والنقدية

(للمزيد من المعلومات حول برامج الدراسات العليا الرجاء الرجوع للدليل الدراسات العليا)

5. بكالوريوس اللغة العربية وآدابها
Bachelor of Arts in Arabic Language

5.1.نظرة عامة على البرنامج

يتضمن برنامج البكالوريوس في اللغة العربية 15 ساعة معتمدة من متطلبات الجامعة و57 ساعة معتمدة من المتطلبات الإجبارية وهناك أيضا 48 ساعة معتمدة من المتطلبات الاختيارية التي يمكن للطالب أن يختار منها ما يناسبه ليصل مجموع عدد الساعات حين تخرجه 120 ساعة معتمدة. في هذا البرنامج سيتلقى الطالب دروسه في صورة محاضرات وتمارين وفروض دراسية واختبارات

تشكل في نهاية المطاف ـ وبعد اجتيازه للامتحانات المقررة ـ أهم المكونات لبرنامج البكالوريوس في اللغة العربية وآدابها الذي يمتد لأربع سنوات.

5.2. أهداف البرنامج

تتلخص أهداف البرنامج في الآتي:

- تعزيز القدرات اللغوية لدى الطالب وتمكينه من التعبير الصحيح.
- تعزيز قدرات الطالب وذوقه الأدبي ليتمكن من تذوق واستيعاب الأساليب المتنوعة والتعرف إلى الأجناس الأدبية.
- تعريف الطالب بالطرائق المتنوعة لاستخدام المراجع والكتب بما في ذلك كتب التراث.
- تطوير مهارات الطالب في القراءة والكتابة وجعله قادرا على التفكير المنطقي والإبداعي.
- تطوير مهارات الطالب في الكتابة وتحسين مستواه في الإملاء والترقيم.
- تطوير مهارات الطالب في الكتابة والمحادثة وتحسين مستواه النحوي وتطوير ثروته اللغوية.
- تطوير وعي الطالب بأهمية اللغة العربية ومكانتها بوصفها لغة دين وحضارة.

5.3. مخرجات تعلم البرنامج

من المتوقع بعد نهاية البرنامج أن يكون الدارس قادراً على:

1. توظيف مهارات الاستماع في فهم العربية من خلال سياقات متعددة.
2. إبراز مهارات التحدث من أجل التعبير عن الأفكار والآراء والبراهين والوظائف اللغوية المختلفة أمام متكلمي العربية.
3. تطبيق مهارات القراءة وإستراتيجياتها في التعامل مع نصوص عربية أصيلة في سياقات متعددة.
4. استخدام مهارات الكتابة في التعبير عن الأفكار والآراء والبراهين والوظائف اللغوية المختلفة من خلال أنماط مناسبة للمهمة المقصود تحقيقها في العربية.
5. إظهار القدرات المكتسبة على تحقيق الاستخدام الفعال للأدوات النحوية والثروة اللغوية من أجل تواصل فعال من خلال العربية.
6. إظهار وعي متقدم بالأنظمة اللغوية الخاصة بالعربية وتبيان القدرة المكتسبة على التعرف على البنى والوظائف اللغوية وتحليلها.
7. الإعراب عن وعي متقدم بالأجناس الأدبية وإظهار القدرة المكتسبة على إخضاع مختلف النصوص الأدبية باللغة العربية للتمحيص النقدي.
8. إظهار القدرة على التعليم الذاتي والمستقل من خلال استخدام التقنيات والاستراتيجيات التعليمية المتعددة.
9. تفعيل المهارات المكتسبة من خلال الدراسة والبحث والعروض التقديمية من أجل زيادة فرص العمل الأكاديمية والمهنية.

5.4. متطلبات القبول:

متطلبات القبول لبكالوريوس الآداب في اللغة العربية موجودة في قسم الكلية a.6 صفحة 50.

5.5. متطلبات التخرج:

مجموع الساعات	متطلبات التخصص		متطلبات الكلية	متطلبات الجامعة
	المتطلبات الاختيارية	المتطلبات الإجبارية		
120	48	57	0	15

5.6. متطلبات الجامعة:

1. ARAB 101: الكتابة الأكاديمية باللغة العربية
2. Introduction to Technical Computing for the Arts: CMPS 100A
3. Basic Academic English: ENGL 101
4. Entrepreneurship: Innovation and Creativity: ENTR 200
5. Omani Society: SOCS 102

5.7. متطلبات الكلية:

لا يوجد متطلبات للكلية في هذا البرنامج.

5.8. متطلبات التخصص

1. ARAB 102: قواعد اللغة العربية
2. ARAB 103: مقدمة في الأدب العربي
3. ARAB 104: الكتابة الأكاديمية المتقدمة
4. ARAB 105: الشعر الجاهلي
5. ARAB 106: مقدمة في اللغويات
6. ARAB 202: النحو (1)
7. ARAB 203: الصوتيات
8. ARAB 205: المعجم والدلالة
9. ARAB 206: البلاغة العربية
10. ARAB 207: الشعر في عصر صدر الإسلام والعصر الأموي
11. ARAB 209: النثر العربي القديم
12. ARAB 302: الشعر العباسي
13. ARAB 303: الأدب الأندلسي
14. ARAB 307: نظرية الأدب والنقد
15. ARAB 308: الصرف
16. ARAB 309: العروض
17. ARAB 401: الشعر العربي الحديث
18. ARAB 402: النحو (2)
19. ARAB 406: الرواية العربية الحديثة

1. ARAB 107: الخطابة والمهارات القرائية والشفوية
2. ARAB 204: دراسات في القرآن والحديث
3. ARAB 208: موضوع خاص في الأدب
4. ARAB 210: اللغويات التاريخية
5. ARAB 211: مصادر الأدب واللغة
6. ARAB 212: الأدب العماني وأدب شبه الجزيرة العربية
7. ARAB 214: اللهجات العربية
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9. ARAB 305: اللغويات الاجتماعية
10. ARAB 306: الأدب في عصر النهضة العربية الحديثة
11. ARAB 310: أدب المهجر
12. ARAB 313: تذوق النص الأدبي
13. ARAB 314: ورشة عمل لغوية
14. ARAB 315: قضايا في الأدب العماني
15. ARAB 316: المتنبي
16. ARAB 404: الأدب الشعبي
17. ARAB 405: اللغويات التطبيقية

18. ARAB 407: النظام الصوتي
19. ARAB 408: الأدب المقارن
20. ARAB 409: موضوع خاص في اللغة
21. ARAB 411: الاستشراق والمستشرقون
22. ARAB 412: دراسات لغوية حديثة
23. ARAB 413: المسرح العربي الحديث
24. ARAB 414: أدب الأطفال

5.9. الخطة الدراسية لبرنامج البكالوريوس في اللغة العربية

السنة الأولى		
فصل الخريف		15 ساعة معتمدة
الرمز	اسم المقرر	عدد الساعات
ARAB 101	الكتابة الأكاديمية باللغة العربية	3
CMPS 100A	Introduction to Technical Computing for the Arts	3
ENGL 101	Basic Academic English	3
ARAB 102	Syntax and Morphology	3
SOCS 102	Omani Society	3
فصل الربيع		15 ساعة معتمدة
ARAB 103	مقدمة في الأدب العربي	3
ARAB 104	الكتابة الأكاديمية المتقدمة	3
ARAB 105	الشعر الجاهلي	3
ARAB 106	مقدمة في اللسانيات	3
الرمز	مادة اختيارية	3
السنة الثانية		
فصل الخريف		15 ساعة معتمدة
الرمز	اسم المقرر	عدد الساعات
ARAB 202	النحو (1)	3
ARAB 203	الصوتيات	3
ARAB 205	المعجم والدلالة	3
ARAB 206	البلاغة العربية	3
الرمز	مادة اختيارية	3
فصل الربيع		15 ساعة معتمدة
الرمز	اسم المقرر	عدد الساعات
ENTR 200	Entrepreneurship: Innovation and Creativity	3
ARAB 207	الشعر في عصر صدر الإسلام والعصر الأموي	3
ARAB 209	النثر العربي القديم	3
الرمز	مادة اختيارية	3
الرمز	مادة اختيارية	3
السنة الثالثة		
فصل الخريف		15 ساعة معتمدة
الرمز	اسم المقرر	عدد الساعات
ARAB 302	الشعر العباسي	3
ARAB 303	الأدب الأندلسي	3
الرمز	مادة اختيارية	3
الرمز	مادة اختيارية	3
الرمز	مادة اختيارية	3
فصل الربيع		15 ساعة

3	نظرية الأدب والنقد	ARAB 307
3	الصرف	ARAB 308
3	العروض	ARAB 309
3	مادة اختيارية	الرمز
3	مادة اختيارية	الرمز
السنة الرابعة		
15 ساعة معتمدة	فصل الخريف	
عدد الساعات	اسم المقرر	الرمز
3	الشعر العربي الحديث	ARAB 401
3	النحو (2)	ARAB 402
3	مادة اختيارية	الرمز
3	مادة اختيارية	الرمز
3	مادة اختيارية	الرمز
15 ساعة معتمدة	فصل الربيع	
3	الرواية العربية الحديثة	ARAB 406
3	مادة اختيارية	الرمز
3	مادة اختيارية	الرمز
3	مادة اختيارية	الرمز
3	مادة اختيارية	الرمز
3	مادة اختيارية	الرمز
مجموع الساعات: 120 ساعة معتمدة		

5.10. توصيف المقررات:

ARAB 101   الكتابة الأكاديمية العربية   (3ساعات معتمدة)
يتناول هذا المقرر أساسيات الكتابة الأكاديمية العربية من حيث قواعد كتابة الكلمة ورسمها الإملائي، وأسس صياغة الجملة من خلال تناول أنواع الجملة ومكوناتها، ويتناول المقرر أسس كتابة الفقرة بما يمكّن الطالب من الكتابة في أي جنس أدبي أو مجال علمي. ولأن المادة تأسيسية في مجال الكتابة يكتفى فيها بتناول المقالة، بحكم إمكانية تناول الموضوعات المتنوعة من خلالها سواء أكانت أدبية أم علمية. ويؤخذ بعين الاعتبار تخصصات الطلبة، إذ يمكن تكليفهم بأوراق بحثية تتعلق بتخصصاتهم.

ARAB 102   قواعد اللغة العربية   (3ساعات معتمدة)
يتناول هذا المقرر المبادئ الأساسية في قواعد اللغة العربية، فيعرف الطالب بمستويات اللغة بصورة عامة كالمستوى الصوتي والمستوى الصرفي والمستوى النحوي والمستوى الدلالي. ثم يتناول مبادئ علم الصرف من خلال التركيز على الميزان الصرفي وأوزان الفعل ومعاني الزيادة. أما في علم النحو فيركز بصورة أساسية على دروس أقسام الكلام والمبني والمعرب وعلامات الإعراب الأصلية والفرعية والممنوع من الصرف والعدد.

ARAB 103   مدخل الى الأدب العربي   (3 ساعات معتمدة)
يستعرض هذا المقرر تاريخ الأدب العربي من عصر الجاهلية الى العصر الحالي، ويتناول نماذج من الشعر والنثر لإبراز سماتها وخصائصها الجوهرية.

ARAB 104   الكتابة الأكاديمية المتقدمة   (3ساعات معتمدة)
يركز هذا المقرر على تعزيز المهارات الكتابية في الأنشطة التعليمية مثل تدوين الملاحظات والتلخيص واستيعاب الأفكار الرئيسة والمعاني الجزئية وإنشاء تعريفات، والتصنيف والاستنتاج، وإثبات الآراء والاستعانة بمراجع مثل الشبكة العنكبوتية، وكتابة التقارير وإجراء البحوث. (متطلب سابق: عربي101)

ARAB 105   الشعر الجاهلي   (3ساعات معتمدة)
يستعرض هذا المقرر الجوانب الاجتماعية والسياسية والفكرية المختلفة للعرب في العصر الجاهلي من خلال نماذج شهيرة من الشعر والنثر، ويتناول بالنقد بعض أكثر المسائل المثيرة للجدل في الأدب الجاهلي مثل بداية الشعر وأوليته ومسألة السرقات الأدبية ومسألة الرواية وتدوين الشعر الجاهلي. ويتعرف الطلبة على الخصائص والموضوعات الجوهرية للشعر الجاهلي مثل المُعلّقات والحوليات وشعر الصعاليك. ومن خلال هذا المقرر يتزود الطلبة بالأدوات المطلوبة لتحليل وتفسير وتمييز أجزاء القصيدة الجاهلية. (متطلب سابق عربي 103)

ARAB 106   مقدمة في اللسانيات   (3ساعات معتمدة)

يبحث هذا المقرر في الطبيعة الجوهرية للسانيات في مستويات الصوت والصرف والنحو والدلالة وفي العلاقة بينها، ويستعرض مناحج متعددة في دراسة اللسانيات كالمنهج التاريخي والمنهج التقابلي والمنهج المقارن. (متطلب سابق عربي 101)

ARAB 107 الخطابة والمهارات القرائية والشفوية (مساق اختياري)   (3ساعات معتمدة)

سيمنح هذا المقرر الفرصة للطلبة للتمرس على المهارات الشفوية والقرائية والخطابية، وسيولي الأداء الشفوي باللغة العربية المعيار أولويةًمن خلال مساعدة الطلبة على اكتساب النطق والتنغيم السليمين، كما سيركز المقرر على مهارة القراءة الجهرية السليمة والمعبّرة فضلا عن تناوله لمهارة لقراءة الصامتة، وسيعرض المقرر نماذج لخطب عربية وعالمية شهيرة. (متطلب سابق عربي 101).

ARAB 202   نحو 1   (3ساعات معتمدة)

يستند هذا المقرر على المعرفة التي اكتسبها الطلبة في عرب 102، حيث سيتناول قواعد تركيب الجملة في العربية من خلال تناول أنواع الجملة وأركانها بقدر من التفصيل، بالإضافة إلى المنصوبات، مثل المفعول به والمفعول فيه والمفعول لأجله والحال والتمييز. ويستعين في ذلك كله بنصوص يوضح من خلالها آلية تركيب جمل سليمة نحويًا. (متطلب سابق عربي 102).

ARAB 203   الصوتيات   (3ساعات معتمدة)

يعالج هذا المقرر السمات النطقية والفيزيائية للأصوات العربية في من العربية الفصيحة. ستُمنح الأولوية للعلاقة بين الصوتيات من جانب والمستويات اللسانية الأخرى من جانب آخر. (متطلب سابق عربي 106).

ARAB 204   دراسات في القرآن والحديث (مادة اختيارية)   (3 ساعات معتمدة)

يُبرزُ هذا المقرر الأسلوب الفريد للقرآن الكريم وللحديث النبوي الشريف. كما يستكشف المعجزة البلاغية للغة القرآن الكريم مع التركيز على طريقة استنباط الإعجاز من النص القرآني من خلال قوانين اللغة. ويستعرض المقرر دراسات تطبيقية تبين أثر البلاغة على جمال لغة القرآن والحديث الشريف. (متطلب سابق عربي 102)

ARAB 205   المعجم والدلالة   (3ساعات معتمدة)

يتناول هذا المساق في الجزء الأول بنية المعجم العربي، فضلاً عن أهم المعاجم العربية في العصور القديمة والحديثة. ويتناول في الجزء الثاني المعنى في اللغة العربية من قبل النحاة والفلاسفة العرب، ويقدم رؤى جديدة في ضوء النظريات اللغوية الحديثة. (متطلب سابق عربي 102)

ARAB 206   البلاغة العربية   (3ساعات معتمدة)

يتناول هذا المقرر بُزوغَ البلاغة العربية وتطورها. ويسعى بالدرجة الأولى إلى تمكين الطالب من تعرف الدروس البلاغية الأساسية التي جاءت من خلال علوم البلاغة:البيان، المعاني، البديع (متطلب سابق عربي 101)

ARAB 207   الشعر في صدر الإسلام والعصر الأموي   (3ساعات معتمدة)

يحلل هذا المقرر نماذج من الشعر العربي في عصر صدر الإسلام والعصر الأموي مع التركيز على التغييرات التي طرأت على أسلوب هذا الشعر وأغراضه بعد هجرة العديد من العرب إلى الأقاليم التي فتحوها. كما يتناول المقرر التغييرات الاجتماعية والاقتصادية والسياسية التي أثرت في ماهية الشعر في صدر الإسلام والعصر الأموي. (متطلب سابق عربي 105).

ARAB 209   النثر العربي القديم   (3ساعات معتمدة)

يحلل المقرر نماذج من النثر العربي القديم مثل كتابات ابن المقفع والجاحظ والتوحيدي. كما ويستطلع المقرر نشوء النثر وأثره في الكتابات العربية للعصور اللاحقة. (متطلب سابق عربي 103).

ARAB 302   الأدب العباسي   (3ساعات معتمدة)

يعالج المقرر الشعر العباسي من خلال دراسة نماذج شعرية متميزة. ويدرسُ الطلبة في الشطر الأول من المقرر عدداً من أشهر الشعراء من العصر العباسي الأول الذي ينتهي في زمن الخليفة المعتصم. ويتناول الشطر الثاني من المقرر بقية الشعراء المتأخرين حتى سقوط بغداد. (متطلب سابق عربي 103)

ARAB 303   الأدب الأندلسي   (3ساعات معتمدة)

يهدف المقرر الى تعريف الطلبة بأوجه التشابه والاختلاف بين الأدب العربي في الشرق ونظيره في الأندلس وشمال إفريقيا. ويتناول المقرر الموضوعات الجوهرية التي طغت على الأدب والنثر في الأندلس وشمال إفريقيا بما في ذلك الحب والغزل ووصف الطبيعة والبحث عن الحقيقة ومرثيات المُدن. كما ويتناول المقرر الموشحات والمؤثرات التي أدت إلى نشأتها، إذ يتمّ ذلك كله من خلال تناول نماذج شعرية أندلسية.   (متطلب سابق عربي 103 وعربي 207)

ARAB 307   نظرية الأدب والنقد   (3ساعات معتمدة)
يتناول هذا المساق نظرية الأدب والنقد منذ النقد اليوناني حتى الآن. ويشير أيضا إلى الموضوعات الأدبية المفضلة للنقاد على مر العصور. (المتطلب السابق: عرب 209)

ARAB 308   علم الصرف   (3 ساعات معتمدة)
يتناول هذا المساق الموضوعات الصرفية الأساسية مثل أوزان الفعل، والمشتقات، والمصادر، وتأثير تشكيل الكلمة على المعنى والسياق. (المتطلب السابق: عرب 101 وعرب 102)

ARAB 309   العروض   (3 ساعات معتمدة)
يتناول هذا المساق علم العروض التقليدي وسماته المميزة. إذ يتعلم الطلاب كيفية التقطيع الشعري، وبحور الشعر الستة عشر، والقافية، والشعر الحر، والنظريات الحديثة المرتبطة بالإيقاع الشعري. (المتطلب السابق: عرب 203)

ARAB 401   الشعر العربي الحديث   (3 ساعات معتمدة)
يتناول هذا المساق قصائد مختارة من العصر الحديث. كما يدرس العوامل التي أدت إلى تطور الشعر العربي بدءا من محاولات باكثير المبتكرة، وحركة الشعر الحر، والمسرحيات الشعرية لأحمد شوقي، والحركة الرومانسية، ومؤخراً قصائد النثر. (المتطلب السابق: عرب 103)

ARAB 402   النحو (2)   (3 ساعات معتمدة)
يدرس هذا المساق الموضوعات النحوية التالية: التوابع، والنداء وأسلوب الشرط، والجمل التي لها محل من الإعراب، والتي ليس لها محل من الإعراب، ولا تغفل المادة تناول نصوص يمكن من خلالها تناول هذه الموضوعات. (المتطلب السابق: عرب 202)

ARAB 406   الرواية العربية الحديثة   (3 ساعات معتمدة)
يركز هذا المساق على ازدهار الرواية العربية الحديثة. ويتناول أيضا رواد الرواية العربية الحديثة الأولين ومحاولاتهم الأولى، والروائيين الحديثين الذين تأثروا بالأدب الأوروبي. ويدرس الطلبة نموذجا روائيا على الأقل تتضح من خلاله عناصر الرواية. (المتطلب السابق: عرب209)

ARAB 208   موضوع خاص في الأدب (مادة اختيارية)   (3 ساعات معتمدة)
يتناول هذا المساق أحد المواضيع الأدبية من خلال دراسة متعمقة.
(المتطلب السابق: عرب103)

ARAB 210   اللغويات التاريخية   (مادة اختيارية)   (3 ساعات معتمدة)
يتناول هذا المساق اللغويات التاريخية مع التركيز على الدراسات السامية. وبعد إعطاء مقدمة حول أساليب المقارنة والمقابلة وإعادة بناء اللغات القديمة، سوف تتاح للطلاب فرصة تناول بعض النصوص القديمة والتعرف على الاختلافات الصوتية والنحوية والدلالية في عدد من اللغات السامية القديمة والحديثة. (المتطلب السابق: عرب 106)

ARAB 211   مصادر الأدب واللغة   (مادة اختيارية)   (3 ساعات معتمدة)
يتعرف الطلاب من خلال دراسة هذا المقرر على المصادر المرموقة من التراث اللغوي والأدبي للغة العربية، وذلك من خلال الاطلاع على الأساليب الكتابية المختلفة للكتاب الأقدمين، ومقارنة ذلك بأساليب الكتاب المحدثين. يهدف المقرر كذلك إلى خلق رابط بين التقليدية والحداثة. يجب على الطالب دراسة المقرر (209) كمتطلب لدراسة هذا المقرر.

ARAB 212   الأدب العُماني وأدب شبه الجزيرة العربية   (مادة اختيارية)   (3 ساعات معتمدة)
يغطي المقرر الأدب العُماني وأدب شبه الجزيرة العربية، وكذلك أدب المهاجرين العمانيين فى قارتى آسيا وإفريقيا عبر حقب تاريخية مختلفة. يتعرض المقرر كذلك إلى دراسة أشهر الأدباء فى عُمان وشبه الجزيرة العربية فى العصر الحديث كما يتناول بالدراسة والتحليل الاتجاهات الحديثة فى مختلف ضروب الأدب من مقامات وشعر وبلاغة ونثر ورواية. حيث يمكن تحقيق هذه الأهداف جميعها من خلال تحليل نصوص أدبية من عمان والجزيرة العربية. يجب على الطالب دراسة المقرر (103) كمتطلب لدراسة هذا المقرر.

ARAB 214   اللهجات العربية   (مادة اختيارية)   (3 ساعات معتمدة)
يتناول المقرر أوجه الاختلافات بين اللغات واللهجات من خلال دراسة نماذج من أشهر اللهجات العربية القديمة والحديثة. وذلك بالتركيز على دراسة وتطبيق مستويات التحليل اللغوي المتنوعة على هذه اللهجات من أصوات وصرف ونحو ومعان. يجب على الطالب دراسة المقرر (عرب 106) كمتطلب لدراسة هذا المقرر.

ARAB 250   الكتابة الإعلامية   (مادة اختيارية)   (3 ساعات معتمدة)
يغطي المقرر المواضيع الإعلامية التى تتناولها وسائل الإعلام العربية المعاصرة. ويهدف المقرر إلى تمكين الطلاب وإثراء ذخيرتهم اللغوية بالمفردات اللغوية المعاصرة وتحسين مهاراتهم الخطابية. يركز المقرر على تناول ونقاش

الخصائص و السمات المميزة للغة الإعلام مما يسهم فى تطوير قدرات الطلاب وتمكينهم من كتابة نصوص ذات طابع إعلامى، وكذلك رفع مستوى وعى الطلاب وتعريفهم بالطرق المختلفة لاستخدام اللغة فى وسائط الإعلام لأغراض مقصودة كالدعاية والتضخيم وتوجيه الرأى العام. يجب على الطالب دراسة المقرر (عرب 104) كمتطلب لدراسة هذا المقرر.

ARAB 305   علم اللغة الاجتماعي (مادة اختيارية)   (3 ساعات معتمدة)
يتناول هذا المقرر التباينات اللغوية فى ضوء العوامل الجغرافية والاجتماعية. يركز المقرر على عدة مواضيع متعلقة بالسياسات اللغوية والتعدد اللغوى ومسائل اللغة والهوية. يجب على الطالب دراسة المقرر (عرب 203) كمتطلب لدراسة هذا المقرر.

ARAB 306   الأدب فى عصر النهضة العربية الحديثة (مادة اختيارية)   (3 ساعات معتمدة)
يتناول المقرر مسائل الانفتاح على الآداب الغربية من قبل الأدباء العرب وذلك بعرض ودراسة نماذج مختارة من نثر وشعر الرواد والمبدعين فى هذا المجال الحديث. يتتبع المقرر كذلك تطور الأدب العربى منذ العام 1940 مبينا الحركات والمدارس الشعرية الجديدة والتى ظهرت إبان تلك الفترة وتأثرت بالأدب الغربى مثل الكلاسيكية الجديدة (النهضة) والرومانسية وبعض المدارس الحديثة الأخرى. سيتناول المقرر بالدراسة والتحليل نصوصا مختارة من النثر والشعر بغرض توضيح السمات المميزة لكل مدرسة من هذه المدارس الحديثة. يجب على الطالب دراسة المقرر (عرب 103) كمتطلب لدراسة هذا المقرر.

ARAB 310   أدب المهجر   (مادة اختيارية)   (3 ساعات معتمدة)
يغطي المقرر الأدب العربى فى المهاجر خصوصا فى دول أمريكا الشمالية والجنوبية وكذلك أجزاء اخرى من العالم بما فى ذلك دول جنوب وجنوب شرق أسيا. يسلط المقرر الضوء على الأسباب والدوافع لهجرة الشعراء وذلك من خلال عرض مقدمة تاريخية سريعة تبدأ عند نهاية القرن التاسع عشر الميلادى. يهدف المقرر الى التعريف بأدباء المهجر وذلك من خلال التركيز على أهم الأدباء وعرض وتحليل نماذج من أعمالهم الأدبية وابتكاراتهم وإسهاماتهم التى أثرت الأدب العربى. كما يتناول المقرر آراء المستشرقين حول أدب المهجر. يجب على الطالب دراسة المقرر (عرب 103) كمتطلب لدراسة هذا المقرر.

ARAB 316   المتنبي   (مادة اختيارية)   (3 ساعات معتمدة)
يتناول هذا المقرر الشاعر المتنبى ومكانته المهمة فى الشعر العربى. يقدم المقرر نبذة عامة عن الشاعر المتنبى وسيرته الذاتية وحياته الاجتماعية. يتعرض المقرر بالدراسة والتحليل لعينات واسعة من قصائد متعددة للشاعر كما يناقش المقرر أثر شعر المتنبي على الشعراء المحدثين. يجب على الطالب دراسة المقرر (عرب 302) كمتطلب لدراسة هذا المقرر.

ARAB 404   الأدب الشعبي   (مادة اختيارية)   (3 ساعات معتمدة)
يتناول المقرر الأدب الشعبى باستعراض نماذج مختلفة من الحكايات و القصص الشعبية، كألف ليلة وليلة، ومغامرات الأبطال الشعبيين أمثال بني هلال وسيف بن ذى يزن وعنترة بن شداد العبسى والزير سالم. ويتناول المقرر أيضا نماذج من الأدب الشعبي العماني. يجب على الطالب دراسة المقرر (عرب 103) كمتطلب لدراسة هذا المقرر.

ARAB 405   اللغويات التطبيقية   (مادة اختيارية)   (3 ساعات معتمدة)
يتناول هذا المقرر استخدام اللغويات التطبيقية في تدريس اللغة العربية للمتحدثين الأصليين وغير الناطقين بها بالإضافة إلى قضايا الترجمة واكتساب اللغة وتحليل الأخطاء وعلم اللغة المقارن. (متطلب سابق ARAB106)

ARAB 407   النظام الصوتي   (مادة اختيارية)   (3 ساعات معتمدة)
يستند هذا المقرر إلى المقرر التمهيدي ARAB 203 ويتناول دراسة أكثر تقدما لعلم الأصوات الحديثة وتطبيقه على اللغة العربية القياسية واللهجات العربية. (متطلب سابق ARAB203)

ARAB 408   الأدب المقارن (اختياري) (مادة اختيارية)   (3 ساعات معتمدة)
يتناول هذا المقرر العلاقة بين الأدب العربي القديم والحديث وأدب اللغات الأخرى مثل الأدب اليوناني والفارسي والعلاقة بين الشعر العربي القديم وشعراء التروبادور، وتأثير اللغة الإنجليزية الحديثة والإسبانية على الشعر العربي الحديث. كما يتناول المقرر التجربة العربية في مجال الأدب المقارن من خلال تماسها مع مدارس الأدب المقارن: الفرنسية والأمريكية والألمانية والسلافية.

ARAB 409   موضوع خاص في اللغة (مادة اختيارية)   (3 ساعات معتمدة)
يركز هذا المقرر على أحد جوانب اللغة على نحو مفصل. متطلب سابق ARAB402

ARAB 313   تذوق النص الأدبي   (مادة اختيارية)   (3 ساعات معتمدة)

يتناول هذا المقرر ما يلي:

- النص الأدبي العربي وعلاقته بثقافة منتج النص.
- وضع اللغة، وجوانبها الدلالية المتنوعة وفهم النص الأدبي.
- القراءات المختلفة للنصوص.

كل هذا يمكن أن يتحقق من خلال التطبيقات والتحليل عن طريق اختيار عدد من النصوص التي يمكن أن تتغير في كل فصل دراسي. المتطلب السابق: ARAB103

ARAB 413   المسرح العربي الحديث   (مادة اختيارية)   (3 ساعات معتمدة)

يدرس المقرر المسرح العربي الحديث وتاريخ تطوره كنوع جديد من أنواع الأدب العربي. سيقوم الطلاب بدراسة وتحليل عدد من النصوص المسرحية الشهيرة. المتطلب السابق: ARAB 103

ARAB 314   ورشة عمل لغوية   (مادة اختيارية)   (3 ساعات معتمدة)

يتناول هذا المقرر دراسة تحليل الأنماط اللغوية، بدءا من مستوى الصوت إلى مستوى الكلمة، وبناء الجملة، والجوانب الدلالية والبلاغية. وسيتناول الجزء العملي من المقرر نصوصًا مختارة (قديمة أو حديثة) يمكن من خلالها تحديد دور الوظيفة اللغوية لكل نص من هذه النصوص. المتطلب السابق: ARAB 308

ARAB 315   قضايا في الأدب العماني   (مادة اختيارية)   (3 ساعات معتمدة)

يهدف هذا المقرر إلى إبراز أصالة الثقافة العربية في عمان من خلال دراسة مصادر مختلفة للأعمال الأدبية عبر القرون وخاصة الشعر. ولتوضيح أهمية المصادر الأدبية والشعرية للأدب العماني، من الضروري دراسة العوامل التي أثرت في اتجاهه. كما يجب دراسة الأنواع المختلفة للأدب العماني مع أمثلة لبعض الأسماء البارزة للأدباء في عمان، سواء من الأجيال القديمة أو الأجيال الحديثة. وسيشمل هؤلاء الشعراء مثل السطالي والنبهاني والعشري وابن رزيق والشيخ مسلم البهلاني ونور الدين السالمي والشيخ عبدالله الخليلي وغيرهم. كما سيتم استعراض تاريخ الأدب في عمان من أجل تسليط الضوء على بعض القضايا الأدبية واللغوية في هذا الجزء من العالم العربي. المتطلب السابق: ARAB103

ARAB 411   الاستشراق والمستشرقون   (مادة اختيارية)   (3 ساعات معتمدة)

يشمل هذا المقرر:

- بدايات الاهتمام الغربي بالمشرق الإسلامي وعلاقته بالحركة الاستعمارية.
- مدارس الاستشراق.
- جهود المستشرقين في تحقيق ودراسة التراث العربي والإسلامي.
- جهود بروكلمان، بلاتشير، ماسينون وأندريه ميكيل في تصنيف وترجمة الأدب العربي، والوضع الحالي للمستشرقين.
- توجهات واتجاهات الاستشراق المعاصر.

المتطلب السابق: عرب 408

ARAB 412   دراسات لغوية حديثة   (مادة اختيارية)   (3 ساعات معتمدة)

يتناول هذا المقرر دراسات جادّة من خلال المدارس اللغوية الحديثة، كالمدرسة الوصفية، والمدرسة التوليدية التحويلية، وغيرها. المتطلب السابق: عرب 405

ARAB 414   أدب الأطفال   (مادة اختيارية)   (3 ساعات معتمدة)

يتناول هذا المقرر مفهوم أدب الأطفال وسماته اللغوية والفنية وأهمية هذا الأدب ودوره في تنشئة الأطفال في مختلف مراحلهم العمرية، كما يحلل نماذج عالمية وعربية من أدب الأطفال، سواء أكان ذلك في مجال القصة القصيرة أو القصيدة أو الأناشيد.

Department of Social Sciences

1. Personnel

Chairperson	Mohammed Foda
Associate Professors:	Reem Abuiyada, Ahmed Al Rantisi
Assistant Professors :	Ahmed Mukhtar, Nasser Al Sairi, Mohamed Foda, Ali Suhail Tabook, Mohamed Kandil, Mona Abdellatif, Huda Al Hajjaj
Lecturer	Hussian Al Dheeb
Secretary	Eiman Mohammed Koofan

2. Vision

Department of Social Science aspires to become a high quality and recognised centre for producing active citizens with humanistic thinking, inter-disciplinary collaboration, social responsibilities and community intervention in this dynamic and changing global and technological society.

3. Mission

The mission of the Social Sciences Department is to provide knowledge of the historical, social and cultural context for understanding contemporary social and psychological phenomena. The mission of social work program is to advance knowledge of social work theories and effective practices and its aim is to educate students on how to practice social work sensitively and competently with diverse, multicultural, rural/urban populations of Oman and the Arabian Gulf.

4. Programs Offered

The department offers following Diploma, Bachelor, and Master programs:

a) Diploma Program

1) Diploma in Social Work

b) Bachelor Program

1) Bachelor of Arts in Social Work

c) Master Program:

1) Master of Arts in Social Work

(Details of Master Programs are given in Graduate Studies Catalogue)

7.1 نظرة عامة على البرنامج

برنامج بكالوريوس الآداب في العمل الاجتماعي هو برنامج متميز في العمل الاجتماعي برؤية تطلعية لإعداد اخصائيين اجتماعيين مؤهلين معرفيا وبحثيا ومهنيا للمساهمة في خدمة وتنمية المجتمع العماني، ويهدف إلى إعداد اخصائيين اجتماعيين ذو كفاءات بشرية عالية الجودة تمتلك بناءا أكاديميا ومهنيا على أعلى المستويات لتلبية حاجات السوق في مجال العمل الاجتماعي والبحث العلمي. كما يمتلكون بناءا معرفيا وخبرة ميدانية تمكنهم من تشخيص الظواهر الاجتماعية، وكذلك بناءا مهنيا يمكنهم من الدراسة والتشخيص ووضع خطة التدخل المناسبة لجميع المستويات أفراد، جماعات، ومجتمع وتنفيذها.

7.2 أهداف البرنامج

يهدف برنامج بكالوريوس الآداب في العمل الاجتماعي إلى تحقيق الأهداف التالية:

1. إعداد وتأهيل كفاءات علمية مدربة في العمل الاجتماعي وقادرة على الابداع والتطور والاسهام بفعالية في خدمة المجتمع، وتحقيق خطط التنمية المستدامة.
2. الالتزام بالميثاق الأخلاقي للخدمة الاجتماعية.
3. تحقيق الريادة والتميز محليا وعالميا في مجالات الدراسات الاجتماعية وخدمة المجتمع.
4. تعزيز الشراكة مع المجتمع المحلي.

1. تزويد الطلبة بأسس نظريات العمل الاجتماعي وإكسابهم معرفة تخصصية وفهم للعمل الاجتماعي.
2. إعداد خريج البرنامج لأن يكون قادر على دراسة الحالات الفردية و تشخيصها ووضع خطة التدخل المهني و تنفيذها.
3. إكساب الطلبة مبادئ المعرفة والتفكير العلمي المنظم في ظل مبادئ وأخلاقيات المهنة.
4. إعداد الطلبة لتقديم خدمات إجتماعية متميزة وعالية الجودة والمقدرة على تطوير الخدمات إذا اقتضت الحاجة.
5. إكساب الطلبة مهارات التواصل الفعالة للتواصل مع المستفيدين والمجتمع.
6. إعداد الطلبة لأن يكونوا قادرين على العمل مع الافراد و الجماعات و خدمة المجتمع.
7. إعداد الطلبة عبر النظريات والتدريب الميداني لشغل وظائف الاخصائيين الاجتماعيين في مختلف المؤسسات الحكومية والخاصة ومنها وزارة التنمية الاجتماعية، المنظمات الاجتماعية الخيرية، المدارس، المراكز الصحية وغيرها من المؤسسات التي تقدم الخدمات الاجتماعية والانسانية.
8. تخريج الكفاءات العلمية لتلبية حاجات المجتمع والمقدرة على استكمال دراساتهم العليا.
9. تنمية القدرات البحثية لدى الطلبة وتعزيز مهارات البحث العلمي المتطورة، وإكساب الطلبة مهارات دراسة الظواهر والمشكلات الاجتماعية وتفسيرها وإيجاد الحلول المناسبة لها.
10. مواكبة متطلبات الاعتماد الأكاديمي العلمية من حيث تطوير المقررات وتوفير مصادر المعلومات وتعزيز البحث العلمي.
11. إعداد الطالب القادر على التحليل والتفسير والتنبؤ وحل المشكلات المتعلقة بدراسته.
12. تنمية شخصية الخريج القيادية والمهنية وتعزيز الهوية وروح الانتماء.
13. إعداد الطالب القادر على التحليل والتفسير والتنبؤ وحل المشكلات المتعلقة بدراسته
14. إعداد الطلبة للتطور المهني المستمر.

7.3 مخرجات التعلم للبرنامج

من المتوقع بعد نهاية البرنامج أن يكون الطالب قادرا على:

1. الفهم الجيد لمفهوم العمل الاجتماعي ومبادىء وطرق واساليب وأخلاقيات ونظريات العمل الاجتماعي.
2. فهم طبيعة وخصائص المجتمع المحلي وطبيعة النظام الاجتماعي وكذلك التفاعلات بين فئات المجتمع على جميع المستويات.
3. المقدرة على فهم ودراسة السلوكيات الفردية والظواهر والمشكلات الاجتماعية وتحليلها وتفسيرها والتصدي لها من خلال البرامج الوقائية والانمائية والعلاجية.
4. المقدرة على جمع وتحليل وتفسير البيانات الهامة سواء كانت كمية أو نوعية بطريقة منوعة.
5. ادراك المعارف المرتبطة بتخصص العمل الاجتماعي والقدرة على التحليل والتفسير وحل المشكلات المحددة والقدرة على توصيلها.
6. القدرة على اتخاذ القرارات الصحيحة حول المسائل المعقدة استنادا إلى المعرفة والمهارات وتوصيل النتائج بفعالية.
7. التطبيق الفعال لمهارات ومعارف الممارسة العامة للعمل الاجتماعي على جميع شرائح المجتمع.
8. ممارسة مهنة الخدمة الاجتماعية من خلال فهم قيم المهنة ومبادئها ومعاييرها الأخلاقية وإعداد خطة تدخل تتناسب مع جميع مستويات المستفيدين أفراد، جماعات ومجتمع.
9. المقدرة على تقديم الخدمات الاجتماعية التي تتناسب مع احتياجات المجتمع.
10. المقدرة على فهم وتحليل السياسات الاجتماعية ووضع المقترحات لتعديلها.
11. المقدرة على تطبيق مهارات التواصل الفعالة مع المستفيدين والمجتمع.
12. المقدرة على القيام بالدراسة والتشخيص ووضع خطة تدخل مهني وتنفيذها.
13. إعداد وتنفيذ البحوث العلمية ذات العلاقة الاجتماعية.
14. توثيق العلاقة مع المجتمع المحلي والمشاركة بشكل فعال في خدمة الجامعة.
15. تطوير الحلول المناسبة للمشكلات الاجتماعية من خلال العمل المشترك ضمن مجموعات.
16. تطبيق مهارات التفكير الناقد.

7.4 متطلبات القبول:

متطلبات القبول لبكالوريوس الآداب في العمل الاجتماعي موجودة في قسم الكلية a.6 صفحة 50

7.5 متطلبات التخرج:

1. أن يجتاز الطالب بنجاح جميع المقررات الدراسية الواردة في الخطة الدراسية واكمال عدد الساعات المطلوبة(120 ساعة معتمدة) كما هي موضحة في الجدول التالي:

مجموع عدد الساعات	متطلبات الكلية	المقررات الاجبارية		متطلبات جامعية
		متطلب	إجباري	
120	12	18	75	15

2. أن يحصل الطالب على 65% فأكثر كمعدل عام.

7.6 متطلبات الجامعة

يدرس الطالب (5) مقررات بمعدل (15) ساعة معتمدة

1. الكتابة الأكاديمية باللغة العربية : ARAB 101
2. اللغة الانجليزية الأكاديمية التأسيسية: ENGL 101
3. مدخل لتقنيات الحاسوب : CMPS 100A

4. المجتمع العماني : SOCS 102
5. ريادة الأعمال : ENTR 200

7.7 متطلبات الكلية

يختار الطالب (4) مقررات بمعدل (12) ساعة معتمدة ضمن لمقررات التالية:

1. نظام التعليم في سلطنة عمان ودول مجلس التعاون الخليجي : EDUC 360
2. اللغة الانجليزية لتخصص الآداب والعلوم الانسانية : ENGL 102A
3. مقدمة في اللغة : ENGL 240
4. الكتابة الأكاديمية المتقدمة في اللغة العربية : ARAB 201
5. اللغة العربية للأعمال : ARAB 260
6. مقدمة في حل المشكلات والبرمجة: CMPS 110 N
7. مقدمة لرسومات الكمبيوتر : CMPS 105
8. مقدمة في تصميم المواقع : CMPS 106

7.8 متطلبات التخصص

يدرس الطالب (25) مقررا بمعدل (75) ساعة معتمدة:

1. مقدمة في العمل الاجتماعي : SOWO 200A
2. السلوك الانساني والبيئة الاجتماعية: SOWO 210A
3. السياسات الاجتماعية والتخطيط الاجتماعي : SOWO 220A
4. العمل الاجتماعي مع الأفراد وأسرهم : SOWO 230A
5. الارشاد والتوجيه الاجتماعي : SOWO 240A
6. العمل الاجتماعي المدرسي: SOWO 250A
7. العمل الاجتماعي مع الجماعات : SOWO 260A
8. تدريب ميداني : SOWO 270A
9. العمل الاجتماعي في المحاكم الشرعية : SOWO 280A
10. العمل الاجتماعي في المجال الصحي : SOWO 290A
11. أساسيات العمل الاجتماعي باللغة الانجليزية : SOWO 300A
12. مناهج البحث في العمل الاجتماعي : SOWO 310A
13. العمل الاجتماعي الدولي : SOWO 320A
14. الاحصاء في العمل الاجتماعي : SOWO 330A
15. المشكلات الاجتماعية : SOWO 206A
16. العمل الاجتماعي مع المجتمع : SOWO 400A
17. إدارة المؤسسات الاجتماعية : SOWO 410A
18. تدريب ميداني متقدم : SOWO 420A
19. العمل الاجتماعي والتطوع: SOWO 430A
20. موضوعات خاصة في العمل الاجتماعي : SOWO 440A
21. مشروع التخرج : SOWO 450A
22. مدخل إلى علم الاجتماع: SOCS 100A
23. مدخل إلى علم النفس : PSYC 110A
24. علم نفس النمو والتطور : PSYC 120A
25. علم النفس الاجتماعي: PSYC 130A

يختار الطالب (6) مقررات بمعدل (18) ساعة معتمدة ضمن المقررات التالية:

1. التنمية الاجتماعية المستدامة : SOCS 201A

2. التنوع الاجتماعي: SOCS 202A
3. التخطيط الاجتماعي : SOCS 203A
4. العمل الاجتماعي مع المسنين : SOWO 204A
5. العمل الاجتماعي مع ذوي الاحتياجات الخاصة : SOWO 205A
6. إدارة الأزمات والكوارث : SOWO 207A
7. الخدمة الاجتماعية العمالية: SOWO 208A

7.9 الخطة الدراسية: بكالوريوس الآداب في العمل الاجتماعي

السنة الأولى		
15 ساعة	**الفصل الدراسي الأول (خريف)**	
الساعات المعتمدة	عنوان المقرر	رمز المقرر
3	الكتابة الأكاديمية العربية	ARAB 101
3	اللغة الانجليزية الأكاديمية التأسيسية	ENGL 101
3	مدخل لتقنيات الحاسوب	CMPS 100A
3	مقدمة في العمل الاجتماعي	SOWO 200A
3	مدخل إلى علم النفس	PSYC 110A
الفصل الدراسي الثاني (ربيع)		
الساعات المعتمدة	عنوان المقرر	رمز المقرر
3	المجتمع العماني	SOCS 102
3	علم نفس النمو والتطور	PSYC 120A
3	السلوك الانساني والبيئة الاجتماعية	SOWO 210A
3	مدخل إلى علم الاجتماع	SOCS 100A
3	إختياري كلية	رمز
السنة الثانية		
15 ساعة	**الفصل الدراسي الثالث (خريف)**	
الساعات المعتمدة	عنوان المقرر	رمز المقرر
3	السياسات الاجتماعية والتخطيط الاجتماعي	SOWO 220A
3	العمل الاجتماعي مع الأفراد وأسرهم	SOWO 230A
3	الارشاد والتوجيه الاجتماعي	SOWO 240A
3	إختياري تخصص	رمز
3	العمل الاجتماعي المدرسي	SOWO 250A
15 ساعة	**الفصل الرابع (ربيع)**	
الساعات المعتمدة	عنوان المقرر	رمز المقرر
3	إختياري كلية	رمز
3	العمل الاجتماعي مع الجماعات	SOWO 260A
3	تدريب ميداني	SOWO 270A
3	العمل الاجتماعي في المحاكم الشرعية	SOWO 280A
3	العمل الاجتماعي في المجال الصحي	SOWO 290A
السنة الثالثة		
15 ساعة		**الفصل الخامس**

الساعات المعتمدة	عنوان المقرر	رمز المقرر
3	ريادة الأعمال	ENTR 200
3	علم النفس الاجتماعي	PSYC 130A
3	أساسيات العمل الاجتماعي باللغة الانجليزية	SOWO 300A
3	مناهج البحث في العمل الاجتماعي	SOWO 310A
3	إختياري تخصص	رمز
15 ساعة		**الفصل السادس**
الساعات المعتمدة	عنوان المقرر	رمز المقرر
3	العمل الاجتماعي الدولي	SOW 320A
3	الاحصاء في العمل الاجتماعي	SOWO 330A
3	المشكلات الاجتماعية	SOWO 206A
3	إختياري تخصص	رمز
3	العمل الاجتماعي مع المجتمع	SOWO 400A
السنة الرابعة		
15 ساعة		**الفصل السابع**
الساعات المعتمدة	عنوان المقرر	رمز المقرر
3	إدارة المؤسسات الاجتماعية	SOWO 410A
3	إختياري تخصص	رمز
3	تدريب ميداني متقدم	SOWO 420A
3	إختياري تخصص	رمز
3	إختياري كلية	رمز
15 ساعة		**الفصل الثامن**
الساعات المعتمدة	عنوان المقرر	رمز المقرر
3	العمل الاجتماعي والتطوع	SOWO 430A
3	موضوعات خاصة في العمل الاجتماعي	SOWO 440A
3	مشروع التخرج	SOWO 450A
3	إختياري تخصص	رمز
3	إختياري كلية	رمز
120	**مجموع الساعات المعتمدة للبرنامج ككل**	

7.10 توصيف القررات

أولا: المقررات الاجبارية

مدخل إلى العمل الاجتماعي: SOWO 200A   **(3 ساعات معتمدة)**
هذا المساق هو مدخل إلى مفهوم العمل الاجتماعي ونشأته وأهدافه ومقوماته ومبادئه، وعلاقة العمل الاجتماعي بالعلوم الأخرى وكذلك مجالاته، كما يتعرف الطلبة على أخلاقيات وقيم مهنة الخدمة الاجتماعية. كما يتضمن المساق إلى المعارف والمهارات التي يحتاجها الاخصائي الاجتماعي للعمل مع المستفيدين على جميع المستويات (الأفراد، الجماعات، المجتمع).

المشكلات الاجتماعية: SOCS 206A   **(3 ساعات معتمدة)**
يتناول المساق التعريف بالمشكلات الاجتماعية وأنواعها ومدي انتشارها وانعكاساتها على الفرد والأسرة والمجتمع، والتعرف على كيفية تحليلها وتفسيرها ومن ثم اقتراح الحلول للتقليل من أخطارها.

SOWO 210A: السلوك الإنساني والبيئة الاجتماعية　**(3 ساعات معتمدة)**

يهدف هذا المساق إلى التعرف على مفهوم السلوك الإنساني وأنواعه خلال فترة الحياة, وأيضاً يركز على المعارف المتعلقة بمحددات السلوك الإنساني والتطبيع الاجتماعي, وأنواع قياس السلوك الإنساني إضافة إلى معرفة خطوات وأساليب الإرشاد للسلوك الإنساني وكيف يتم تعديله في نطاق مجموعة من النظم الاجتماعية, ومعرفة دور الخدمة الاجتماعية مع البيئة.
(متطلبات سابقة PSYC 110A, SOWO 200A)

SOWO 220A: السياسات الاجتماعية والتخطيط الاجتماعي　**(3 ساعات معتمدة)**

يهدف هذا المساق إلى أكساب الطلبة المفاهيم النظرية والتطور التاريخي لخدمات الرعاية الاجتماعية ودورها في تحقيق الرفاه الاجتماعي للفئات المحتاجة والمهمشة لذا يتضمن هذا المساق على تشريعات الرعاية الاجتماعية والسياسات والبرامج والخدمات الناتجة عن هذه التشريعات في سلطنة عمان. كما يتضمن أيضا على المجالات الرئيسية التي تقدمها برامج الرعاية الاجتماعية مثل: تحسين الدخل (برامج الضمان الاجتماعي)، الرعاية الصحية، الأمومة والطفولة، والخدمات المقدمة لكبار السن. سيركز المساق على فهم الطلبة لهيكلية وتنظيم برامج الرعاية الاجتماعية كما سيعزز فهم أثر برامج وسياسات الرعاية الاجتماعية في مساعدة الفئات المحتاجة.
(متطلبات سابقة SOWO 210A, SOWO 200A)

SOWO 230A: العمل الاجتماعي مع الأفراد وأسرهم　**(3 ساعات معتمدة)**

يهدف هذا المقرر إلى تعريف الطلبة بطريقة العمل مع الأفراد باستخدام تقنيات دراسة الحالة لفهم مشكلة العميل من جوانبها الذاتية والبيئية وتحليلها وصولا لمساعدة العميل على حلها. ويشتمل المقرر على المهارات المتعددة والتي يحتاجها الاخصائي للعمل مع العميل مع طرح حالات دراسية للمناقشة ولعب الأدوار.
(متطلبات سابقةPSYC 120A, PSYC 11A, SOWO 220A, SOWO 210A, SOWO 200A)

SOWO 240A: الارشاد والتوجيه الاجتماعي　**(3 ساعات معتمدة)**

يهدف هذا المساق إلى تزويد الطلبة بالمعارف والمعلومات المتعلقة بالارشاد الاجتماعي الاستشارات والعلاقة بينهما وأنواع الارشاد الاجتماعي وخصائصه وعناصره، كما يقدم هذا المساق المفاهيم والاجراءات المتبعة في الارشاد الاجتماعي ودور المرشد ومختلف الأساليب المتبعة والمهارات اللازمة ،ودور المرشد الاجتماعي في مساعدة الحالات التي بحاجة لعملية الارشاد.
(متطلبات سابقة SOCS 100A, SOWO 200A)

SOWO 250A: العمل الاجتماعي المدرسي　**(3 ساعات معتمدة)**

يهدف هذا المساق إلى تعريف الطلبة بأسس العمل الاجتماعي في المجال المدرسي كالمفهوم والفلسفة والأهداف وتصنيفات مشكلات الطلبة ودور الاخصائي الاجتماعي في التعامل معها، بالاضافة إلى دوره في مساعدة التنظيمات المدرسية على المساعدة في مواجهة المشكلات المختلفة التي تعيق المدرسة عن أداء وظائفها، كما سيتم التركيز على الدور الوقائي والتنموي للاخصائي الاجتماعي في المجال المدرسي في سلطنة عمان
(متطلبات مصاحبة SOWO 240A, SOWO 230A)

SOWO 260A: العمل الاجتماعي مع الجماعات　**(3 ساعات معتمدة)**

يهدف هذا المساق إلى تزويد الطلبة بالاطار النظري والمهارات والمعرفة التطبيقية للعمل مع الجماعات ونظريات العلاج المستخدمة ووسائل التدخل المهني، كما يتناول أسس تكوين الجماعات وأنواعها ودور الاخصائي الاجتماعي فيها.
(متطلبات سابقة SOWO 240A, SOWO 230A)

SOWO 270A: تدريب ميداني　**(3 ساعات معتمدة)**

يهدف هذا المساق إلى إعداد الطلبة ميدانيا وإكسابهم الخبرات والمهارات من واقع الممارسة الميدانية للعمل الاجتماعي، كما يهدف إلى تمكين الطلبة من ربط المعلومات النظرية التي درسها الطالب بالتطبيق، وسيكون هذا التدريب في المؤسسات. كما يتناول هذا المساق تطبيقات عملية ميدانية داخل هذه المؤسسات، بالاضافة لتحقيق النمو المهني للطالب وإكسابه قيم ومبادئ وأخلاقيات مهنة الخدمة الاجتماعية وتنمية الذات والسمات الشخصية لدى الطلبة.
(متطلب سابق SOWO 250A)

SOCS 280A: العمل الاجتماعي في المحاكم الشرعية　**(3 ساعات معتمدة)**

تم طرح هذا المساق بناء على تطور مجالات العمل الاجتماعي حيث تم أنشاء مكاتب العمل الاجتماعي والارشاد الأسري والاجتماعي في المحاكم الشرعية، ويتناول المساق التعريف بالمحكمة ودورها في حل الخلافات الاجتماعية ودور الاخصائي الاجتماعي في إعادة التواصل بين أطراف المشكلة في جو أسري وإجتماعي صحيح إلى جانب كيفية مساعدة القاضي في معرفة حقيقة المشكلة وتصورها بشكل أدق. كما يتناول المساق المواضيع الارشادية التي يمكن

للاخصائي الاجتماعي تقديمها في المحاكم، كما سيتعرف الطالب من خلال هذا المساق على القوانين والأنظمة المتعلقة بالمحاكم الشرعية.
(متطلب سابق SOWO 240A)

العمل الاجتماعي في المجال الصحي: SOWO 290A   **(3 ساعات معتمدة)**
يهدف هذا المساق إلى تعريف دور االاخصائي الاجتماعي في المجال الصحي وكيفية تطبيق أساليب العمل الاجتماعي في المؤسسات الصحية ويشتمل المساق على التعرف بالمؤسسات في سلطنة عمان . ويشتمل المساق على عدد من تعريفات المصطلحات الطبية التي يحتاجها الاخصائي الاجتماعي والتي تساعده على فهم مشكلة العميل ومساعدته.
(متطلب مصاحب SOWO 260A, متطلب سابق SOWO 220A)

أساسيات العمل الاجتماعي باللغة الانجليزية: SOWO 300A   **(3 ساعات معتمدة)**
يهدف هذا المساق إلى رفع مستوى المهارة اللغوية للطالب وتمكينه من استخدام اللغة الانجليزية في قراءة وفهم أساسيات العمل الاجتماعي، بالاضافة إلى اكسابه مهارات القراءة والاطلاع والكتابة والمحادثة والبحث باللغة الانجليزية في المصادر والمراجع الانجليزية المتخصصة الورقية منها والالكترونية.
(متطلبات سابقة SOWO 200A, ENGL 101)

مناهج البحث في العمل الاجتماعي: SOWO 310A   **(3 ساعات معتمدة)**
يشتمل هذا المساق على تصميم البحث العلمي وإكساب الطالب مفاهيم ومبادئ وأساسيات البحث الاجتماعي، ويركز المساق على الاجراءات المنهجية للبحث بالاضافة إلى العمليات الاحصائية كما يركز على المعايير الأخلاقية للبحث العلمي، كذلك سيتم عمل تطبيقات عملية لكتابة الأبحاث من أجل رفه مهارة الطلبة في كتابة الأبحاث.
(متطلبات سابقة SOWO 200A, SOWO 300A)

العمل الاجتماعي الدولي: SOWO 320A   **(3 ساعات معتمدة)**
يهدف هذا المساق إلى تعريف الطالب بمفهوم العولمة والعمل الاجتماعي الدولي وتعريف الطلبة بالمؤسسات الدولية التي تقدم الخدمات الاجتماعية على مستوى دولي، كما يهدف المساق إلى رفع مستوى الادراك والوعي لدى الطالب بأساليب الممارسة المهنية للعمل الاجتماعي مع الشعوب المختلفة، كما يشتمل المقرر على تأهيل الاخصائيين الاجتماعيين للعمل في المنظمات الدولية العاملة في مجال الخدمة الاجتماعية الدولية.
(متطلبات سابقة SOWO 200A, SOWO 300A)

الاحصاء في العمل الاجتماعي: SOWO 330A   **(3 ساعات معتمدة)**
يتضمن المساق المبادئ الأساسية للإحصاء في مجال العمل الاجتماعي وكيفية تطبيقها حتى يتمكن الطالب من تحويل المعلومات الاجتماعية إلى بيانات يستدل من خلالها الوصول إلى نتائج بحثه. لذلك سيركز المساق على العمليات الاحصائية مثل: التوزيع التكراري، الرسومات البيانية.
(متطلبات سابقة SOWO 310A)

العمل الاجتماعي مع المجتمع: SOWO 400A   **(3 ساعات معتمدة)**
يتناول هذا المساق التعريف بالنماذج المختلفة لتنظيم المجتمع والتركيز على الدور الذي يقوم به الاخصائي الاجتماعي لتحديد الاحتياجات والخدمات الاجتماعية اللازمة لمجتمعاتهم، كذلك دراسة مشاكل المجتمع المحلي، والطرق المختلفة التي يمكن أن تستخدم لحلها عن طريق تنظيم المجتمع.
(متطلبات سابقة SOWO 260A)

إدارة المؤسسات الاجتماعية: SOWO 410A   **(3 ساعات معتمدة)**
يتضمن هذا المساق التعريف بالمؤسسات الاجتماعية وخصائصها وتصنيفها ودورالاخصائي الاجتماعي في إدارة المؤسسات الاجتماعية. يتضمن المساق أيضا عملية التقويم وأهميته ووسائل ومراحل التقويم. كما يركز المساق على المهارات المطلوبة للقيادة الناجحة.
(متطلبات سابقة SOWO 220A, SOWO 320A)

تدريب ميداني متقدم: SOWO 420A   **(3 ساعات معتمدة)**
يهدف هذا المساق إلى إكساب الطلبة ميدانيا خبرات ومهارات من واقع الممارسة الميدانية للعمل الاجتماعي والتعرف على أهم المؤسسات الاجتماعية في السلطنة وتنمية التعاون بين هذه المؤسسات وجامعة ظفار. كما يتناول هذا المساق تطبيقات عملية ميدانية داخل هذه المؤسسات وربط المعلومات النظرية التي درسها بالتطبيق، بالاضافة لتحقيق النمو المهني لطالب تخصص الخدمة الاجتماعية وتحقيق الألفة بين الطلبة والواقع الفعلي للعمل التي تقوم به المؤسسات الاجتماعية.
(متطلبات سابقة SOWO 260A, SOWO 270A, SOWO 400A)

العمل الاجتماعي والتطوع: SOWO 430A   **(3 ساعات معتمدة)**

يتناول هذا المساق العمل الاجتماعي التطوعي من حيث مفهومه ومراحله وأنواعه وأهدافه ، ويركز المساق على العلاقة بين العمل الاحتماعي التطوعي ومؤسسات المجتمع المحلي في تقديم المساعدة والمشاركة في عملية التنمية المجتمعية كذلك يركز المساق على العناصر الأخلاقية للعمل التطوعي ثم واقع العمل التطوعي في سلطنة عمان.
(متطلبات سابقة SOWO 200A, SOWO 400A)

موضوعات خاصة في العمل الاجتماعي: SOWO 440A   **(3 ساعات معتمدة)**

يتناول المساق دراسة مواضيع مختلفة تتعلق بالعمل الاجتماعي يتم اختيارها من قبل الطلبة ومدرس المادة، ، لذا سيتطلب من الطلبة استكمال مشروعاتهم والقيام بعرض موضوعهم داخل الفصل باستخدام الوسائل التكنولوجية المتعددة.
(متطلبات سابقة SOWO 200A, SOWO 420A)

مشروع التخرج: SOWO 450A   **(3 ساعات معتمدة)**

يهدف هذا المساق إلى تدريب الطلبة عل إجراء بحث تطبيقي في أحد مجالات العمل الاجتماعي باستخدام مهارات البحث العلمي، ويتم مناقشة الأبحاث من قبل لجنة يحددها القسم.
(متطلبات سابقة SOWO 310A, SOWO 330A)

مدخل إلى علم الاجتماع: SOCS 100A   **(3 ساعات معتمدة)**

هذا المساق مدخل إلى دراسة السلوك البشري الجماعي، ويناقش العلاقة بين بنية المجتمع وما طرأ عليها من تغيير. كما يتعرف الطالب على مجالات علم الاجتماع والنظريات المفسرة للظواهر والمشكلات الاجتماعية.

علم نفس النمو والتطور: PSYC 120A   **(3 ساعات معتمدة)**

يتناول هذا المساق التطور البدني، والمعرفي، والعاطفي لجميع المراحل العمرية وخاصية كل مرحلة والتغيرات التي تطرأ عليها وسلوكيات كل مرحلة.
(متطلبات سابقة SOWO 200A, PSYC 110A)

مدخل إلى علم النفس: PSYC 110A   **(3 ساعات معتمدة)**

يشمل هذا المساق مدخلا إلى المبادئ والمفاهيم الأساسية والنظريات الخاصة بعلم النفس، ويقدم نظرة عامة على النماذج النفسية العديدة في السلوك البشري ويستعرض الحقول المختلفة لعلم النفس كعلم النفس الاجتماعي، والمعرفي، والطبي، والتعليمي.

علم النفس الاجتماعي: PSYC 130A   **(3 ساعات معتمدة)**

يتناول المساق مفهوم علم النفس الاجتماعي وتاريخه،كذلك المفاهيم الأساسية في علم النفس الاجتماعي مثل: الجماعة ، التفاعل الاجتماعي، الأدوار، علم النفس الاجتماعي والصحة النفسية.
(متطلبات سابقة SOWO 200A, PSYC 110A, PSYC 120A)

ثانيا: المقررات الاختيارية

التنمية المستدامة: SOCS 201A   **(3 ساعات معتمدة)**

يتناول المساق إلى المفاهيم الأساسية المتعلقة بالتنمية المستدامة بالتركيز على الاستدامة الاجتماعية، ويشتمل المساق على العديد من القضايا الاجتماعية. كما يتناول المساق مفهوم المجتمع المحلي ودراسة المشكلات والحاجات وكيفية تحديد الضرورات والأولويات.

التنوع الاجتماعي SOCS 202A   **(3 ساعات معتمدة)**

يهدف هذا المساق إلى تعريف الطلبة بالثقافات المختلفة والتي تساعدهم على استخدام المهارات الفعالة في عملية التدخل مع العملاء. كما سيتضمن المساق على تعريف الطلبة على ثقافتهم وتراثهم العماني والتي ستساعدهم على العمل مع مختلف فئات المجتمع.

العمل الاجتماعي مع المسنين: SOWO 204A   **(3 ساعات معتمدة)**

يتناول المساق التعريف بمفهوم المسنين والمراحل التي يمرون بها وخصائص كبار السن، والتعرف على مشاكلهم وسلم احتياجاتهم وسلوكيات المجتمع تجاههم وما ينتج عنها من نتائج سلبية على المسنين أنفسهم. ويركز المساق على تزويد الطالب بمهارات التعامل معهم كاخصائي اجتماعي وعلى طرق حل مشاكلهم.

العمل الاجتماعي مع ذوي الاحتياجات الخاصة: SOWO 205A   **(3 ساعات معتمدة)**

يتضمن المساق التعريف بالاعاقة وأنواعها وفهمها وكيفية التدخل مع الأنواع المختلفة من الاعاقة. كما يزود المساق الطلبة بالمهارات المختلفة للتعامل مع ذوي الاعاقة ويتم التركيز على التأهيل الاجتماعي، ويتضمن المساق زيارات ميدانية لبعض المؤسسات العاملة في مجال الاعاقة وإلقاء الضوء على دور الاخصائي الاجتماعي في العمل في هذه المؤسسات.

إدارة الأزمات والكوارث: SOCS 207A   **(3 ساعات معتمدة)**

يتناول هذا المساق تعريف الطالب بمفهوم الأزمات والكوارث والطرق المختلفة للتعامل معها وإدارتها وكيفية اتخاذ القرار عند حدوثها، كما يتناول المساق كيفية التخطيط للكوارث قبل وخلال وبعد وقوع الكارثة. وكيفية ربط إدارة الأزمات والكوارث بالخطط الاستراتيجية المختلفة.

العمل الاجتماعي العمالي: SOWO 208A   **(3 ساعات معتمدة)**

يهدف هذا المقرر إلى تدريب الطالب كيفية مساعدة العامل في مواجهة المشكلات المعوقة لأداء أدواره وكذلك تنمية قدراته لرفع كفاءة الانتاج عن طريق بناء العلاقات العمالية السليمة، كما يهدف هذا المقرر إلى تعريف الطلبة بواقع ميدان العمل ودراسة القوانين العمانية المتعلقة بالعمل والعمال والتعريف بنظام التأمينات الاجتماعية.

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8. Diploma in Social Work (دبلوم في العمل الاجتماعي)

8.1 نظرة عامة على البرنامج

دبلوم العمل الاجتماعي هو برنامج متميز في العمل الاجتماعي برؤية تطلعية لاعداد مساعدين اجتماعيين مؤهلين معرفيا ومهنيا للمساهمة في خدمة وتنمية المجتمع العماني، ويهدف البرنامج إلى إعداد مساعدين اجتماعيين ذو كفاءات بشرية عالية الجودة تمتلك بناءا أكاديميا ومهنياعلى أعلى المستويات لتلبية حاجات السوق في مجال العمل الاجتماعي. كما يمتلكون بناءا مهنيا يمكنهم من الدراسة والتشخيص ووضع خطة التدخل المناسبة لجميع المستويات أفراد، جماعات، ومجتمع وتنفيذها.

8.2 أهداف البرنامج

يهدف برنامج دبلوم العمل الاجتماعي إلى تحقيق الأهداف التالية:

أولا: الأهداف العامة

1. إعداد وتأهيل كفاءات علمية مدربة في العمل الاجتماعي وقادرة على الابداع والتطور والاسهام بفعالية في خدمة المجتمع، وتحقيق خطط التنمية المستدامة.
2. الالتزام بالميثاق الأخلاقي للخدمة الاجتماعية.
3. تعزيز الشراكة مع المجتمع المحلي.

ثانيا: الأهداف الفرعية

1. تمكين الخريج للعمل مع الافراد و الجامعات و خدمة المجتمع.
2. إعداد الطلبة عبر النظريات والتدريب الميداني لشغل وظائف المرشدين الاجتماعيين في مختلف المؤسسات الحكومية والخاصة ومنها وزارة التنمية الاجتماعية، المنظمات الاجتماعية والخيرية، المدارس، المراكز الصحية وغيرها من المؤسسات التي تقدم الخدمات الاجتماعية والانسانية.
3. تخريج الكفاءات العلمية لتلبية حاجات المجتمع والمقدرة على استكمال المرحلة الجامعية الأولى.
4. تنمية شخصية الخريج القيادية والمهنية وتعزيز الهوية وروح الانتماء.
5. تزويد الطلبة بأسس نظريات العمل الاجتماعي وإكسابهم معرفة تخصصية وفهم للعمل الاجتماعي.
6. إكساب الطلبة مبادئ المعرفة والتفكير العلمي المنظم في ظل مبادئ وأخلاقيات المهنة.
7. إعداد الطلبة لتقديم خدمات إجتماعية متميزة وعالية الجودة والمقدرة على تطوير الخدمات إذا اقتضت الحاجة.
8. إكساب الطلبة مهارات التواصل الفعالة للتواصل مع المستفيدين والمجتمع.

9. إعداد خريج البرنامج لأن يكون قادرا على دراسة الحالات الفردية وتشخيصها ووضع خطة التدخل المهني وتنفيذها.
10. إعداد الطلبة للتطور المهني المستمر.

8.3 مخرجات التعلم للبرنامج

من المتوقع بعد نهاية البرنامج أن يكون الطالب قادرا على:

1. الفهم الجيد لمفهوم العمل الاجتماعي ومبادىء وطرق واساليب وأخلاقيات ونظريات العمل الاجتماعي.
2. فهم طبيعة وخصائص المجتمع المحلي وطبيعة النظام الاجتماعي وكذلك التفاعلات بين فئات المجتمع على جميع المستويات.
3. المقدرة على فهم ودراسة السلوكيات الفردية والظواهر والمشكلات الاجتماعية.
4. التطبيق الفعال لمهارات ومعارف الممارسة العامة للعمل الاجتماعي على جميع شرائح المجتمع.
5. ممارسة مهنة الخدمة الاجتماعية من خلال فهم قيم المهنة ومبادئها ومعاييرها الأخلاقية وإعداد خطة تدخل تتناسب مع جميع مستويات المستفيدين أفراد، جماعات.
6. المقدرة على فهم السياسات الاجتماعية.
7. المقدرة على تطبيق مهارات التواصل الفعالة مع المستفيدين والمجتمع.
8. المقدرة على القيام بالدراسة والتشخيص ووضع خطة تدخل مهني وتنفيذها.
9. تطبيق مهارات التفكير الناقد.

8.4 متطلبات القبول:

متطلبات القبول لدبلوم العمل الاجتماعي موجودة في قسم الكلية 6.a صفحة 50

8.5 متطلبات التخرج:

1. أن يجتاز الطالب بنجاح جميع المقررات الدراسية الواردة في الخطة الدراسية واكمال عدد الساعات

المطلوبة (60 ساعة معتمدة) كما هي موضحة في الجدول التالي:

مجموع عدد الساعات	المقررات الاجبارية		متطلبات جامعية
	متطلب	إجباري	
60	3	42	15

2. أن يحصل الطالب على 60% فأكثر كمعدل عام وأن يحصل على 65% كمعدل تخصص.

8.6 متطلبات الجامعة

يدرس الطالب (5) مقررات بمعدل (15) ساعة معتمدة

1. الكتابة الأكاديمية العربية : ARAB 101
2. اللغة الانجليزية الأكاديمية التأسيسية: ENGL 101
3. مدخل لتقنيات الحاسوب : CMPS 100A
4. المجتمع العماني : SOCS 102
5. ريادة الأعمال : ENTR 200

8.7 متطلبات الكلية

لاتوجد متطلبات كلية لبرنامج دبلوم العمل الإجتماعي.

8.8 متطلبات التخصص

يدرس الطالب (14) مقررات بمعدل (42) ساعة معتمدة

1. مقدمة في العمل الاجتماعي : SOWO 200A
2. السلوك الانساني والبيئة الاجتماعية: SOWO 210A
3. السياسات الاجتماعية والتخطيط الاجتماعي : SOWO 220A
4. العمل الاجتماعي مع الأفراد وأسرهم : SOWO 230A
5. الارشاد والتوجيه الاجتماعي : SOWO 240A
6. العمل الاجتماعي المدرسي :SOWO 250A
7. العمل الاجتماعي مع الجماعات : SOWO 260A
8. تدريب ميداني : SOWO 270A
9. العمل الاجتماعي في المحاكم الشرعية : SOWO 280A
10. العمل الاجتماعي في المجال الصحي : SOWO 290A
11. أساسيات العمل الاجتماعي باللغة الانجليزية : SOWO 300A
12. مدخل إلى علم الاجتماع :SOCS 100A
13. مدخل إلى علم النفس : PSYC110A
14. علم نفس النمو والتطور : PSYC120A

يختار الطالب مقرر واحد بمعدل (3) ساعات معتمدة ضمن المقررات التالية:

1. التنمية الاجتماعية المستدامة : SOCS 201A
2. التنوع الاجتماعي:SOCS 202A
3. التخطيط الاجتماعي : SOCS 203A
4. العمل الاجتماعي مع المسنين : SOWO 204A
5. العمل الاجتماعي مع ذوي الاحتياجات الخاصة : SOWO 205A
6. إدارة الأزمات والكوارث : SOWO 207A
7. الخدمة الاجتماعية العمالية :SOWO 208A

8.9 الخطة الدراسية: دبلوم في العمل الاجتماعي

السنة الأولى		
الفصل الدراسي الأول (خريف)		**15 ساعة**
رمز المقرر	عنوان المقرر	الساعات المعتمدة
ARAB 101	الكتابة الأكاديمية العربية	3
ENGL 101	اللغة الانجليزية الأكاديمية التأسيسية	3
CMPS 100A	مدخل لتقنيات الحاسوب	3
SOWO 200A	مقدمة في العمل الاجتماعي	3
PSYC 110A	مدخل إلى علم النفس	3
الفصل الدراسي الثاني (ربيع)		**15 ساعة**
رمز المقرر	عنوان المقرر	الساعات المعتمدة
SOCS 102	المجتمع العماني	3
PSYC 120A	علم نفس النمو والتطور	3
SOWO 210A	السلوك الانساني والبيئة الاجتماعية	3
SOCS 100A	مدخل إلى علم الاجتماع	3
SOWO 230A	العمل الاجتماعي مع الأفراد وأسرهم	3

السنة الثانية		
15 ساعة	**الفصل الدراسي الثالث (خريف)**	
الساعات المعتمدة	**عنوان المقرر**	**رمز المقرر**
3	السياسات الاجتماعية والتخطيط الاجتماعي	SOWO 220A
3	الارشاد والتوجيه الاجتماعي	SOWO 240A
3	العمل الاجتماعي المدرسي	SOWO 250A
3	العمل الاجتماعي مع الجماعات	SOWO 260A
3	ريادة الأعمال	ENTR 200
15 ساعة	**الفصل الرابع (ربيع)**	
الساعات المعتمدة	**عنوان المقرر**	**رمز المقرر**
3	تدريب ميداني	SOWO 270A
3	العمل الاجتماعي في المحاكم الشرعية	SOWO 280A
3	العمل الاجتماعي في المجال الصحي	SOWO 290A
3	أساسيات العمل الاجتماعي باللغة الانجليزية	SOWO 300A
	إختياري تخصص	رمز
60	**مجموع الساعات المعتمدة للبرنامج ككل**	

8.10 توصيف المقررات الدراسية

يرجي الرجوع إلى برنامج بكالوريوس الآداب في العمل الاجتماعي بند 7.10

Department of Mathematics and Sciences

1. Personnel

Chairperson:	Husam Eldin Sadig Ahmed Sadig
Professors:	Muhammad Asif Gondal, Khedr Abo Hassan, Sameen Ahmed Khan
Associate Professors:	Inayatur Rehman, Gowhar Ahmed Naikoo
Assistant Professors:	Sabir Ali Siddiqui, Musallam Tabook, Taoufik Ben Jabeur, Husam Eldin Sadig Ahmed Sadig, Haider Abbas
Lecturers:	Mohammed Abdul Tabidi
Laboratory Technicians	Yousri Hassan Youssef, Ahmed Said Jaboob
Secretary:	Hajer Al Shanfri

2. Vision

The Department of and Sciences aspires to maintain its standing for excellence in quality education and research in basic sciences along with community services.

3. Mission

The mission of the Department of and Sciences is to provide the university community with a theoretical and practical experience in and the sciences. This experience can be applied to other academic disciplines, teaching, or professional fields. The Department works to provide its students with the background and critical thinking skills required for life-long learning in mathematical and scientific areas.

4. Programs Offered

The department offers following Diploma and Bachelor programs:

a) Diploma Programs

1) Diploma in Mathematics

b) Bachelor Programs

1) Bachelor of Science in Mathematics

5. Bachelor of Science in Mathematics

5.1. Program Overview

The Bachelor of Science in is a four-year, 121-122 credit hours' study program designed to offer high quality teaching that promotes critical thinking and problem-solving skills in a variety of subjects and through related disciplines. It provides fundamental background knowledge and expertise for study in engineering and sciences.

It includes at least 30 credit hours of University Requirements, at least 12-13 credit hours of College Requirements, and at least 79 credit hours of Major Courses, including language and technical writing courses. It is designed to grant students the Bachelor of Science degree upon the successful completion of the four-year program.

The program is also offered in Diploma Degree upon the successful completion of a two-year program. The first common year with other college majors allows students to switch between the majors at the same college at the start of the second year of their study.

5.2. Program Objectives

The objectives of the program are to:

1) Achieve the career goals of students by providing them quality education in.
2) Provide the students opportunities to develop careers in.
3) Prepare students to assume positions in public and private sectors, banking sector or educational institutions.
4) Produce graduates who can apply knowledge and skills to situations, which require mathematical solutions.
5) Prepare students for basic and applied research, in.
6) Provide students with training and appropriate learning skills and values.
7) Promote life-long independent learning.

5.3. Program Learning Outcomes

The learning outcomes for the Program are to:

1) Provide a knowledge of the important theorems and techniques in pre-calculus and calculus;
2) Provide knowledge of the theory and applications of ideas in physics, chemistry, and biology;
3) Provide experience with laboratory techniques in the sciences;
4) Provide knowledge and experience in statistics and its applications;
5) Introduce and provide practice for important applications of mathematical and scientific theory;
6) Provide a background in advanced theory and practice, in areas of computing and numerical analysis, abstract algebra, and mathematical analysis.

5.4. Admission Requirements

Admission requirements for a Bachelor of Science in Program are as specified in **College Section 6-a on Page 50.**

5.5. Graduation Requirements

To graduate with a Bachelor of Science in, students must satisfactorily complete 121-122 credits taken over four academic years, with an overall minimum average of 65 percent, and a cumulative average of 70 percent in the major courses. The university, college, and program requirements are as given in the following table.

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
30	12-13	64	15	121-122

5.6. University Requirements

The University requirements include the following ten (10) course encompassing 30 credit hours:

1) ARAB 101: Academic Writing in Arabic
2) CMPS 100B: Introduction to Technical Computing for the Sciences
3) ENGL 101: Basic Academic English
4) ENGL 102E: English for Engineering and Sciences I
5) ENGL 203E: English for Engineering and Sciences II
6) ENGL 204: Advanced English for Academic Purposes and Research
7) MATH 199: Calculus I
8) ENTR 200: Entrepreneurship: Innovation and Creativity
9) SOCS 102: Omani Society
10) ENGL 305: Advanced English Language and Communication Skills

5.7. College Requirements

The college requirement consists of the following four (4) courses encompassing 12 or 13 credit hours:

- One courses in physical/natural sciences electives   (3-4 Cr. hrs.)
- One course in humanities/social sciences electives   (3 Cr. hrs.)
- Two courses in any other majors   (6 Cr. hrs.)

5.8. Program Requirements

The program requirement includes the following 29 courses encompassing 79 credit hours distributed as follows:

I) Major Requirement:

This component consists of the following 24 courses constituting 64 credit hours:

1) CHEM 130: Chemical Principles I
2) CHEM 130L: Introductory Chemistry Laboratory
3) CHEM 170: Chemical Principles II
4) MATH 120: Geometry and Trigonometry
5) MATH 200: Calculus II

6) MATH 205: Calculus III
7) MATH 210: Differential Equations
8) MATH 220: Linear Algebra I
9) MATH 240: Computer Applications I
10) MATH 250: Probability and Statistics
11) MATH 260: Numerical Analysis I
12) MATH 340: Real Analysis I
13) MATH 355: Statistical Inference
14) MATH 365: Fourier Series and Partial Differential Equations
15) MATH 385: Set Theory
16) MATH 415: Abstract Algebra I
17) MATH 435: Toplogy
18) MATH 470: Complex Analysis
19) MATH 485: Project in Mathematics
20) MATH 490: Seminar
21) PHYS 170: Fundamentals of Physics I
22) PHYS 170L: Introductory Physics Laboratory
23) PHYS 210: Fundamental of Physics II
24) PHYS 210L: Physics Laboratory II

II) Major Electives:
This component includes 5 courses encompassing 15 credit hours chosen form the following list:
1) MATH 280: Computer Applications II
2) MATH 305: Advanced Calculus
3) MATH 345: Topics in Geometry
4) MATH 360: Linear Algebra II
5) MATH 375: Topics in Statistics
6) MATH 380: Numerical Analysis II
7) MATH 390: Differential Equations II
8) MATH 410: Number Theory
9) MATH 455: Abstract Algebra II
10) PHYS 265: Modern Physics

5.9. Plan of Study: Bachelor of Science in Mathematics

Year I		
Semester 1 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ARAB 101	Academic Writing in Arabic	3
CMPS 100B	Introduction to Technical Computing for the Sciences	3
ENGL 101	Basic Academic English	3
MATH 199	Calculus I	3
SOCS 102	Omani Society	3

Semester 2 (Spring)		17 Credits
Code	**Course Title**	**Credit Hours**
CHEM 130	Chemical Principles I	3
CHEM 130L	Introductory Chemistry Laboratory	1
ENGL 102E	English for Engineering and Sciences I	3
MATH 200	Calculus II	3
PHYS 170	Fundamentals of Physics I	3
PHYS 170L	Introductory Physics Laboratory	1
MATH 120	Goemetry and Trigonometry	3

Year II		

Semester 3 (Fall)		15 Credits
Code	**Course Title**	**Credit Hours**
ENGL 203E	English for Engineering and Sciences II	3
MATH 205	Calculus III	3
MATH 210	Differential Equations	3
MATH 220	Linear Algebra I	3
MATH 240	Computer Applications I	3

Semester 4 (Spring)		15 Credits
Code	**Course Title**	**Credit Hours**
ENGL 204	Advanced English for Academic Purposes and Research	3
ENTR 200	Entrpreneurship: Innovation & Creativity	3
MATH 250	Probability and Statistics	3
MATH 260	Numerical Analysis I	3
Code	General Elective *	3

Year III		

Semester 5 (Fall)		16 Credits
Code	**Course Title**	**Credit Hours**
MATH 365	Fourier Series and Partial Differential Equations	3
ENGL 305	Advanced English Language and Communication Skills	3
PHYS 210	Fundamental of Physics II	3
PHYS 210L	Physics Laboratory II	1
MATH 385	Set Theory	3
Code	Major Elective	3

Semester 6 (Spring)		15 Credits
Code	**Course Title**	**Credit Hours**
CHEM 170	Chemical Principals II	3
MATH 340	Real Analysis	3
MATH 355	Statistical Inference	3
Code	Major Elective	3
Code	Major Elective	3

Year IV		
Semester 7 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
MATH 415	Abstract Algebra I	3
MATH 485	Project in Mathematics	3
Code	Major Elective	3
Code	Physical and Natural Sciences Elective	3
Code	General Elective	3
Semester 8 (Spring)		**13 Credits**
Code	**Course Title**	**Credit Hours**
MATH 470	Complex Analysis	3
MATH 490	Seminar	1
MATH 435	Toplogy	3
Code	Major Elective	3
Code	Humanities and Social Science Elective	3

* A course in programming, Computer Science CMPS 110 is highly recommended for majors.

5.10. Course Descriptions

MATH 103   for Social Sciences I   (3crs.)
Factorization of polynomials, second degree equations, equations for straight lines, inequalities, systems of linear equations, Gaussian elimination, curve plotting, derivatives, maxima and minima, limits, algebra of exponents, the exponential and logarithmic functions. The emphasis is on applications. *Note: This course may not be used as an elective for Diploma or BS in.*

MATH 103B   for Business   (3crs.)
Factorization of polynomials, second degree equations, equations for straight lines, inequalities, systems of linear equations, Gaussian elimination, curve plotting, derivatives, maxima and minima, limits, algebra of exponents, the exponential and *logarithmic* functions. The emphasis is on applications. *Note: This course may not be used as an elective for Diploma or BS in.*

MATH 120   Geometry and Trigonometry   (3crs.)
Coordinate systems, distances, Pythagorean Theorem, vectors and vector operations, transformations (symmetry, reflections, etc.) analytic geometry (circles, ellipses, parabolas, etc.), areas and volumes. Exponential and logarithm function: Properties, graphs, and equations. Trigonometry: Radian measure, trigonometric functions and inverse functions, graphs, identities, equations, applications (law of sines and law of cosines), trigonometric form for complex numbers (De Moivre's Theorem), hyperbolic *functions*.

STAT 170   Introduction To Statistics   (3 crs.)
This course trains the students on descriptive statistical methods. Topics include: statistics basics, types of data and variables, frequency distribution for qualitative

data, graphical presentation of qualitative data, frequency distributions for quantitative data, graphical presentation of quantitative data, measures of central tendency from raw data, measures of central tendency from grouped data, measures of dispersion from raw data, measures of dispersion from grouped data, measures of position, correlation coefficients, simple regression coefficients.

MATH 199   Calculus I   (3crs.)

Calculus of one variable: Limit of a function, limit laws, one-sided limit, limits involving infinity, continuity, the derivative as a function, the differentiation rules, derivatives of Trigonometric functions, chain rule, implicit differentiation, extreme values of functions, monotonic functions, first derivative test, concavity and curve sketching, derivative of inverse functions, Logarithmic functions, exponential functions, Inverse Trigonometric *functions* and hyperbolic functions.

MATH 200   Calculus II   (3crs.)

Techniques of integration: integration by substitution; integration by parts, integrating powers of trigonometric functions, trigonometric substitutions, integrating rational functions, partial fractions; improper integrals; application of definite integral: volumes, length of a plane curve, area of a surface of revolution; infinite series: sequences, infinite series, convergence tests, absolute convergence, conditional convergence; alternating series; *power* series: Taylor and Maclurine series. *Prerequisite: MATH 199*.

MATH 204   Mathematics for Social Sciences II   (3crs.)

Continuation of MATH 103 where the emphasis is on applications. Determinants, matrix inversion, combinations, introduction to probability, methods of integration, approximations of definite integrals, differential equations, multivariable functions, partial derivatives, chain rule, optimization of bivariate functions. *Prerequisite: MATH 199 or MATH 103.*

MATH 205   Calculus III   (3crs.)

Multivariable Calculus: Partial derivatives, directional derivatives, chain rule, tangent planes, maxima and minima, Lagrange multipliers, cylindrical and spherical coordinates, multiple integrals, substitutions in multiple integrals. *Prerequisite: MATH 200*.

MATH 210   Differential Equations   (3crs.)

Abstract concepts and applications for first-order and linear higher-order differential equations, homogeneous and nonhomogeneous equations, Laplace transforms, and initial value problems. *Prerequisite: MATH 200*.

MATH 215   Elementary Statistics for the Social Science   (3crs.)

Organizing Data; Standard deviation, variance, mean deviation and coefficient of variation. Correlation and Regression Analysis. Multiple and partial correlation. Regression Lines, Test of Significance: Hypotheses, level of significance, tests for significance. Credits can be awarded for only one course of either MAT H 215 or MATH 250.

MATH 220   Linear Algebra I   (3crs.)

Systems of linear equations, Gaussian elimination, matrices, determinants, inverse of matrices, introduction to vector spaces, subspaces and dimension, rank and nullity, eigenvalues and eigenvectors, linear transformations and matrices, similar matrices, inner products, orthogonal projection, least squares approximation, and orthogonal diagonalization.

MATH 240   Computer Applications I   (3crs.)

Introducing MatLab package including components, syntax, features, functions, preparation of input, implementation of commands, interpretation of output, programming some algorithms to solve some pure and applied mathematical and statistical problems. *Prerequisite: MATH 103 or MATH 199*.

STAT 250   Probability and Statistics   (3crs.)

Introduction to probability, Types of probability, types of events, Probability rules, Bayes' theorem, Random variables and probability distributions, Mathematical expectations, Moment generating functions, Discrete theoretical Probability distributions, Continuous theoretical Probability distributions. *Prerequisite: MATH 200*.

MATH 260   Numerical Analysis I   (3crs.)

Programming for numerical calculations, round off errors, solutions of equations by iteration, interpolation methods, numerical differentiation and integration, and numerical methods for ordinary differential equations: first order methods, multi-step methods, and boundary value problem. Solutions of ordinary differential equations, implementations and analysis of algorithms, and projects using MatLab or a similar tool. *Prerequisites: MATH 210, and (CMPS 110, or MATH 240), Co-requisite: MATH 240, or CMPS 110*.

STAT 270   Applied statistics using computer tools   (3crs.)

This course trains students to apply statistical methods to analyze data using SPSS. The focus is practical rather than theoretical. Topics include: creating SPSS data files, coding variables, data manipulation, obtaining and interpreting descriptive statistics measures, producing and interpreting statistical graphs, constructing frequency and contingency tables, correlation analysis, normality checks, one sample t-test, independent samples t-test, paired samples t-test, ANOVA, MANOVA, Chi square test, simple and multiple regression analyses.

MATH 280   Computer Applications II   (3crs.)

A mathematical software is used in a computer Lab to illustrate selected mathematical concepts, explore some mathematical facts, build algorithms for problem solving cases, do numerical and analytical computations, do simulation studies and plot graphs. The selected topics can cover a wide range of mathematical topics such as geometry, calculus, linear algebra, differential equations, probability, statistics, number theory, Fourier and Laplace transforms. The course starts with training on using the software and ends with writing programs to solve some specific mathematical problems. *Prerequisite: MATH 240 or CMPS 110 or co-requisite: EECE 130*.

Math 290: Final year Project (Diploma)   **(2crs.)**

This course is based on a contracted study arrangement between the student and an approved supervisor. Students improve their skills to choose and define problems in mathematics and statistics.

MATH 305   Advanced Calculus   **(3crs.)**

Vector differential calculus: gradient, divergence, curl, curvilinear coordinates; vector integral calculus: line integral, surface integral volume integral, Green's theorem, Stoke's theorem, divergence theorem; implicit and inverse function theorems; Leibnitz theorem; calculus of variations (functionals of one variable). *Prerequisite: MATH 205*.

MATH 340   Real Analysis I   **(3crs.)**

Real numbers: order, absolute value, bounded subsets, completeness property, Archimedean property; supremum and infimum; sequences: limit, Cauchy sequence, recurrence sequence, increasing, decreasing sequence, lim sup, lim inf of a sequence; functions: limit, right, left limit, continuity at a point, continuity on an interval; uniform continuity (on an interval) relations between continuity and uniform continuity, differentiability: definition, right, left derivative, relation between differentiability and continuity, Rolle's theorem, mean value theorem, applications on mean value theorem. *Prerequisite: MATH 200*.

MATH 345   Topics in Geometry   **(3crs.)**

Topics include: Isometries of Euclidean plane, two-dimensional crystallography, inversive geometry, affine geometry, projective geometry, Desargues theorem, hyperbolic geometry, differential geometry of curves and surfaces: Frenet formulas, differential forms, Gaussian and mean curvatures, normal curvature, isometries, geodesics, and Gauss-Bonnet theorem. *Prerequisites: (MATH 205 and MATH 320), or MATH 335*.

MATH 355   Statistical Inference   **(3crs.)**

Sampling and sampling distributions: Chi-square distribution, t-distribution. Point and interval estimation; Unbiasedness, consistency, efficiency and maximum likelihood estimation, method of moments, minimum variance unbiased estimator. Testing of Hypothesis: Neyman-Pearson lemma. Test of significance: Paired t-test, Chi-Square tests and F-test. *Co-requisite: MATH 250*.

MATH 360   Linear Algebra II   **(3crs.)**

A deeper study of vector spaces, linear transformations, rank-nullity theorem, determinants, eigenvalue theory. Minimal polynomial, primary decomposition, diagonalization, triangulation, rational and Jordan canonical forms. Inner product spaces, self-adjoint and unitary operators, normal operators, the spectral theorem, positive symmetric matrices, and bilinear forms. *Prerequisite: MATH 320 or MATH 335*.

MATH 365   Fourier Series and Partial Differential Equations   **(3crs.)**

Fourier series of a function, convergence theorems, half-range expansions, Fourier integrals, Fourier transform, complete orthonormal systems, Parseval's identity, Partial differential equations: methods of variable separation,

hyperbolic, parabolic and elliptic equations, wave equation, heat equation, and Laplace equation, Integral transform method: Fourier and Laplace transforms. *Prerequisites: MATH 210, MATH 305, and MATH 320*.

MATH 375   Topics in Statistics   (3crs.)

A range of applied statistical methods are covered. Topics include: index numbers, life tables, Markov chains, Association and Correlation, Regression analysis and time series analysis. Prerequisite. *Prerequisite: MATH 250*.

MATH 380   Numerical Analysis II   (3crs.)

Iterative solution of systems of nonlinear equations. Numerical methods in linear algebra: linear systems, matrix inversion, LU factorization, eigenvalues and eigenvectors. Numerical methods for differential equations, applications to simple partial differential equations. *Prerequisite: MATH 260*.

MATH 385   Set Theory   (3crs.)

Uncountable sets, ordered and well-ordered sets, equivalent forms of the axiom of choice such as well-ordering and Zorn's Lemma, transfinite induction, arithmetic with cardinal numbers, generalized continuum hypothesis, ordinal numbers.

MATH 390   Differential Equations II   (3crs.)

The topics to be covered in this course include series solutions to second order linear equations – Bessel, Legendre equations; hypergeometric functions/equations; Gamma and Beta functions; Sturm-Liouville problems; Matrix methods for systems of differential equations. *Prerequisite: MATH 210*.

MATH 410   Number Theory   (3crs.)

Divisibility, congruence equations, quadratic reciprocity, numerical functions, some Diophantine analysis, binary quadratic forms, continued fractions, Pell's equation. Prerequisite: *MATH 320 or MATH 335*.

MATH 415   Abstract Algebra I   (3crs.)

Groups, subgroups, homomorphisms, normal subgroups and quotient groups, permutation groups, orbits and stabilizers, Cauchy's theorem. Rings and fields, ideals, homomorphisms and quotient rings, maximal and prime ideals, ring of polynomials, non-commutative examples. *Prerequisite: MATH 220 or MATH 335*.

MATH 435   Topology   (3crs.)

Topological Spaces, subspaces, continuous mappings, separation axioms, compactness, connectedness, metric spaces, and finite product spaces. *Prerequisite: MATH 305*.

MATH 455   Abstract Algebra II   (3crs.)

Topics on groups, rings and fields not covered in MATH 415, including the Sylow theorems and their applications to group theory, abelian groups, Euclidean domains, algebraic field extensions, and constructions by compass and ruler, splitting fields, classification of finite fields, solvability of equations by radicals, Galois Theory. *Prerequisite: MATH 415*.

MATH 470   Complex Analysis   (3crs.)

Analytic functions of a complex variable, Cauchy-Riemann equations, harmonic functions, complex integration, Cauchy's integral theorem, Taylor series, trigonometric functions, Laurent series, singularities and zeroes, the residue theorem and contour integration with applications to real integrals. *Prerequisite: MATH 305*.

MATH 485   Project in Mathematics   (3crs.)

This course is based on a contracted study arrangement between the student and an approved supervisor. Students improve their skills to choose and define problems, obtain information from libraries or experiments, organize facts and ideas, and report ideas and conclusions in written form.

MATH 490   Seminar   (1cr.)

A written report and oral presentation in the form of a seminar about a current topic in. *Prerequisite: MATH 485*.

PHYS 100   Physics for the Arts   (3crs.)

An introductory formulation of physical concepts. Covers mechanics, electricity and magnetism, light, atomic and nuclear physics for non-science majors. This course emphasizes the significance of fundamental physical principles and methodologies in real world problems. PHYS 100 cannot be taken for credits in lieu of PHYS 170, PHYS 170L or PHYS 210, PHYS 210L when these courses are required for the major.

PHYS 170   Fundamentals of Physics I   (3crs.)

Measurements, vectors, motion in one two and three dimensions, Newton's laws, Particle dynamics, work and energy, circular motion and rotation, collisions, linear momentum and angular momentum, oscillations, Fluid statics and dynamics, wave motion and sound waves. Prerequisite or co-requisite: *MATH 199 or MATH 103*.

PHYS 170L   Introductory Physics Laboratory   (1cr.)

Experiments related to the material taught in PHYS 170 (classical physics) with emphasis on error analysis and computer-assisted experimentation. *Prerequisite or co-requisites: PHYS 170*.

PHYS 210   Fundamentals of Physics II   (3crs.)

Electric field and potential, capacitance and dielectrics, current and resistance, DC circuits, magnetic fields, Faraday's law, inductance, AC circuits, Maxwell's equations. Lab experiments related to the material taught in PHYS 210 with emphasis error analysis and computer-assisted experimentation. *Prerequisite: PHYS 170 or co-requisite: MATH 200*.

PHYS 210L   Physics Laboratory II   (1cr.)

Lab experiments related to the material taught in PHYS 210 with emphasis on error analysis and computer-assisted experimentation. *Prerequisite or co-requisite: PHYS 210*.

PHYS 265   Modern Physics   (3crs.)

Geometrical optics and modern physics interference of light waves, diffraction, and polarization. Special theory of relativity, light particle duality, introductory quantum mechanics, uncertainty principle, Schrodinger equation, atomic physics, nuclear physics and introduction to elementary particles. Lab. Experiments related to the materials taught in class with emphasis error analysis and computer assisted experimentation. *Prerequisite: MATH 205*.

CHEM 100   Chemistry for the Arts   (3 crs.)

A survey of chemistry including atomic structure, chemical bonding, acid-base equilibrium, and introductory thermodynamics and kinetics designed for non-science majors. This course emphasizes the significance of fundamental chemical principles and methodologies in real world problems. Students cannot receive credits for both CHEM 170 and CHEM 100. CHEM 100 cannot be taken for credit in lieu of CHEM 130, CHEM 130L or CHEM 170 when these courses are required for the major.

CHEM 130   Chemical Principles I   (3 crs.)

An introduction to chemical principles covering atomic structure, quantum theory, chemical bonding, stoichiometry, thermodynamics, net ionic equations, aqueous reaction and gas laws with emphasis on examples and problems to illustrate the applications of chemistry to engineering disciplines.

CHEM 130L   Introductory Chemistry Lab   (1cr.) 0.3*

Weekly introductory lab sessions for Chemical Principles I which includes an introduction to chemical principles covering atomic structure, chemical bonding, stoichiometry, gas laws, chemical equilibrium including acid-base and solubility equilibrium, electrochemistry, introductory kinetics and thermodynamics. *Prerequisite or co-requisite: CHEM 130.*

CHEM 170   Chemical Principles II   (3 crs.)

An introductory theoretical formulation of physical and analytical chemistry including the periodic table, properties of solutions, chemical equilibrium, acid-base equilibrium, electrochemistry, and an introduction to organic chemistry. *Prerequisites: CHEM 130.*

CHEM 210   Organic Chemistry I   (3 crs.)

Introduction to organic chemistry functional groups, structures and reactions of alkanes, alkenes, alkynes, alkyl halides, and aromatic molecules; nomenclature of organic compounds; stereochemistry; reaction mechanisms and dynamics, and an introduction to biochemistry. *Prerequisite: CHEM 170.*

CHEM 250   Organic Chemistry II   (3 crs.)

This course covers structures and reactions of alcohols, ethers, carboxylic acids, aldehydes, ketones, and amines. It also provides an introduction to chemistry of heterocycles, carbohydrates, amino acids, and synthesis and reaction techniques. Emphasis is on the classification of biochemical and petroleum products including synthetic polymers, lipids, detergents, and crude oil. *Prerequisite: CHEM*

CHEM 250L   Organic Chemistry Laboratory   (1 crs.)

*210.*Experimental organic chemistry focusing on the synthesis, separation, purification, and characterization of organic compounds. Characterization techniques include IR and UV visible absorbance, NMR, mass spectrometry, and chemical tests. Unknown compounds and mixtures of unknown compounds will be separated and identified by chemical and spectroscopic techniques. *Prerequisite: CHEM 210.*

CHEM 260   Analytical Chemistry   (3 crs.)

The fundamentals and techniques of analytical chemistry including solution equilibria, titrations, spectroscopic fundamentals and techniques, electrochemical fundamentals and techniques, chromatography, and statistical analysis.

CHEM 280   Environmental Chemistry   (3 crs.)

A survey of environmental problems, the chemistry of atmospheric processes. Stratospheric chemistry, the ozone layer, air pollution, the greenhouse effect, photochemical and chemical reactions, and properties of aerosols. Effect of pollutants on acid rain, global warming, water, soil, and health; and destruction of pollutants. Effect of energy production on the state of the environment including nuclear energy, fossil fuels, and hydrogen fuel. Prerequisite: CHEM 170 or CHEM 100. Can be taken by science and non-science majors.

CHEM 370   Physical Chemistry   (3 crs)

Surface phenomena and chemistry: Surface tension. Capillarity. Adsorption. Electrical double layers. Colloids. Transport properties: Thermal conductivity. Viscosity and diffusion coefficients. Porous media. Chemical kinetics: Rate laws, mechanisms, catalysis, reaction rates. Heterogeneous reactions, photochemistry. Polymers: types: Thermodynamics of solutions. Applications: Principles of oil production performance. Water flooding and enhanced oil recovery techniques. Prerequisite: CHEM 170.

BIOL 100   Biology for the Arts   (3crs.)

This is an introductory course which covers major biological principles and concepts. Topics include basic cells and its organelles, properties of water, organs and organ systems, genetics, DNA and RNA, and a look at emerging diseases in modern times for non-science majors. This course emphasizes the significance of fundamental biological principles and methodologies in the real world.

BIOL 120   Introductory Biology   (3crs.)

An introduction to biological principles at the ecosystem, population, organism and organ system level using an investigative and problem-based approach. Exploration of cellular processes including metabolism and inheritance from an evolutionary perspective in an investigative, problem-based format.

BIOL 120L   Introductory Biology Lab   (1cr.)

Weekly introductory lab sessions for Biology, which includes an introduction to biological principles covering the material taught in BIOL 120. *Prerequisite or co-requisite: BIOL 120.*

BIOL 160   Contemporary Issues in Biology   (3 cr.)

This course focuses on the scientific background to some of the current topics in biology. Students will get an in-depth treatment of issues such as genetic and molecular biology, as well as topics related to environment.

NUTR 150   Food and Nutrition   (3 cr.)

Food and Nutrition is a course which focuses on helping students understand the significance of eating appropriate foods, principles of nutrition, and the importance of carbohydrates, fats, proteins, vitamins and minerals in the diet. This course provides students with the opportunity to analyze diet according to nutritional needs and also to develop skills in the selection, storage, and preparation of food.

ENVR 150   Introduction to Environmental Studies   (3 cr.)

This course attempts to provide an overview of environmental science: the interactions between humans and the environment, with an emphasis on the natural science elements of environmental issues. More specifically, this course is an introduction to the various ways that humans depend on the earth's natural resources, and how human activities directly and indirectly affect the earth and its human and non-human inhabitants. In addition, the course will explore how policy, individual behavior, and technology can prevent, control, and reverse environmental harm.

6. Diploma in Mathematics

6.1. Program Overview

The Diploma in Mathematics is a two-year, 63 credit hours' study program designed to equip its holders with adequate knowledge, skills, and competencies in and statistical analysis. The program focuses on pairing theoretical explanations with practical work in the form of problem solving and projects. In addition, the program follows a modern liberal arts approach by exposing the students to a sound knowledge of general sciences, the arts, study of the Omani culture, mastery of general computing skills, and efficient usage of Arabic and English languages.

Although the Diploma holders may exit the university education with this degree, they will also have opportunities to continue their education to complete Bachelor of Science (BS) degree in if they satisfy the requirements for admission to the BS in programs, then all the credits that are successfully completed in the Diploma program are transferable to the BS programs.

6.2. Program Objectives

Refer to Bachelor of Science in Program Sections 5.2.

6.3. Program Learning Outcomes

Refer to Bachelor of Science in Program Sections 5.3.

6.4. Admission Requirements

Admission requirements for a Diploma in Program are as specified in **College Section 6-a on Page 50.**

6.5. Graduation Requirements

To graduate with a Diploma in, students must satisfactorily complete 63 credits taken over two academic years, with an overall minimum average of 65 percent. The university, college, and program requirements are as given in the following table.

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
15	9	36	3	63

6.6. University Requirements

The University requirements include the following nine (5) course encompassing 15 credit hours:
1) ARAB 101: Academic Writing in Arabic
2) ENGL 101: Basic Academic English
3) ENGL 102E: English for Engineering and Sciences I
4) ENTR 200: Entrepreneurship: Innovation & Creativity
5) SOCS 102: Omani Society

6.7. College Requirements

The college requirement consists of three (3) courses , 9-credit hours courses from any other major (highly recommended: CMPS110 course)

1) CMPS 100B: Introduction to Technical Computer for the Sciences
2) MATH 199: Calculus I
3) ENGL 203E: English for Engineering and Sciences II
4) CMPS 110: Introduction to Programming

6.8. Program Requirements

The program requirement includes the following 11 core course encompassing 33 credit hours and 1 lab course with 1 credit hour and 1 Project with 2 credit hour

I) **Major Required Courses:**
1) CHEM 130: Chemical Principles I
2) CHEM 130L: Introductory Chemistry Laboratory
3) STAT 170: Introduction to Statistics
4) MATH 200: Calculus II
5) MATH 205: Calculus III
6) MATH 210: Differential Equations
7) MATH 220: Linear Algebra I
8) MATH 240: Computer Applications I
9) STAT 250: Probability and Statistics

10) MATH 260: Numerical Analysis I
11) STAT 270: Applied Statistics using computer tools
12) PHYS 170: Fundamentals of Physics I
13) MATH 290: Final year Project

II) Major Elective Courses:

The students must choose one course from major elective courses with 3 credit hours from the following list:

1) CMPS 110: Introduction To Programming
2) MATH 120: Geometry and Trigonometry
3) NUTR 150: Food and Nutrition
4) BIOL 120: Introductory Biology

6.9. Plan of Study: Diploma in Mathematics

Year I		
Semester 1 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ARAB 101	Academic Writing in Arabic	3
CMPS 100B	Introduction to Technical Computing for the Sciences	3
ENGL 101	Basic Academic English	3
MATH 199	Calculus I	3
SOCS 102	Omani Society	3
Semester 2 (Spring)		**16 Credits**
Code	**Course Title**	**Credit Hours**
CHEM 130	Chemical Principles I	3
CHEM 130L	Introductory Chemistry Laboratory	1
ENGL 102E	English for Engineering and Sciences I	3
MATH 200	Calculus II	3
PHYS 170	Fundamentals of Physics I	3
MATH 120	Geometry and Trigonometry	3

Year II		
Semester 3 (Fall)		**15 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 203E	English for Engineering and Sciences II	3
MATH 205	Calculus III	3
STAT 250	Probability and Statistics	3
MATH 240	Computer Applications I	3
MATH 220	Linear Algebra I	3
Semester 4 (Spring)		**17 Credits**
Code	**Course Title**	**Credit Hours**
STAT 270	Applied statistics using computer tools	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3

MATH 210	Differential Equations	3
MATH 260	Numerical Analysis I	3
Code	General Elective	3
MATH 290	Final Year Project	2
Completion of the Diploma In - Total Credits 63		

6.10. Course Descriptions

Refer to Bachelor of Science in Program Sections 5.10.

COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION

(CCBA)

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College of Commerce and Business Administration		
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COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION

1. Officers of the College

Dean	Mawih Kareem Al Ani
Assistant Dean	Abdullah Mohammed Al Ghazali
Academic Coordinator	Eedeh Ahmed AlZoubi
Secretory	Laila bait Said, Nawal Hafedh Al Kathiri

2. Organizational Structure

The College of Commerce and Business Administration (CCBA) is headed by a Dean overseeing the following **Five Departments**:

1) Department of Accounting
2) Department of Finance and Economics
3) Department of Management
4) Department of Marketing and Entrepreneurship
5) Department of Management Information Systems

3. Vision

The College of Commerce and Business Administration at Dhofar University aspires to acquire a distinguished place among national, regional and international business educational institutions.

4. Mission

To provide quality business education with a global perspective in an open learning environment, fostering research and community outreach and nurturing leaders who are capable of contributing to Omani society and beyond.

5. Academic Programs Offered

The College offers five (5) Diploma, seven (7) Bachelor and three (3) Graduate (Master) Programs. Diploma and Bachelor students may join for the morning (regular) or the evening program (but not both). The medium of instruction in all programs is English except for Masters of Art in Management program and Master of Sciences in Accounting wherein they are Arabic. These programs are:

a) Diploma Programs

1) Diploma in Accounting
2) Diploma in Finance
3) Diploma in Management
4) Diploma in Digital Marketing
5) Diploma in Management Information Systems (MIS)

b) Bachelor Programs

1) Bachelor in Accounting
2) Bachelor in Finance
3) Bachelor in Management
4) Bachelor in Digital Marketing
5) Bachelor in Management Information Systems (MIS)
6) BSc in Logistics and Supply Chain Management
7) BSc in Business Analytics

c) Master Programs

1) Master in Business Administration(MBA)
2) Master of Arts in Management (MA in Management)
3) Master of Science in Accounting (MSc in Accounting)

(Details of Master Programs are given in Graduate Studies Catalogue)

6. Program Objectives

The objectives of the programs at the College are:

1) To provide students with up-to-date academic programs of high quality and relevance through excellent instruction, scholarly contribution, and service to students and other constituencies.
2) To prepare students for a variety of managerial and professional careers in business through innovative programs that integrates theory with practical experience.
3) To produce morally responsible individuals who are highly competent in their fields of specialization and well prepared to succeed in a global knowledge economy.
4) To produce life-long self-learners committed to serve their society

7. Program Learning Outcomes

a) Diploma Programs

The Diploma programs graduate will:

1) Have the knowledge and skills specifically in their area of specialization necessary to understand and succeed in business, government, and/or graduate school.
2) Have the team work spirit.
3) Have interpersonal communication skills.
4) Be able to use technologies that relate to their future work domains.
5) Be global-oriented enabling them to recognize the influence of globalization on country's economy.

b) Bachelor Programs

The Bachelor programs graduate will:

1) Have the knowledge and skills specifically in their area of specialization necessary to understand and succeed in business, government, and/or graduate school.

2) Have the team work spirit.
3) Have interpersonal communication skills.
4) Be able to use technologies that relate to their future work domains.
5) Be global-oriented enabling them to recognize the influence of globalization on country's economy.
6) Be able to think creatively and critically and contribute to Omani society and beyond.
7) Have the research-oriented spirit enabling them to challenge the status quo to move to better ones.

C) BSc in Business Analytics
As given in section 5

8. Admission Requirements

a) Undergraduate Programs

I) General Requirements

For admission to any of the undergraduate programs offered by CCBA, a student must have:

- A General Education Certificate or its equivalent and
- Passed FP from DU or any other HEI recognized by MoHE

OR

Be exempted from FP English, Maths and IT courses based on placement tests conducted by DU FP

II) Program Specific Requirements

Program Specific admission requirements, if any, are given in the concerned section in this catalogue.

b) Graduate (Master) Programs

(For admission requirements of Master Programs, refer to Graduate Studies Catalogue.)

9. Graduation Requirements

To receive a Diploma in all programs, students must satisfactorily complete 60 credit hours with a cumulative average of 65 percent.

To receive a Bachelor Degree in all programs and BSc in Logistics and Supply Chain Management, students must satisfactorily complete a total of 120 credit hours (including the 60 credits earned in the diploma) with a cumulative average of 65 percent.

To receive a BSc in Business Analytics, students must satisfactorily complete a total of 123 credit hours.

The following table summarizes the number of credits normally required for each Diploma and Bachelor granting program in the CCBA.

Program	University Requirements	College Requirements	Major Compulsory Requirements	General Electives Courses			Total Credit Hours
				General Elective	Skills of Life	Major Elective	
Diploma	6	33	21	---	---	---	60
Bachelor	12	57	45	3	3	---	120
BSc in Business Analytics	18	27	69	3	3	3	123

10. University Requirements

a) Diploma Programs

The University requirements for Diploma programs consist of the following Two (2) courses comprising of 6 credit hours:

1) ENGL101: Basic Academic English
2) ENTR200: Entrepreneurship: Innovation and Creativity

b) Bachelor Programs

The University requirements for Bachelor programs consist of the following additional two (2) courses comprising of 6 credit hours, apart from the courses mentioned above for the diploma program.

1) ARAB101: Academic writing in Arabic
2) SOCS102: Omani Society

11. College Requirements

a) Diploma Programs

The college requirements for Diploma programs consist of the following eleven (11) courses comprising of 33 credit hours.

1) BUSS 101: Principles of Management
2) BUSS 102: Principles of Financial Accounting
3) BUSS 103: Principles of Marketing
4) BUSS 104: Principles of Management Accounting
5) BUSS 105: Principles of Financial Management
6) BUSS 106: Business and Information Technology
7) BUSS 201: Principles of Microeconomics
8) BUSS 203: Principles of Macroeconomics
9) BUSS 204: Business Law and Ethics
10) ENGL102B: English for business I
11) MATH103B: Mathematics for Business

b) Bachelor Programs

The college requirements for Bachelor programs consist of the following additional eight (8) courses comprising of 24 credit hours, apart from the courses mentioned above for the diploma program:

1) BUSS 304: Quantitative Methods in Business
2) BUSS 306: Strategic Management
3) BUSS 307: Statistics for Business
4) BUSS 312: e- Business
5) BUSS 401: Research Methodology
6) BUSS 403: Business Environment
7) ENGL203B: English for business II
8) ENGL204: Advanced English for academic purposes and research

12. Program (Major) Requirements

The program requirements consist of two parts namely Major courses and general electives as given below.

a) Major Compulsory Courses

These are given in the respective Majors/specialization areas in this catalogue

b) General Electives

Every student in the Bachelor programs only has to select a total of three (3) general electives comprising of 9 credit hours from two clusters given below:

I) Cluster one - Skills for Life Elective (SLE):

The student has to choose any one (1) course comprising 3 credit hours from the list of skills for life courses given in the following table.

Cluster 1: Skills for life Elective		Crs
PHIL160	Critical and Creative Thinking	3
PHIL 230	Principles of Professional Ethics	3
ENVR150	Introduction to Environmental Studies	3
PSYC250	Personal Development	3
NUTR150	Food and Nutrition	3
BUCP 200	Communication and Professional development	3
BURS 200	Professional report writing skills	3
BUSK 200	Soft Skills	3

II) Cluster two - College General Electives (CGE):

The student has to choose any one (1) course comprising 3 credit hours from the list of college general electives as given in the following table. However, the Dean of the college could substitute a course as per the rules of course substitution.

Cluster 2: College General Electives		Crs	Pre-req.
ACCT 221	Intermediate Accounting I	3	BUSS 102
ACCT 222	Managerial Cost Accounting	3	BUSS 104
ACCT 223	Financial Statement Analysis	3	BUSS 104
FINA 221	Money and Capital Markets	3	BUSS 102
FINA 222	Commercial Bank Management	3	BUSS 105
FINA 223	Financial Services	3	BUSS 105
LSCM 221	Fundamentals of Logistics and Supply Chain Management	3	BUSS101
LSCM 222	Purchasing and Supply Management	3	LSCM221
LSCM 223	Freight and Transport Management	3	LSCM221
MISS 221	Introduction to Information Systems	3	BUSS 106
MISS 222	Systems Analysis and Design	3	BUSS 106
MISS 223	Business Programming	3	BUSS 106
MNGT 221	Human Resource Management	3	BUSS 101
MNGT 222	Organizational Behavior	3	BUSS 101
MNGT 223	Business Ethics	3	BUSS 101
MKTG 221	Consumer Behavior	3	BUSS 103
MKTG 222	Marketing Communication	3	BUSS 103
MKTG 223	Service Marketing	3	BUSS 103
BSBA 111	Introduction to Information Security	3	MISS 221
BSBA 211	Introduction to Big Data	3	MISS 224
BSBA 212	Foundations of Decision Analysis	3	MISS 224 - BSBA 111

13. Final Year Project and Internship Training

a) **Final Year Project**

As part of their fourth year, students are required to carry out a project and submit a report. This project is a substantial piece of work that will require creative activity and original thinking. Students are supervised while working on a project in his/her specialization for three-credits, extending over a full semester. The project aims to provide students with skills to solve critical workplace problems and issues. (see the course as per the major).

b) **Internship Training**

All students of CCBA (Diploma and Bachelor), who have completed 45 credits are required to undergo Internship Training in their major for a period of eight weeks. This ensures that each student gains practical training experience during the summer prior to graduation from diploma level, with some business organizations.

14. Course Description

a) University Requirement course offered by CCBA

ENTR 200   Entrepreneurship: Innovation & Creativity   (3 crs)
This introductory course provides a fully-enabled curriculum for the students to explore entrepreneurship as a study topic as well as practice. Entrepreneurship has become one of the most powerful and influential force of change in the world. This course aims to provide a basic understanding of the most important and relevant concepts and processes in the field of entrepreneurship in addition to practical training. Topics covered in this course will include significance of entrepreneurship, feasibility study, business model, business plan, understanding the concept of opportunity, different types of business ownership existing in Sultanate of Oman, as well as practical applications and field visits.
Prerequisite: ENGL 203A; ENGL 102B; ENGL 203E

b) Other University Requirements

Course description of other university requirements is given in corresponding sections of CAAS.

c) College Requirements

BUSS 101   Principles of Management   (3 crs)
This course is an introductory course in management that reviews the main concepts and ideas associated to management of organizations including the functions and activities of the manager. This course studies the significant management theories, and practice at national and international level. This course covers the following topics: nature of management, planning, controlling, decision making, and types of organizations, delegation of authority & decentralization and leadership. The course is designed to deliver the basic understanding of the concepts and tools in management to the students. *Prerequisite: FPE 103C*

BUSS 102   Principles of Financial Accounting   (3 crs)

This course provides an overview of basic concepts and principles underlying financial accounting system. This course aims to develop the understanding of the students in identifying, recording, classifying and summarizing the financial transactions of any entity and provides an understanding of the preparation and presentation of the basic financial statements, the income statement, and the balance sheet and their interpretation as well. The understanding of these essential concepts provides essence for the students as future managers of accounting. *Prerequisite: FPE 103C*.

BUSS 103   Principles of Marketing   (3 crs)

The course introduces the basic concepts and the practices which comprise the principles of marketing, and develops an understanding of the marketing concepts and problem-solving approach from a managerial point of view in the students. The course is a foundation to the advanced courses in marketing/related areas and emphasizes on the topics like marketing-mix, marketing environment, consumer

buying behavior, segmentation-targeting-positioning strategies, product planning & management, pricing, distribution and the promotional strategies in marketing. The course will be offered by lecture mode with discussions in the class as well adopting the case studies and assignments for critical thinking development in the students. *Pre-requisite: FPE 103C.*

BUSS 104   Principles of Management Accounting   (3 crs)

This course introduces students to the principle concepts, techniques and tools in management accounting. It aims to provide students with an understanding of management accounting information used in planning and controlling in business organizations. Topics in this course include preparing manufacturing final accounts, cash flow statements, cost behavior and analyses, budgeting and budgetary control and relevant cost information for decision making and performance evaluation. *Prerequisite: BUSS 102*.

BUSS 105   Principles of Financial Management   (3 crs)

The essential emphasis of this course is on the changing role of financial management and how to maximize the firm value. The course aims to cover the basics required to understand concepts and advance courses in finance. The essence of this course is on the principles of contemporary corporate finance and its management. It accentuates the imperative concepts and techniques required for financial decision-making. *Prerequisite: BUSS 102*

BUSS 106   Business and Information Technology   (3 crs)

This course introduces the application of Information and communication technology to support business activities. It establishes role of information technology and communication technology (ICT) as an Important Component in Modern Business World. Technically, it focuses Understanding different hardware, Software, Tool, Techniques and Process required that facilitates the office and industry tasks. It includes creating and store of business documents using word processing, Use of spreadsheets to collect, compile and analyze business data, creation of effective Presentation. It also creates awareness about emerging and current Trends in Information Technology. *Prerequisite: BUSS 101*

BUSS 201   Principles of Microeconomics   (3 crs)

The microeconomics focuses on how firms and households make decisions and interact in the market. This course is proving the undergraduates with a thorough information and comprehension of the foundations of modern economic analysis. This course presents the elementary values of the theory of microeconomics and their implementation: demand and supply, markets' operation, producer and consumer actions, market conditions and wealth allocation. *Prerequisite: BUSS 105*

BUSS 203   Principles of Macroeconomics   (3 crs)

Principles of macroeconomics to provide an understanding and overview basic concepts of macroeconomics and explain the macroeconomic indicators which effect the society. The purpose of this course is to provide the knowledge to the student about basic tools of macroeconomics. The course covers national income accounting, overview of classical concept, Keynesian concept of income employment, consumption, saving function, inflation & unemployment, money

supply and other related macroeconomic indicators. A student who grasps macroeconomic relationship will understand impact of macroeconomic indicators on international trade. *Prerequisite: BUSS 201*

BUSS 204   Business Law and Ethics   (3 crs)
This course is an introduction to the ethical and legal standards prevailing in business environment. It includes the legal frameworks necessary for the protection of customers and organizations along with the study of legal and ethical business environment in which businesses operate. The course focuses on Omani law but also considers international ethical perspectives in business. *Prerequisite: BUSS 201*

BUSS 304   Quantitative Methods in Business   (3 crs)
This course is designed to provide an understanding and working knowledge of quantitative methods and concepts applied in business areas. The course aims to cover topics of business mathematics & and statistical description and analysis appropriate for business students. The topics include are Applications of AP and GP, exponential techniques, applications derivative, descriptive statistics – measures of central tendencies and measures of dispersion, introduction of probability, expected value of random variable and its application in business, probability distributions - binomial, Poisson, and normal use of MS Excel and SPSS. *Prerequisite: MATH 103B and BUSS 203*

BUSS 306   Strategic Management   (3 crs)
The course of Strategic Management is built on the concepts already acquired earlier. The course includes fundamentals concepts regarding the basic Model of strategic Management process, Micro and Macro Environmental scanning, Industry Analysis. The course stresses the role of Strategic Leadership in formulating strategies and their main tasks in making strategic decisions and actions, especially in a volatile environment. The emphasis is on the application of Analytical tools used in the modern companies in the world. Different and contemporary strategies applied by local and global companies, and the importance of getting competitive advantage through resource/competence-based view will be addressed. *Prerequisite: BUSS 204*

BUSS 307   Statistics for Business   (3 crs)
This course is designed to provide an understanding and practical knowledge of statistical methods and concepts applied in business areas. The course aims to cover topics of statistical description and analysis needed for business students. The focus of the course is on the practical use of data in business decision making. The topics include are introduction of hypotheses testing of large and small sample sizes, analysis of categorical data, ANOVA, correlation, and simple and multivariate linear regression analysis. Use of MS Excel / SPSS will be used. *Prerequisite: BUSS 304*

BUSS 312   e-Business   (3 crs)
This course introduces the fundamentals of e-business processes, methods and technologies It describes e-business infrastructure, business models, advantages, limitations barriers and scope. The course will give a general idea about e-commerce, e-marketing, e-learning, e-procurement, e-services, e-government e-

society etc. The students will be able to understand how the information and communication technology has changed the scenario of business. The student will be exposed to different ICT best tools and techniques for various aspects of business including information management, analytics and decision making, electronic payments and delivery etc, in global and local(GCC) context. *Pre-requisite: BUSS 306*

BUSS 401   Research Methodology   (3 crs)
The main purpose of this course is to develop student's research orientation and to accustom them with basics of research methods. This course introduces fundamental concepts and approaches used in research. It includes discussions on problem definition, research process, research design, sampling techniques, data collection, questionnaire designing and its analysis by using MS Excel/SPSS software, ethical concern in research and report writing. *Pre-requisite: BUSS 307*

BUSS 403   Business Environment   (3 crs)
This course is firmly based upon the analysis of a broad range on environmental factors influencing business organizations. It allows students to figure out environmental changes while considering globalization. Moreover, it delivers a comprehensive introduction to major topics and concepts of the 21st century business environment. Therefore, students will be able to make appropriate decisions based on an adequate business environment analysis. *Pre-requisite: BUSS306+ More than 90 cr. hrs*

d) **Electives: Cluster 1- Skills for Life Electives**

PHIL 160   Critical and Creative Thinking   (3 crs)
This course explores the field of critical thinking from a historical perspective, explaining how various philosophical schools define and deal with the concepts of critical thinking, problem solving, logical reasoning, creative thinking, logical and textual analyses, fallacies and certainty in knowledge. Students will develop understanding of the critical and creative thinking processes. They will be guided to think more clearly, insightfully and effectively, enhancing their own natural tendencies for critical and creative thinking.

PHIL 230   Principles of Professional ethics   (3 crs)
Deals with the meaning and authenticity of ethical life and raises issues related to working in a professional environment such as: what does it mean to be a professional? What moral qualities should professionals have? What are the rights and responsibilities of professionals? Can one's personal morality conflict with one's professional moral commitments? How to balance one's professional responsibilities with the interests of the clients and the community? What is corporate responsibility? What are the limits of privacy and confidentiality? What are the ethical implications of plagiarism, cheating, deception, dishonesty and infringement of copyrights? These discussions will be set within an ethical theoretical framework, which will provide students with an ethical perspective necessary for making them better decision-making professionals.

ENVR 150   Introduction to Environmental Studies   (3 crs)

This course attempts to provide an overview of environmental science: the interactions between humans and the environment, with an emphasis on the natural science elements of environmental issues. More specifically, this course is an introduction to the various ways that humans depend on the earth's natural resources, and how human activities directly and indirectly affect the earth and its human and non-human inhabitants. In addition, the course will explore how policy, individual behavior, and technology can prevent, control, and reverse environmental harm.

PSYC 250   Personal Development   (3 crs)

This course aims at introducing students to the world of work, potential career paths and planning. The primary goal of this course is to enable students to acquire the knowledge and skills for employment and think entrepreneurially. The course also enables the student to know oneself in terms of personality type and vocational aptitudes that are considered useful in making occupational decisions. Various hands-on activities are offered both inside and outside the classroom to give students a taste of the world of work in the 21st century. Professionals are invited in class to introduce students to various career opportunities available after graduation.

NUTR 150   Food and Nutrition   (3 crs)

Food and Nutrition is a course which focuses on helping students understand the significance of eating appropriate foods, principles of nutrition, and the importance of carbohydrates, fats, proteins, vitamins and minerals in the diet. This course provides students with the opportunity to analyze diet according to nutritional needs and also to develop skills in the selection, storage, and preparation of food.

BURS 200   Professional report writin skills   (3 crs)

The course aims to explain the importance of annual reports for organizations and give participants the basis for preparing annual reports according to modern means, from the stage of preparing information to the stage of producing and printing the report using modern scientific methods and means between them.

BUCP 200   Communication and Professional development   (3 crs)

The course of professional development is designed to help the learners to discover and achieve their goals through a focus on organizing and encouraging action to make a better world. Students will learn techniques that will increase their capabilities in key areas; including setting and achieving goals, communication skills, presentations skills, self-motivation, resume writing, and positive mental attitude. This course will help the students to develop their skills so that, every day, they will be able to get the best performance from their selves and others.

BUSK 200   Soft Skills   (3 crs)

This course prepares the students with soft skills to improve their effectiveness in life and at work. This course develops self-confidence, communication skills, decision-making and problem-solving skills, interpersonal skills, teamwork, self-

management and professionalism skills, time management and emotional intelligence. The course covers the key areas such as personal skills, personality development skills, social skills, presentation skills, professional skills, and life skills.

e) <u>Electives: Cluster 1- College General Electives</u>

Course description for the college general elective courses can be found under various majors of CCBA sections.

Department of Accounting

1. Personnel

Chairperson	Omar Ikbal Tawfik
Associate Professors	Mawih Kareem Shaker Al Ani, Zaroug Osman Mohammed Bilal, Omar Ikbal Tawfik, Shariq Mohammed
Assistant Professors	Ilker Yilmaz, Ahmed Samour, Saeed Awadh Ali Bin Nashwan
Lecturers	Shireen Rosario

2. Mission

The Department of Accounting in CCBA promotes global and professional accounting knowledge, analytical and critical thinking skills whilst encouraging scientific accounting research in an open learning environment to future leaders in Oman society and beyond.

3. Programs Offered

The department offers following Diploma and Bachelor programs:

a) Diploma Programs

1) Diploma in Accounting

b) Bachelor Programs

1) Bachelor in Accounting

c) Master Programs

1) Master of Science in Accounting (MSc in Accounting)

(Details of Master Programs are given in Graduate Studies Catalogue)

4. Accounting Major (Bachelor and Diploma)

4.1. Program Overview

Bachelor in Accounting is a four-year program encompassing 120 credit hours. As part of their fourth year, students are required to carry out a Final year Project and submit a report.

Diploma in Accounting consists of the first two years of Bachelor program encompassing 60 credit hours.

In addition, in both programs, after completing the second year (45 credits), students are required to undergo Internship Training for a period of eight weeks.

4.2. Program Objectives

As given in College Section 6.

4.3. Program Learning Outcomes

As given in College Section 7.

4.4. Admission Requirements

As given in College Section 8.a

4.5. Graduation Requirements

As given in College Section 9.

4.6. University Requirements

As given in College Section 10.

4.7. College Requirements

As given in College Section 11.

4.8. Program Requirements

The Program requirements for Accounting Major are as follows:

a) Major Compulsory Courses

I) Diploma Level

1) ACCT 221: Intermediate Accounting I
2) ACCT 222: Managerial Cost Accounting
3) ACCT 223: Financial Statement Analysis
4) ACCT 224: Internal Auditing
5) ACCT 225: Intermediate Accounting II
6) ACCT 226: Banking Accounting
7) ACCT 227: Excel in Taxation and Accounting
8) ACCT 228: Internship in Accounting

II) Bachelor Level

The major compulsory courses for Bachelor level consist of the following additional eight courses, apart from the courses mentioned above for the diploma program.

1) ACCT 411: Corporate Accounting
2) ACCT 412: Advanced Auditing
3) ACCT 413: Advanced Accounting
4) ACCT 414: Government and Fund Accounting
5) ACCT 416: Accounting Information Systems
6) ACCT 417: International Financial reporting
7) ACCT 418: Final year project in Accounting
8) ACCT 419: Tax Accounting

b) College General Electives(CGE)

As given in College Section 12.b.

4.9. Plan of Study: Accounting Major

Year I				
Term	**Course Code**	**Title**	**Credits**	**Pre-requisites**
(1) Fall	BUSS 101	Principles of Management	3	FPE 103C
	BUSS 102	Principles of Financial Accounting	3	FPE 103C
	MATH 103B	Mathematics for Business	3	FPM 102B
	ENGL 101	Basic Academic English	3	FPE 103C
	BUSS 103	Principles of Marketing	3	FPE 103C
Total Credits			**15**	
(2) Spring	BUSS104	Principles of Management Accounting	**3**	BUSS102
	BUSS 105	Principles of Financial Management	3	BUSS 102
	BUSS 106	Business Information Technology	3	BUSS 101
	ACCT 221	Intermediate Accounting I	3	BUSS 102
	ACCT 222	Managerial Cost Accounting	3	BUSS 102
Total Credits			**15**	
Year II				
Term	**Course**	**Title**	**Credits**	**Pre-requisites**
(3) Fall	ENGL 102B	English for Business I	3	ENGL 101
	BUSS 201	Principles of Microeconomics	3	BUSS 105
	ACCT 223	Financial Statement Analysis	3	ACCT 221
	ACCT 224	Principles of Auditing	3	ACCT 221
	ACCT 225	Intermediate Accounting II	3	ACCT 221 and ACCT222
Total Credits			**15**	

Term	Course	Title	Credits	Pre-requisites
(4) Spring	BUSS 203	Principles of Macroeconomics	3	BUSS 201
	BUSS 204	Business Law and Ethics	3	BUSS 201
	ENTR 200	Enterpreneurship-Innovation & Creativity	3	ENGL 102B or ENGL102
	ACCT 226	Banking Accounting	3	ACCT 223 and ACCT224
	ACCT 227	Excel in Taxation and Accounting	3	ACCT 225
	ACCT 228	Internship in Accounting (Two Months)	0	8 Weeks- more than 45 crs.
Total credits			**15**	

DIPLOMA IN ACCOUNTING (60 CREDITS)				

Year III				

Term	Course	Title	Credits	Pre-requisites
(5) Fall	BUSS 304	Quantitative Methods in Business	3	MATH 103B and BUSS 203
	BUSS 306	Strategic Management	3	BUSS204
	ACCT 411	Corporate Accounting	3	ACCT 226
	ACCT412	Advanced Auditing	3	ACCT224
	ARAB 101	Academic Writing in Arabic	3	More than 60 cr. hrs.
Total Credits			**15**	

Term	Course	Tile	Credits	Pre-requisites
(6) Spring	BUSS 307	Statistics for Business	3	BUSS 304
	ENGL 203B	English for Business II	3	ENGL 102B
	ACCT 413	Advanced Accounting	3	ACCT411
	ACCT 414	Governmental and Fund Accounting	3	ACCT411
		Skills for Life (Elective)	3	More than 60 cr. hrs.
Total Credits			**15**	

Year IV				
Term	**Course**	**Title**	**Credits**	**Pre-requisites**
(7) Fall	BUSS 401	Research Methodology	3	BUSS 307
	BUSS 312	e-Business	3	BUSS 306
	ENGL204	Advanced English for Academic Purposes and Research	3	ENGL 203B
	ACCT 416	Accounting Information System	3	ACCT412+ ACCT 413
	ACCT417	International Financial reporting	3	ACCT413
Total Credits			**15**	
Term	**Course**	**Tile**	**Credits**	**Pre-requisites**
(8) Spring	BUSS 403	Business Environment	3	BUSS306 + More than 90 cr. hrs.
	SOCS 102	Omani Soceity	3	More than 60 cr. hrs.
	ACCT 418	Final year project in Accounting	3	BUSS 401
	ACCT 419	Tax Accounting	3	ACCT 414
		College Elective 1	3	More than 90 cr. hrs.
Total Credits			**15**	
Bachelor in Accounting (120 Credits)				

4.10. Course Description: Accounting Major

ACCT 221   Intermediate Accounting I   (3 crs)

This course deals with the concepts of financial statements focusing on balance sheet which include assets valuations, as well as the concept of revenue recognition, in addition to Income statement. Various component of assets in the balance sheet such as current assets, tangible assets and intangible assets are taught to the students. We also include various concepts of liability recognition which include long term liabilities and current liabilities and contingencies. *Prerequisite: BUSS 102.*

ACCT 222   Managerial Cost Accounting   (3 crs)

This course deals with the concept of management Accounting, as well as cost and cost behavior. Different types of cost are taught in this subject. Here we also include the impact of cost and volume on profit. Various types of budgets are discussed which include functional budgets, fixed and variable and master budget. Standard costing is an important tool of cost and Management accounting which is included in this subject. Jobs costing and process costing is another important part of this syllabus. Some emerging trends such as just in time and activity-based costing concept are included in the subject. *Prerequisite: BUSS 102.*

ACCT 223   Financial Statement Analysis   (3 crs)

The main purpose of the course is to enable the students to comprehend the fundamental elements of financial statements and to make interpretations about the financial position and financial performance of the companies. The course teaches the tools to analyze many aspects of the companies, including liquidity, profitability, riskiness and growth opportunities. The analyses covered in the course give insights about the historical trends and also enable to make future projections. The course provides the analysis of cash flow statements to enable to comment on the inflows and outflows of cash according to the different categories. *Prerequisite: ACCT 221*.

ACCT 224   Principles of Auditing   (3 crs)

The course aims to provide a general framework of principles of auditing, including the need for it in all types of organizations, the qualifications of the internal auditor, principles and standards that must be applied in conducting the audits. The course also provides the necessary information about the national and international regulations regarding the audit profession. The step-by-step analysis of an internal audit, the evidence collection and evaluation, the judgements made by the auditor and the types of different reports prepared at the end of an internal audit are covered in the course. The course also focuses on the abilities to apply accounting and financial analysis information *Prerequisite: ACCT 221.*

ACCT 225   Intermediate Accounting II   (3 crs)

This course provides students with an understanding of generally accepted accounting principles (GAAPs) and an exposure to financial reporting and accounting disclosures in all types of business organization. Topics in this course

include accounting transactions in buying and selling of investments, current liabilities and contingencies, operating and capital leases, intangible assets, computation of shareholders' equity and treatments of accounting errors and changes. *Prerequisite: ACCT 221&ACCT 222.*

ACCT226   Banking Accounting   (3 crs)

This course presents students with an overview of accounting tools and systems use by both conventional and Islamic banks. It covers topics to establish a sound foundation about activities in the accounting cycles for banking systems, such as recording bank transactions; accounting for facilities offered by banks – including credit facilities and foreign currency transactions; analysis of bank's financial reports and financial statements. *Prerequisite: ACCT 223 & 224*.

ACCT 227   Excel in Taxation and Accounting   (3 crs)

This course aims to provide the students with the practical applications of MS Excel in accounting, financial reporting, and also the analysis of financial statements. The students will find the opportunity to comprehend the knowledge they had in prior studies by applying MS Excel functionalities in specific topics. The course aims both to improve the understanding of fundamental accounting topics and also to enrich the practice of office software by providing the students with a holistic understanding of accounting, financial reporting, and financial analysis. *Prerequisite: ACCT 225*

ACCT 228   Internship In Accounting   (0 crs)

Students in the second year (completed 45 credits) from Accounting major have to undergo practical training in any reputed organization of their choice in the area of accounting. The training course is named as Internship in accounting. Period of training is 240 Hours or Eight weeks. The course is offered on a pass/fail basis only. The purpose of training is to expose the students to real-life work environment in accounting areas. Students get a chance to link their theoretical knowledge in accounting with practical experiences. Training will also help the students to realize the demands to workplace and identify organizations for their future employment. For the college training helps to establish linkages with the industry and get feedback for our students and College. *Prerequisite: complete more than 45 crs.*

ACCT 411   Corporate Accounting   (3 crs)

This course covers all aspects of accounting for partnership. Topics include in this course are formation and establishment of partnership, operation and distributions of profits in the partnership; changes in capital; change of ownership in the partnership and liquidation of partnership. *Prerequisite: ACCT 226*.

ACCT 412   Advanced Auditing   (3 crs)

The aim of this course is provide the students with knowledge and skills in external auditing which is based on International Auditing standards with reference to auditing law in Oman. This course is covered some auditing topics such as: audit planning, audit evidence, audit sampling, audit program, audit reports and opinions and risk, materiality and audit committee. *Prerequisite: ACCT 224.*

ACCT 413　　　　Advanced Accounting　　　　　　　　　(3 crs)
The course deals with accounting application for business mergers, acquisitions, and purchase of Investments using Cost method, Equity method. It also covers Issue and redemption of debentures, financial reporting of companies and not for profit organizations. *Prerequisite: ACCT 411*

ACCT 414　　　　Government and Fund Accounting　　　　　(3 crs)
The course covers the unique reporting requirement to be followed by Government and Not for Profit Organizations. Course includes Fund accounting, Governmental Budgeting, Modified Accrual Basis of Accounting, Accounting for Fixed and Capital Projects, Long term Debt and Business type activities. *Prerequisite: ACCT 411*.

ACCT 416　　　　Accounting Information Systems (AIS)　　　(3 crs)
The course is designed to provide the students with an understanding and overview of the accounting information systems functions. Accounting Information systems is now becoming vital to every Organization. The course will explore the essential concepts and applications, methods of collection, organization, sorting, processing and communicating of the accounting data and information with the help of computer, Importance of information technology and use of the Computer Networks to Accountants and for communicating information, data management and exposed them to computer-based transactions processing. The understanding of these concepts provides a platform to students who want to pursue career as an accounting information system manager. *Prerequisite: ACCT413*+ACCT412

ACCT 417　　　　International Financial Reporting　　　　　(3 crs)
The objective of this course is to teach the students how to deal with international accounting and financial reporting problems. This course is covered three main areas: Foreign transactions, foreign activities, and comparison between accounting systems. In these three areas, there are many are covered such as importing-exporting transactions, types of exchange rates, translation of financial statements, analysis of foreign financial statements, transfer pricing and comparison between GAAP and IFRS in some specific issues such as treatment of goodwill, treatment of depreciation and R&D costs. *Prerequisite: ACCT 413*.

MNGT418　　　　Final Year Project in Accounting　　　　　(3 crs)
Every student has to choose a relevant business situation/problem related to the accounting major and using the knowledge gained on how to tackle the problem come out with a viable solution. The entire project has to be completed under the supervision of a faculty mentor and the students have to defend the report submitted in front of a jury. *Pre-requisite: BUSS 401*

ACCT 419　　　　Tax Accounting　　　　　　　　　　　(3 crs)
The purpose of this course is to provide a basic understanding of basic taxon principles, valued added tax and tax planning techniques. Focus on the income tax treatment, value added tax t with emphasis on the tax law in Oman. The course covers fundamental, principles and concepts of taxes in Oman. Students will build a foundation of knowledge around compliance and tax issues for both individuals and corporate entities. *Prerequisite: ACCT 414*.

Department of Finance and Economics

1. Personnel

Chairperson	Kavita Chavali
Professor	Faris Nasif AL-Shubairi
Associate Professors	Syed Ahsan Jamil, Kavita Chavali, Naushad Alam
Assistant Professors	Ahmaruddin Mohammed; Mohammed Abdul Imran Khan; Nadia Sha, Muawya Ahmed Hussein, Mohammad Alomari, Abdullah Al Ghazali
Lecturer	Hitham Al Hadhri
Secretary	Reem Fael

2. Mission

To equip students with finance area knowledge, analytical and thinking skills, and encourage scientific research in an open learning environment to serve the community.

3. Programs Offered

The department offers following Diploma and Bachelor programs:

a) Diploma Programs

1) Diploma in Finance

b) Bachelor Programs

1) Bachelor in Finance

4. Finance Major (Bachelor and Diploma)

4.1. Program Overview

Bachelor in Finance is a four-year program encompassing 120 credit hours. As part of their fourth year, students are required to carry out a Final year Project and submit a report.

Diploma in Finance major consists of the first two years of Bachelor program encompassing 60 credit hours.

In addition, in both programs, after completing the second year (45 credits), students are required to undergo Internship Training in Finance for a period of eight weeks.

4.2. Program Objectives

As given in College Section 6.

4.3. Program Learning Outcomes

As given in College Section 7.

4.4. Admission Requirements

As given in College Section 8.a

4.5. Graduation Requirements

As given in College Section 9.

4.6. University Requirements

As given in College Section 10.

4.7. College Requirements

As given in College Section 11.

4.8. Program Requirements

The Program requirements for Finance major are as follows:

a) Major Compulsory Courses

I) <u>Diploma Level</u>

1) FINA 221: Money and Capital Markets
2) FINA 222: Commercial Bank Management
3) FINA 223: Financial Services
4) FINA 224: Islamic Finance
5) FINA 225: Risk Management
6) FINA 226: Financial Analysis and Security Evaluation
7) FINA 227 Financial Econometrics
8) FINA 228 Internship in Finnace

II) <u>Bachelor level</u>

The major compulsory courses for Bachelor level consist of the following additional eight courses, apart from the courses already mentioned above for the diploma program.

1) FINA 411: Fundamentals of Corporate Finance
2) FINA 412: Insurance
3) FINA 413: Investment Management
4) FINA 414: Behavioral Finance
5) FINA 415: Personal Financial Planning
6) FINA 416: International Financial Management
7) FINA 417: Special Topics in Finance
8) FINA 418: Final Year Project in Finance

b) College General Electives

As given in College Section 12.b.

4.9. Plan of Study: Finance Major

Year I				

Term	Course Code	Title	Credits	Pre-requisites
(1) Fall	BUSS 101	Principles of Management	3	FPE 103C
	BUSS 102	Principles of Financial Accounting	3	FPE 103C
	BUSS 103	Principles of Marketing	3	FPE 103C
	ENGL 101	Basic Academic English	3	FPE 103C
	MATH 103B	Mathematics for Business	3	FPM 102B
Total Credits			**15**	

Term	Course Code	Title	Credits	Pre-requisites
(2) Spring	BUSS 104	Principles of Management Accounting	3	BUSS 102
	BUSS 105	Principles of Financial Management	3	BUSS 102
	BUSS 106	Business Information Technology	3	BUSS 101
	FINA 221	Money & Capital Markets	3	BUSS 102
	FINA 222	Commercial & Digital Banking	3	BUSS 102
Total Credits			**15**	

Year II				

Term	Course Code	Title	Credits	Pre-requisites
(3) Fall	BUSS 201	Principles of Microeconomics	3	BUSS105
	ENGL 102B	English for Business I	3	ENGL 101
	FINA 223	Financial Services	3	BUSS 105
	FINA 224	Islamic Finance	3	FINA 221
	FINA 225	Risk Management	3	FINA 221 & FINA 222
Total Credits			**15**	

Term	Course Code	Title	Credits	Pre-requisites
(4) Spring	BUSS 203	Principles of Macroeconomics	3	BUSS 201
	BUSS 204	Business Law & Ethics	3	BUSS 201
	ENTR 200	Entrpreneurship - Innovation & Creativity	3	ENGL 102B
	FINA 226	Financial Analysis & Security valuation	3	FINA 223& FINA 224
	FINA 227	Financial Econometrics	3	FINA 225
	FINA 228	Internship in Finance	0	More than 45 credits

Total Credits			15	

Diploma in Finance (60 Credits)				

Year III

Term	Course Code	Title	Credits	Pre-requisites
(5) Fall	BUSS 304	Quantitative Methods in Business	3	MATH 103B & BUSS 203
	BUSS 306	Strategic Management	3	BUSS 204
	FINA 411	Fundamentals of Corporate Finance	3	FINA 226
	FINA 412	Insurance	3	FINA 227
	ARAB 101	Academic Writing in Arabic	3	More than 60 cr. hrs.
Total Credits			15	

Term	Course Code	Tile	Credits	Pre-requisites
(6) Spring	BUSS 307	Statistics for Business	3	BUSS 304
	ENG 203 B	English for Business II	3	ENGL 102B
	FINA 413	Investment Management	3	FINA 227
	FINA 414	Behavioural Finance	3	FINA 411
		Skills for Life (Elective)	3	More than 60 cr. hrs.
Total Credits			15	

Year IV

Term	Course Code	Title	Credits	Pre-requisites
(7) Fall	BUSS 401	Research Methodology	3	BUSS 307
	BUSS 312	E-Business	3	BUSS 306
	ENGL204	Advanced English for Academic Purposes and Research	3	ENGL203B
	FINA 415	Personal Financial Planning	3	FINA 413
	FINA 416	International Financial Management	3	FINA 413 & FINA414
Total Credits			15	

Term	Course Code	Tile	Credits	Pre-requisites
(8) Spring	BUSS 403	Business Environment	3	BUSS306 + More than 90 cr. hrs.
	FINA 417	Special Topics in Finance	3	FINA 415
	FINA 418	Final Year Project in Finance	3	BUSS 401

	SOCS 102	Omani Society	3	More than 60 cr. hrs.
		College Elective I	3	More than 90 cr. hrs.
Total Credits			**15**	
Bachelor in Finance (120 Credits)				

4.10. Course Description: Finance Major

FINA 221   Money and Capital Markets   (3 crs)

The course covers the concept of the utility and importance of money and capital market for a country's financial system and the role they play in financial management and development of the financial system of the country. Topics covered are financial markets and their utility, the financial system and its constituents, Financial development in Oman, the role and impact of inflation on project decisions, the role of central bank in controlling the market, Features and functions of the money market, functions and features of the capital markets and their constituents and instrument used in both the markets. *Prerequisite: BUSS 102*

FINA 222   Commercial Bank Management   (3 crs)

This course aims to increase students' knowledge and skills concerning functions and operations of financial institutions as well as an outline of financial intermediaries with a focus of commercial banks and their management. The course concentrates on types of commercial banks and decision-making processes in such institutions. It also deals with regulatory and business environments surrounding such organizations, assessment and management of risks concerned with them, asset and liability management in banks, evaluation and management of portfolios and other financial instruments in banks, and understanding and analyzing capital adequacy ratio as a major indicator of banks' health. In a broad sense the course will cover following topics; financial statement analysis of banks, liquidity management, asset and liability management, measuring and analyzing profits, capital adequacy ratio and regulatory environment of banks, interest rates and their effects on banks' operations, and overall risk management of banks including external and internal factors. *Prerequisite: BUSS 102*

FINA 223   Financial Services   (3 crs)

The course covers the available and important financial service in the world with special focus on the financial services and investment banking options available in Oman. The course is intended to give an understanding on the utilities of these services and the impact they make on the financial system. The course will help the students to have good understanding about insurance, mortgages market and the market for short-term loans, hire purchase and leasing, mutual funds, credit cards, bills of exchange, venture capital, depository and custodial services and micro financing services in Oman. *Prerequisite: BUSS 105*

FINA 224   Islamic Finance   (3 crs)

This course has an objective of delivering fundamentals and principles of Islamic economics and finance. Besides, the course provides skills to understand and combine the concepts of classical Islamic financial instruments and modern Islamic banking and financial applications. Furthermore, it analyses and connects the Islamic Finance theory with recent improvements in contemporary economic and financial environment. Major issues to be discussed in the course are policy of financing, profit sharing, Islamic economic and financial institutions, investment policies in Islamic economic system, models of Islamic banking, and fund management in Islamic Financial System *Prerequisite: FINA 221*

FINA 225   Risk Management   (3 crs)

The course emphases on facets of risk and its categories and enable students with the understanding of risk management process, various strategies in minimizing risk, notion of probability, risk, return and its measurement with a single stock and portfolio; credit risk, process of credit analysis and the credit rating agencies involved in credit rating of instruments *Prerequisite: FINA 221 & FINA 222*

FINA 226   Financial Analysis and Security Valuation   (3 crs)

This course explains how to analyze the financial securities based on tools of financial analysis. This course will cover various aspects such as financial market indicators and the efficiency of this market in achieving high rate of return in addition to analysis models of return and risk and analysis of financial statements based on recent indicators, valuation of stocks and bonds in both in micro and macro level, industry and company analysis and, technical analysis of stock valuation *Prerequisite: FINA 223 & FINA 224*

FINA 227   Financial Econometrics   (3 crs)

This course is the intersection of statistical techniques and finance aims to introduce the students to the econometric principles and techniques commonly used in financial data analyses. It provides different tools to analyze historical financial data and predict their future trends. The course introduces the students to both cross-sectional and time-series data. Furthermore, it develops the students' ability to carry multivariate regression analysis using both cross-sectional and time series data. The main topics that include in this course are the characteristics of financial data, cross-sectional and time-series data, regression analyses and interpretation of the statistical findings. *Prerequisite:FINA 225*

FINA 228   Internship in Finance   (0 crs)

Students in the second year (completed 45 credits) from finance major have to undergo practical training in any reputed organization of their choice in the area of finance. The training course is named as Internship in finance. Period of training is 240 Hours or Eight weeks. The course is offered on a pass/fail basis only. The purpose of training is to expose the students to real-life work environment in finance areas. Students get a chance to link their theoretical knowledge in finance with practical experiences. Training will also help the students to realize the demands to workplace and identify organizations for their future employment. For the college training helps to establish linkages with the industry and get feedback for our students and College. *Prerequisite: completed more than 45 crs.*

FINA 411   Fundamental of Corporate Finance   (3 crs)

This course explains the fundamentals of finance and covers advanced aspects in finance science such as the relationship between return and risk, interest rates models, capital cost and methods of capital budgeting including net present value and developed methods to discount cash flow (DCF), profitability index (PI) and internal rate of return (IRR). It also gives a detailed explanation of dividend theory and capital structure components. *Prerequisite: FINA 226*

FINA 412   Insurance   (3 crs)

The objective of course is to make students familiar with different insurance contracts type, which includes insurance for life, insurance generally like insurance for fire, insurance for marine, insurance for vehicle, insurance for property and insurance for financial liabilities. This will lead to understand how they can manage the risks coming in their daily lives in an efficient way. The course familiarizes the reinsurance concepts also along with the usage of insurance schemes available in the market in a better and innovative manner. The particular course introduces the basics of insurance with the principles followed, interpretation of the policies, decisions taken on life insurance schemes, insurance for property, insurance for financial liabilities, insurance for health, tools to control risks, plans for retirement, schemes under annuities, calculation of insurance premiums and the legalities in insurance contracts. *Prerequisite: FINA 227*

FINA 413   Investment Management   (3 crs)

The course of investment management prepares finance students in many aspects, including analysis of all information related to investment, estimating the return and risk of investment, as well as understanding the basic principles in building the investment portfolio. The core of this course deals with important topics in finance such as financial securities, the concept of tradeoff between return and risk, the capital asset pricing model, mechanisms of stock price behaviors under the assumptions of efficiency of financial markets. The practical side of this course will deal with stocks, bonds and investment funds in the financial markets, in addition to financial derivatives such as futures contracts and option contracts. This course will give special importance to understanding the mechanism of work in the financial markets, investment policies, methods of valuation of financial securities, in addition to some important techniques in the methods of choosing the investment in financial securities. *Prerequisite: FINA 227*

FINA 414   Behavior Finance   (3 crs)

This course covers the micro-foundations of investor behavior keeping into the consideration of behavioral biases, as well as the resulting macro implications for financial markets. These ideas are applicable in the realms of financial products and services design, asset management, and corporate finance. At the end of the course the students will be able to identify the behavioral biases among the financial market players. *Prerequisite: FINA 411*

FINA 415   Personal Financial Planning   (3 crs)

The course gives the students majoring in Finance essential knowledge of personal finance. This will help to attain financial literacy related to personal Income statement, personal balance sheets, the use of loan and purchasing

decisions. This will result in becoming financially independent and individuals can acquire assets and generate income even after their retirement. Students will also critically examine problems and solutions to personal finances. *Prerequisite: FINA 413*

FINA 416   International Financial Management   (3 crs)
The course intends to equip students with understanding of the global corporate finances. Globalization and integration requires managers to be well versed with the various aspects cross border financial transactions such as currency exchange and risk management strategies. Economic theories of parity and exchange rate determination are discussed. Numerical related to exchange rate, triangular arbitrage and forex risk management are also discussed *Prerequisite: FINA 413& FINA 414*

FINA 417   Special Topics in Finance   (3 crs)
This course provides bachelor's degree students an in-depth examination of selected contemporary issues and advanced concepts in finance. Topics will vary each semester to reflect current trends and interests. Possible topics may include financial technology (fintech), environmental and social finance, behavioral finance, advanced portfolio management strategies, financial regulation and policy, among others. Through analysis of real-world cases, research projects, and class discussions, students will gain expert knowledge on cutting-edge practices, innovations, opportunities, and challenges relevant to the particular special topics. This course offers finance students the chance to explore a financial subject matter more deeply than would be possible in a general survey course. *Prerequisite: FINA 415*

MNGT418   Final Year Project in Finance   (3 crs)
Every student has to choose a relevant business situation/problem related to the finance major and using the knowledge gained on how to tackle the problem come out with a viable solution. The entire project has to be completed under the supervision of a faculty mentor and the students have to defend the report submitted in front of a jury. *Pre-requisite: BUSS 401*

Department of Management

1. Personnel

Chairperson:	Omar Durrah
Associate Professors:	Omar Durrah, Moaz Nagib Gharib
Assistant Professors:	Tariq Mohamed Saleh Atya, Mohammed Wamique Hisam, Mariam Anil, Abdelbaset Ramadan Queiri, Abderrahmane benlahcene, Abdullah AL Ansi.
Lecturers	Khayar Al Ansi; Mohammed Osman Eltigani, Logine Almaghraby

2. Mission

To provide management knowledge and skills in an open learning environment that has benefit for the community at large. Faculty members strive to excel in teaching in a student-centered environment, supported by research and service contributing to the professional and academic communities at the national level and beyond.

3. Programs Offered

The department offers following Diploma and Bachelor programs and also two Master programs:

a) Diploma Programs

1) Diploma in Management

b) Bachelor Programs

1) Bachelor in Management

c) Master Programs

1) Master in Business Administration (MBA)
2) Master of Arts in Management (MA in Management)

(Details of Master Programs are given in Graduate Studies Catalogue)

4. Management Major (Bachelor and Diploma)

4.1. Program Overview

Bachelor in Management is a four-year program encompassing 120 credit hours. As part of their fourth year, students are required to carry out a Final year Project and submit a report.

Diploma in Management consists of the first two years of Bachelor program encompassing 60 credit hours.

In addition, in both programs, after completing the second year (45 credits), students are required to undergo Internship Training for a period of eight weeks.

4.2. Program Objectives

As given in College Section 6.

4.3. Program Learning Outcomes

As given in College Section 7.

4.4. Admission Requirements

As given in College Section 8.a

4.5. Graduation Requirements

As given in College Section 9.

4.6. University Requirements

As given in College Section 10.

4.7. College Requirements

As given in College Section 11.

4.8. Program Requirements

The Program requirements for Management major are as follows:

a) Major Compulsory Courses

I) Diploma level

1) MNGT 221: Organizational Behavior
2) MNGT 222: Human Resource Management
3) MNGT 223: Operations Management
4) MNGT 224: International Management
5) MNGT 225: Leadership for Results
6) MNGT 226: Total Quality Management
7) MNGT 227: Hospitality Management
8) MNGT 228: Internship in Management

II) Bachelor level

The major compulsory courses for Bachelor level consist of the following additional eight courses, apart from the courses already mentioned above for the diploma program.

1) MNGT 411: Corporate Social Responsibility
2) MNGT 412: Training and Development
3) MNGT 413: Organizational Change & Development
4) MNGT 414: Operational Research
5) MNGT 415: Project Management
6) MNGT 416: Special Topics in Management
7) MNGT 417: Innovation and Technology Management
8) MNGT 418: Final Year Project in Management

b) College General Electives

As given in College Section 12.b.

4.9. Plan of Study: Management Major

Year I				
	Course Code	**Title**	**Credits**	**Pre-requisites**
(1) Fall	BUSS 101	Principles of Management	3	FPE 103C
	BUSS 102	Principles of Financial Accounting	3	FPE 103C
	BUSS 103	Principles of Marketing	3	FPE 103C
	ENGL 101	Basic Academic English	3	FPE 103C
	MATH 103B	Mathematics for Business	3	FPM 102B
Total Credits			**15**	
Term	**Course**	**Title**	**Credits**	**Pre-requisites**
(2) Spring	BUSS 104	Principles of Management Accounting	3	BUSS 102
	BUSS 105	Principles of Financial Management	3	BUSS 102
	BUSS 106	Business Information Technology	3	BUSS 101
	MNGT 221	Organizational Behavior	3	BUSS 101
	MNGT 222	Human Resources Management	3	BUSS 101
Total Credits			**15**	
Year II				
Term	**Course**	**Title**	**Credits**	**Pre-requisites**
(3) Fall	BUSS 201	Principles of Microeconomics	3	BUSS105
	ENGL 102B	English for Business I	3	ENGL 101
	MNGT 223	Operations Management	3	MNGT 221
	MNGT 224	International Management	3	MNGT 221
	MNGT 225	Leadership for Results	3	MNGT 221 & MNGT 222
Total Credits			**15**	
Term	**Course**	**Title**	**Credits**	**Pre-requisites**
(4) Spring	BUSS 203	Principles of Macro Economics	3	BUSS 201

	Course	Title	Credits	Pre-requisites
	BUSS 204	Business Law & Ethics	3	BUSS 201
	ENTR 200	Entrpreneurship - Innovation & Creativity	3	ENGL 102B
	MNGT 226	Total Quality Management	3	MNGT 223 & MNGT224
	MNGT 227	Hospitality Management	3	MNGT 225
	MNGT 228	Internship in Management	0	More than 45 credits
Total Credits			**15**	

DIPLOMA of MANAGEMENT (60 CREDITS)				

Year III				
Term	**Course**	**Title**	**Credits**	**Pre-requisites**
(5) Fall	BUSS 304	Quantitative Methods in Business	3	MATH 103B & BUSS 203
	BUSS 306	Strategic Management	3	BUSS 204
	MNGT 411	Corporate Social Responsibility and Business Sustaina-bility	3	MNGT 225 & MNGT 226
	MNGT 412	Training and Development	3	MNGT 226 & MNGT 227
	ARAB 101	Academic Writing in Arabic	3	More than 60 cr. hrs.
Total Credits			**15**	

Term	**Course**	**Tile**	**Credits**	**Pre-requisites**
(6) Spring	BUSS 307	Statistics for Business	3	BUSS 304
	ENG 203 B	English for Business II	3	ENGL 102B
	MNGT 413	Organizational Change and Development	3	MNGT 227
	MNGT 414	Operation Research	3	BUSS 304 & MNGT 411
		Skills for Life (Elective)	3	More than 60 cr. hrs.
Total Credits			**15**	

Year IV				
Term	**Course**	**Title**	**Credits**	**Pre-requisites**
(7) Fall	BUSS 401	Research Methodology	3	BUSS 307
	BUSS 312	E-Business	3	BUSS 306

Term	Course	Tile	Credits	Pre-requisites
	ENGL204	Advanced English for Academic Purposes and Research	3	ENGL 203 B
	MNGT 415	Project Management	3	BUSS 307 & MNGT 414
	MNGT 416	Special Topics in Management	3	MNGT 412
Total Credits			**15**	

Year IV				
Term	**Course**	**Tile**	**Credits**	**Pre-requisites**
(8) Spring	BUSS 403	Business Environment	3	BUSS 306 + More than 90 cr. hrs.
	MNGT 417	Innovation and Technology Management	3	MNGT 413 & MNGT 415
	MNGT 418	Final Year Project in Management	3	BUSS 401
	SOCS 102	Omani Society	3	More than 60 cr. hrs.
		College Elective I	3	More than 60 cr. hrs.
Total Credits			**15**	
BACHELOR of MANAGEMENT (120 CREDITS)				

4.10. Course Description: Management Major

MNGT 221   Organizational Behavior   (3 crs)
The aim of this course is to provide the students with the essential ideas of behavioral dynamics in organizations at individual and group levels and their effects on organizational performance. It covers basic principles of organizational behavior (OB) and their applications in various situations within business organizations. Some of the topics include core concepts of organizational behavior concerning the foundations of individual behavior and group behavior in organizations. *Prerequisite: BUSS 101*

MNGT 222   Human Resource Management   (3 crs)
The aim of this course is to develop an understanding of the basic ideas and practices in the area of human resource management. It gives an introduction to the practice used to manage personnel needs within any organization. The course covers introduction to the process of job analysis and personnel planning along with the techniques related to recruitment, selection, training, performance management and career planning. *Prerequisite: BUSS 101*

MNGT 223   Operations Management   (3 crs)

This course is tailored to give the students an insight into the basics of operations management function in manufacturing and service organizations. The course seeks to develop an operational orientation in order to highlight the competitive edge which operations function gives to an organization. The course coverage includes topics such as production/process management and control, facility location and layout planning, aggregate planning, Inventory management, quality control, Just in Time (JIT) systems, Material Requirement Planning (MRP), etc. *Pre-requisite: MNGT 221*

MNGT 224   International Management   (3 crs)

This course aims at understanding management function with an international perspective. It seeks to understand management challenges of the firms involved in international business operations. The course comprises understanding the global political, legal, economic and technological environment, communicating across cultures, global strategy, international human resource management, negotiations, decision making at an international level and the contemporary issues. *Pre-requisite: MNGT 221*

MNGT 225   Leadership for Results   (3 crs)

Leadership for results is equipping students with knowledge and skills essential for leading or facilitating tasks among individuals, groups, and/or organizations. The students are familiarized with the concepts of leadership, its difference with management and established theories. The basic knowledge about developing and sustaining influence, power and skills required for managing the complex environment within an organization is also delivered. This course aims at providing a guideline for students to develop their personality as a leader along with the capability of stimulating human resources and building teams. *Pre-requisite: MNGT 221 and MNGT 222*

MNGT 226   Total Quality Management   (3 crs)

This course will develop student's understanding of the concept of quality, its principles, benefits, ideas of major quality scholars and theorists, the use of quality tools, challenges of quality program implementation in actual business situations. This course will enrich the students understanding of the TQM philosophies, quality models, and to know how to implement the key principles and concepts of the Total Quality Management (TQM). This course will help the students to be able to assess and measures the success of these strategies. Specific topics include TQM perspective, TQM Principles and Strategies, the ISO standards, TQM tools and Quality Systems. *Pre-requisite: MNGT 223 and MNGT 224*

MNGT 227   Hospitality Management   (3 crs)

This course is designed to provide students with a thorough overview of the hospitality industry, the necessary knowledge and skills to enable students to practice work in the field of hospitality. The course introduces the development of the tourism and hotel industry, gives an understanding of the activities required to manage business operations in the hospitality industry, and provides valuable work experience within the field. Topics include general concepts of hospitality

management, structure and systems of hospitality organizations, and culture and basic issues regarding hospitality management. *Pre-requisite: MNGT 225.*

MNGT 228   Internship in Management   (3 crs)

Students in the second year (completed 45 credits) from management major have to undergo practical training in any reputed organization of their choice in the area of management. The training course is named as Internship in financ management. Period of training is 240 Hours or Eight weeks. The course is offered on a pass/fail basis only. The purpose of training is to expose the students to real-life work environment in management areas. Students get a chance to link their theoretical knowledge in management with practical experiences. Training will also help the students to realize the demands to workplace and identify organizations for their future employment. For the college training helps to establish linkages with the industry and get feedback for our students and College. *Pre-requisite: completed more than 45 crs.*

MNGT 411   Corporate Social Responsibility   (3 crs)

This course provides an overview of the trends in corporate social responsibility including social, economic and environmental factors. This course will include consideration of corporate stakeholders, corporate citizenship, and sustainable development and community-employee relationships. *Pre-requisite: MNGT225 and MNGT 226*

MNGT 412   Training and Development   (3 crs)

This course aims at familiarizing students with the process of training and development within organizations. A variety of approaches used for instruction and learning along with their practical applications are focused in the course. The course will develop an understanding of conducting need analysis, design training program, deliver and evaluate it. Moreover, the course will cover training technique, transfer of training, recent trends in training and the skills required to deliver a training program. *Pre-requisite: MNGT 226 and MNGT 227*

MNGT 413   Organizational Change and Development   (3 crs)

In today's competitive environment business organizations should constantly develop themselves, be creative and innovate to be responsive to change. This course will focus on theories and methods of introducing, bringing and implementing change in organizations. Moreover, the concepts of leading change and technological advancements, human resources and developmental aspects needed to bring about change would also be part of this course. *Pre-requisite: MNGT 227*

MNGT 414   Operations Research   (3 crs)

The aim of this course is to introduce the decision making process. It provides an introduction to the basic techniques of Operations Research and their applications. During the course of study the students will go through the range of problems and applications that can be dealt with using Operations Research techniques.   Topics include in this course are linear, transportation and assignment problems, game theory, inventory models, queuing models using MS Excel Solver. *Pre-requisite: BUSS 304& MNGT 411*

MNGT 415   Project Management   (3 crs)

This course concentrates on the skills required for managing general projects. It covers the entire project management process including initiation, planning, implementation and termination of the project. The course will cover the topics including project selection, life cycle, and different types of project organizations, critical path method, work breakdown structure, PERT analysis, risk management and feasibility study of the project. *Pre-requisite: BUSS 304 and MNGT 414*

MNGT 416   Special Topics in Business   (3 crs)

This course focuses on emerging and interesting topics in the field of management. The goal of the course is to examine current topics related to the field of management that are not the part of text books but are yet important in the current scenario. The course will take hand on hand approach in learning about management concepts and thinking about the issues associated with it. The topics/readings/projects covered in the course will vary with the subject or interest area of the student. *Pre-requisite: MNGT 412*

MNGT 417   Innovation and Technology Management   (3 crs)

The course aims to improve the students' body of knowledge on exercising innovation in a market setting, and to develop students' ability to analyze and assess critical trade-offs in innovation and technology management. This course includes concepts, theories, and frameworks of innovation and technology management, creative thinking, innovation in multicultural contexts, and the analysis and development of business strategies in technology-based industries. *Pre-requisite: MNGt 413 &MNGT 415*

MNGT418   Final Year Project in Management   (3 crs)

Every student has to choose a relevant business situation/problem related to the management major and using the knowledge gained on how to tackle the problem come out with a viable solution. The entire project has to be completed under the supervision of a faculty mentor and the students have to defend the report submitted in front of a jury. *Pre-requisite: BUSS 401*

Department of Marketing and Entrepreneurship

1. Personnel

Chairperson:	Mohammed Bait Ali Sulaiman
Associate Professor	Mohammed Bait Ali Sulaiman, Suhail Mohammad Ghouse, Shouvik Sanyal
Assistant Professors:	Aissa Musbah, Hafiz Akram
Lecturers	Mohammad Nazmuzzaman Hye
Secretary	Ali Jabob

2. Mission

To provide our students with a sound understanding of various functional areas of marketing and entrepreneurship through innovative programs that integrate theory with practical experience. Our research-oriented faculty members through their professional and community engagements add value to students' knowledge and skills and enable them to contribute to society at the national level and beyond.

3. Programs Offered

The department offers following Diploma program in one major and Bachelor programs in two majors:

a) Diploma Programs

1) Diploma in Digital Marketing

b) Bachelor Programs

1) Bachelor in Digital Marketing
2) Bachelor of Science in Logistics and Supply Chain Management

4. Digital Marketing Major (Bachelor and Diploma)

4.1. Program Overview

Bachelor in Digital Marketing is a four-year program encompassing 120 credit hours. As part of their fourth year, students are required to carry out a Final year Project and submit a report.

Diploma in Digital Marketing consists of the first two years of Bachelor program encompassing 60 credit hours.

In addition, in both programs, after completing the second year (45 credits), students are required to undergo Internship Training for a period of eight weeks.

4.2. Program Objectives

As given in College Section 6.

4.3. Program Learning Outcomes

As given in College Section 7.

4.4. Admission Requirements

As given in College Section 8.a

4.5. Graduation Requirements

As given in College Section 9.

4.6. University Requirements

As given in College Section 10.

4.7. College Requirements

As given in College Section 11.

4.8. Program Requirements

The Program requirements for Digital Marketing major are as follows:

c) Major Compulsory Courses

I) Diploma level

1) MKTG 220: Digital Marketing Channels
2) MKTG 221: Consumer Behavior
3) MKTG 223: Service Marketing
4) MKTG 225: Sales Management
5) MKTG 229: Social Media Marketing
6) MKTG 228: Internship in Marketing
7) MKTG 230: Digital Content Creation and Management
8) MKTG 231: E-Commerce and Retail Management

II) Bachelor level

The major compulsory courses for Bachelor level consist of the following additional Six courses, apart from the courses already mentioned above for the diploma program.

1) MKTG 412: Brand Management
2) MKTG 414: International Marketing
3) MKTG 415: Data Analytics for Marketing
4) MKTG 416: Special Topics in Marketing
5) MKTG 417: Search Marketing and Search Engine Optimization
6) MKTG 418: Final year Project in Marketing
7) MKTG 419: Digital Marketing Strategies and Communication
8) MKTG 420: Influencer Marketing

d) College General Electives

As given in College Section 12.b.

4.9. Plan of Study: Digital Marketing Major

Term	Course	Title	Crs	Pre-req.
Year I				
Term	Course	Title	Crs	Pre-req.
(1) Fall	BUSS 101	Principles of Management	3	FPE 103C
	BUSS 102	Principles of Financial Accounting	3	FPE 103C
	BUSS 103	Principles of Marketing	3	FPE 103 C
	ENGL 101	Basic Academic English	3	FPE 103 C
	MATH 103B	Mathematics for Business	3	FPM 102B
		Total Credits	**15**	
(2) Spring	BUSS 104	Principles of Management Accounting	3	BUSS 102
	BUSS 105	Principles of Financial Management	3	BUSS 102
	BUSS 106	Business Information Technology	3	BUSS 101
	MKTG 220	Digital Marketing Channels	3	BUSS 103
	MKTG 221	Consumer Behaviour	3	BUSS 103
		Total Credits	**15**	
Year II				
(3) Fall	BUSS 201	Principles of Microeconomics	3	BUSS 105
	ENGL 102B	English for Business I	3	ENGL 101
	MKTG 223	Service Marketing	3	MKTG 220
	MKTG 225	Sales Management	3	MKTG 220
	MKTG 226	Social Media Marketing	3	MKTG 221 and MKTG 220
		Total Credits	**15**	
(4) Spring	BUSS 203	Principles of Macroeconomics	3	BUSS 201
	BUSS 204	Business Law and Ethics	3	BUSS 201
	ENTR 200	Entrepreneurship - Innovation & Creativity	3	ENGL 102B
	MKTG 227	Digital Content Creation and Management	3	MKTG 225
	MKTG 228	Internship in Marketing	0	more than 45 credits
Summer	MKTG 229	E-Commerce and Retail Management	3	MKTG 226
		Total Credits	**15**	
Diploma in Digital Marketing (60 Credits)				

Year III				
(5) Fall	BUSS 304	Quantitative Methods in Business	3	MATH 103B and BUSS 203
	BUSS 306	Strategic Management	3	BUSS204
	MKTG 412	Brand Management	3	MKTG 229
	MKTG 414	International Marketing	3	MKTG 229
	ARAB 101	Academic Writing in Arabic	3	More than 60 credits
		Total Credits	**15**	
(6) Spring	BUSS 307	Statistics for Business	3	BUSS 304
	ENGL 203 B	English for Business 2	3	ENGL 102B
	MKTG 415	Data Analytics for Marketing	3	MKTG 227 and MKTG 229
	MKTG 416	Special Topics in Marketing	3	MKTG 414
		Skills for Life (Elective)	3	
		Total Credits	**15**	
Year IV				
(7) Fall	BUSS 401	Research Methodology	3	BUSS 307
	BUSS 312	e-Business	3	BUSS 306
	ENGL 204	Advanced English for Academic Purposes and Research	3	ENGL 203 B
	MKTG 417	Search Marketing and Search Engine Optimization	3	MKTG 412
	MKTG 419	Digital Marketing Strategies and Communication	3	MKTG 414
		Total Credits	**15**	
(8) Spring	BUSS 403	Business Environment	3	BUSS 306 + more than 90 credits
	MKTG 418	Final year Project in Marketing	3	BUSS 401
	MKTG 420	Influencer Marketing	3	MKTG 415
	SOCS 102	Omani Society	3	More than 60 credits
		College Elective 1	3	More than 90 credits
		Total Credits	15	
Bachelor in Diogital Marketing (120 Credits)				

4.10. Course Description: Digital Marketing Major

MKTG 220   Digital Marketing Channels   (3 crs)
This course is an introductory course aimed at equipping students with a basic knowledge of digital marketing channels. The course will cover various topics such as distribution, material handling, inventory management, order fulfilment, purchasing, quality and capacity management in the digital space. *Pre-requisite: BUSS 103.*

MKTG 221   Consumer Behaviour   (3 crs)
This course seeks to study marketing in the light of psychology, sociology and other relevant social sciences in order to understand consumer motivations for products and services purchases. The course demonstrates the utility of behavioral sciences to develop new products/services and communication programs. This course aims at explaining the consumers buying process, and internal and cultural factors that affect consumer buying decisions. *Pre-requisite: BUSS 103.*

MKTG 223   Service Marketing   (3 crs)
This course aims to provide the students the ability to distinguish the difference between services and goods. This course illustrates the consumer behavior in service, how to developing service concepts, the employees' roles in service delivery and how to recover service. *Prerequisite: MKTG 221*

MKTG 225   Sales Management   (3 crs)
This course introduces the concepts and techniques of professional selling and sales force management. The course illustrates the steps in effective selling process and seeks to prepare the students for planning effective sales programs, organizing the sales function and managing the sales force in terms of recruitment, training and motivating the sales force. *Pre-requisite: MKTG 220.*

MKTG 226   Social Media Marketing   (3 crs)
This course is designed to provide the students with an understanding of the foundations of the concept of Social Media Marketing. The course lays a greater emphasis on Social Media in the area of services and product marketing. The course coverage includes marketing and globalization, importance of sales customer social media interface, managing customer experience, managing customer relationships, managing service delivery environment and importance of information technology in social media, developing and distributing services and products using electronic channels, pricing and promotion of services with a special reference to CRM. *Pre-requisite: MKTG 220 & MKTG 221*

MKTG 227   Digital Content Creation and Management   (3 crs)
This course introduces the concepts and techniques of digital content creation and management. The course illustrates the steps in effective digital content creation and seeks to prepare the students for planning effective digital content and planning and implementing social media plans. *Pre-requisite: MKTG 225*

MKTG 228   Internship In Digital Marketing   (0 crs)
Students in the second year (completed 45 credits) from Digital Marketing major have to undergo practical training in any reputed organization of their choice in the area of Digital Marketing. The training course is named as Internship in Digital Marketing. Period of training is 240 Hours or Eight weeks. The course is offered on a pass/fail basis only. The purpose of training is to expose the students to real-life work environment in Digital Marketing areas. Students get a chance to link their theoretical knowledge in Digital Marketing with practical experiences. Training will also help the students to realize the demands to workplace and identify organizations for their future employment. For the college training helps to establish linkages with the industry and get feedback for our students and College. *Pre-requisite: completed more than 45 crs.*

MKTG 229   E-Commerce and Retail Management   (3 crs)
This course develops an understanding of the key issues and challenges that retailers must resolve while establishing, managing, or expanding an electronic retail store. It covers topics related to classification of retail e-stores, franchising, retail location, retail store design, visual merchandising and merchandise planning. *Prerequisite: MKTG 226*

MKTG 412   Brand Management   (3 crs)
This course introduces the concept and practices of brand management. Particular emphasis is placed on how to build strong brands and maximize the value of existing brands. The course illustrates also brand elements, brand equity, brand creation, and brand extensions. *Pre-requisite: MKTG 229*

MKTG 414   International Marketing   (3 crs)
The course develops an understanding about the marketing issues involved in a global marketing environment incorporating the role of different factors like political, legal, cultural, demographic, technological as well as the role of multilateral institutions in the process of international marketing planning and decision making. The role of international marketing managers in developing, managing and executing the international marketing mix is discussed. The course is taught through the lecture mode and case studies in various contexts of international marketing are discussed to develop analytical thinking about the course. *Pre-requisite: MKTG 229*

MKTG 415   Data Analytics for Marketing   (3 crs)
The course covers concepts and techniques followed by prominent companies while developing data analytics tools and strategies. This course examines how electronic devices such as the Internet, mobile phones, and other electronic devices are used for marketing purposes and how data analytics tools and software can be used to collect, tabulate, and interpret big data. *Prerequisite: MKTG 227 & MKTG 229.*

MKTG 416   Special Topics in Marketing   (3 crs)
The course is designed to build a broad understanding of the latest developments taking place in the field of marketing. The course aims to develop a theoretical base as well as a practical orientation towards marketing management. The

course also seeks to appreciate and understand the relevant marketing environment and trends for effective decision making. *Pre-requisite: MKTG 414*

**MKTG 417   Search Marketing and Search Engine   (3 crs)
                 Optimization**

The course is aimed at appreciating the significance of search marketing in providing meaningful insights into the areas related to marketing management. The course seeks to create an understanding of the process and significance of search marketing. The course aims at building a practical understanding of methods of search marketing and appropriate techniques for search engine optimization. It seeks to appreciate the relevance of SEO for effective decisions in marketing. *Pre-requisite: MKTG 412*

MNGT418   Final Year Project in Marketing   (3 crs)

Every student has to choose a relevant business situation/problem related to the marketing major and using the knowledge gained on how to tackle the problem come out with a viable solution. The entire project has to be completed under the supervision of a faculty mentor and the students have to defend the report submitted in front of a jury. *Pre-requisite: BUSS 401*

MKTG 419   Digital Marketing Strategies and Communication   (3 crs)

An overview of the creation and use of digital marketing strategies is provided in this course. To help in understanding how to assess the performance of various digital marketing strategies, study the landscape of digital marketing, and create marketing plans that incorporate many online and offline strategies. The course emphasizes how conventional and digital marketing work in tandem to enhance the consumer journey. Additionally, the field's trends, prospects, and risks will be covered. This course would be helpful to business students who want to get into marketing, as well as to any students who want to use digital media to create their own brands. Through case talks, individual projects, and group projects, students will learn how to tackle actual difficulties in digital marketing. *Prerequisite: MKTG 414*

MKTG 420   Influencer Marketing   (3 crs)

This course is designed to introduce the student to the concept of influencers and influencer marketing, especially in online media and channels. The course also outlines how to create a social media marketing campaign through the use of influencers and measures to analyse the effectiveness of influencer marketing. The course also details on how to create contacts and relationships with social media influencers and strategies for negotiating contracts with influencers. The course will be delivered using case studies and group projects focusing on building an effective influencer marketing strategy. *Prerequisite: MKTG 415*

4 B.Sc. in Logistics and Supply Chain Management

4.1. Program Overview

Bachelor of Science in Logistics and Supply Chain Management is a four-year program encompassing 120 credit hours. As part of the second year, students are required to undergo Internship Training for a period of eight weeks. In addition, in the fourth-year students are required to carry out a Final year Project and submit a report.

4.2. Program Objectives

As given in College Section 6.

4.3. Program Learning Outcomes

As given in College Section 7.

4.4. Admission Requirements

As given in College Section 8.a

4.5. Graduation Requirements

As given in College Section 9.

4.6. University Requirements

As given in College Section 10.

4.7. College Requirements

As given in College Section 11.

4.8. Program Requirements

The Program requirements for BSc in Logistics and SCM are as follows:

A) Major Compulsory Courses

1) LSCM 221: Fundamentals of Logistics and Supply Chain Management
2) LSCM 222: Purchasing and Supply Management
3) LSCM 223: Freight and Transport Management
4) LSCM 224: Export – Import Procedures and Documentation
5) LSCM 225: Warehousing and Inventory Management
6) LSCM 226: Operations Management in Supply Chains
7) LSCM 227: Shipping & Freight Forwarding
8) LSCM 228: Internship in LSCM
9) LSCM 411: Supply Chain Strategies and Processes
10) LSCM 412: Global Logistics and Supply Chain Management
11) LSCM 413: Retail and Service Logistics
12) LSCM 414: Air Cargo Management
13) LSCM 415: Shipping Logistics Management
14) LSCM 416: Special Topics in Supply Chain Management
15) LSCM 417: Sustainable Logistics and Supply Chain management
16) LSCM 418: Final Year Project in LSCM

B) College General Electives

As given in College Section 12.b.

4.9. Plan of Study: B.Sc. in Logistics and Supply Chain Management

Year I				
Term	**Course Code**	**Title**	**Credits**	**Pre-requisites**
(1) Fall	BUSS 101	Principles of Management	3	FPE 103C
	BUSS 102	Principles of Financial Accounting	3	FPE 103C
	BUSS 103	Principles of Marketing	3	FPE 103C
	ENGL 101	Basic Academic English	3	FPE 103C
	MATH 103B	Mathematics for Business	3	FPM 102B
Total Credits			**15**	
Term	**Course**	**Title**	**Credits**	**Pre-requisites**
(2) Spring	BUSS 104	Principles of Management Accounting	3	BUSS 102
	BUSS 105	Principles of Financial Management	3	BUSS 102
	BUSS 106	Business Information Technology	3	BUSS 101
	LSCM 221	Fundamentals of logistics and Supply Chain Management	3	BUSS 101
	LSCM 222	Purchasing and Supply Management	3	BUSS103
Total Credits			**15**	
Year II				
Term	**Course**	**Title**	**Credits**	**Pre-requisites**
(3) Fall	BUSS 201	Principles of Microeconomics	3	BUSS 105
	ENGL 102B	English for Business I	3	ENGL 101
	LSCM 223	Freight and Transport Managenent	3	LSCM 221
	LSCM 224	Export- Import procedures and Documentation	3	LSCM 221

Term	Course	Title	Credits	Pre-requisites
	LSCM 225	Warehousing and Inventory Management	3	LSCM 221 & LSCM 222
Total Credits			**15**	

Term	Course	Title	Credits	Pre-requisites
(4) Spring	BUSS 203	Principles of Macroeconomics	3	BUSS 201
	BUSS 204	Business Law and Ethics	3	BUSS 201
	ENTR 200	Entrepreneurship - Innovation & Creativity	3	ENGL 102B
	LSCM 226	Operations Mamagement in Supply Chains	3	LSCM223& LSCM 224
	LSCM 227	Shipping & Freight Forwarding	3	LSCM223& LSCM 224
	LSCM 228	Internship in LSCM	0	more than 45 credits
Total Credits			**15**	

Year III

Term	Course	Title	Credits	Pre-requisites
(5) Fall	BUSS 304	Quantitative Methods in Business	3	MATH 103B and BUSS 203
	BUSS 306	Strategic Management	3	BUSS204
	LSCM 411	Supply Chain Strategies and Processes	3	LSCM 225 & LSCM 226
	LSCM 412	Global Logistics and Supply Chain Management	3	LSCM 226 & LSCM 227
	ARAB 101	Academic Writing in Arabic	3	More than 60 cr. hrs.
Total Credits			**15**	

Term	Course	Tile	Credits	Pre-requisites
(6) Spring	BUSS 307	Statistics for Business	3	BUSS 304
	ENGL 203B	English for Business II	3	ENGL 102B
	LSCM 413	Service Logistics	3	LSCM 411
	LSCM 414	Air Cargo Management	3	LSCM 412
		Skills for Life (Elective)	3	More than 60 cr. hrs.
Total Credits			**15**	

Year IV				
Term	**Course**	**Title**	**Credits**	**Pre-requisites**
(7) **Fall**	BUSS 401	Research Methodology	3	BUSS 307
	BUSS 312	e-Business	3	BUSS 306
	ENGL204	Advance English for Academic Purpose and Research	3	ENGL203B
	LSCM415	Shipping Logistics Management	3	LSCM413
	LSCM 416	Special Topics in Supply Chain Management	3	LSCM 414
Total Credits			**15**	
Term	**Course**	**Tile**	**Credits**	**Pre-requisites**
(8) **Spring**	BUSS 403	Business Environment	3	BUSS306 + More than 90 credits
	LSCM 417	Sustainable Logistics and Supply Chain management	3	LSCM 414
	LSCM418	Final year Project in LSCM	3	BUSS 401
		Omani Society	3	More than 60 credits
		College Elective 1		More than 90 credits
Total Credits			**15**	
Bachelor of Science Logistics and Supply Chain Managemen (120 CREDITS)				

4.10. Course Description: B.SC in Logistics and Supply Chain Management

LSCM 221   Fundamentals of Logistics and Supply Chain Management   (3 crs)

This course is an introductory course aim to equip students with the basic knowledge of logistic and supply chain management activities. The course will cover various topics such as distribution, material handling, inventory management, order fulfilment, purchasing, quality and capacity management. *Prerequisite: BUSS 101*

LSCM 222   Purchasing and Supply Management   (3 crs)

This course addresses the role of procurement within an organization's overall supply chain. It highlights the concepts and models in Purchasing Management, with special emphases on purchasing strategy, strategic sourcing, negotiations, contract development, supplier identification and evaluation, and materials management. *Prerequisite: BUSS 103*

LSCM 223   Freight and Transport Management   (3 crs)

This course addresses how to plan and control freight and transport operations and practices in supply chain with special emphasis on road, sea and air freight transport. This course will also cover topics such as shipping documentation and procedures, and multi-modal transport systems. *Prerequisite: LSCM 221*

LSCM 224   Export – Import Procedures and Documentation   (3 crs)

The course provides information related to the procedures and the documentation involved in export and import process and develops a knowledge-based approach in students to handle the documentary procedures in international business. The topics to be discussed in the course includes EXIM related documentary Information-Letter of Credit (L/C), Incoterms, Packing-List, Shipping Documents, Performa Invoice, Customs Clearance Documents, Bank Documents, Duty Drawback, etc. required in processing an EXIM order. *Prerequisite: LSCM 221*

LSCM 225   Warehousing and Inventory Management   (3 crs)

This course discusses the basic principles of warehousing and inventory management and their importance in the supply chain. Topics to be discussed include types of warehouse space, warehouse storage modes, policies and procedures of warehouse operations, selecting and setting up a warehouse and determining storage requirements and warehouse preparation planning. Students will also learn about inventory management methods like EOQ and ABC, stock control, technology for tracking inventory like RFID and inventory control techniques*. Prerequisite: LSCM 221 and LSCM 222*

LSCM 226   Operations Management in Supply Chains   (3 crs)

This course lays emphasis on the simple concepts, issues and practices for effective and efficient operations related to supply chain management. Subject matter includes a wide range of topics like capacity planning, Inventory control, TQM, productivity and economies of scale, push vs Pull strategy, supply chain management, etc. *Prerequisites: LSCM 223 and LSCM 224*

LSCM 227   Shipping & Freight Forwarding   (3 crs)

International Freight Forwarding is a constantly changing environment. Understanding how it all works can be confusing. This course covers all aspects of the process involved in moving goods internationally. Learners will learn what is required, what documents needed, where to get them from, and what to expect. Risks and avoiding them through sensible forward management will discuss. Furthermore, learners will benefit by understanding all requirements and will be able to save money on forwarding services, whilst those engaged in International Freight Forwarding will be better informed. A class session will be devoted to each of the supply chain processes as well as to topics such as: shipping and freight forwarding, documents and roles in a freight forwarder, the process of shipping, BL/MTD notations, contract of carriage etc. *Pre-requisite: LSCM 223 & LSCM 224.*

LSCM 228   Internship In LSCM   (0 crs)

Students in the second year (completed 45 credits) from LSCM major have to undergo practical training in any reputed organization of their choice in the area of LSCM. The training course is named as Internship in LSCM. Period of training is 240 Hours or Eight weeks. The course is offered on a pass/fail basis only. The purpose of training is to expose the students to real-life work environment in LSCM areas. Students get a chance to link their theoretical knowledge in LSCM with practical experiences. Training will also help the students to realize the demands to workplace and identify organizations for their future employment. For the college training helps to establish linkages with the industry and get feedback for our students and College. *Pre-requisite: completed more than 45 crs.*

LSCM 411   Supply Chain Strategies and Processes   (3 crs)

This course will discuss the fundamentals and implementation of SCM, and investigate it in various sectors and perspectives, from B2C to B2B services. This subject also focuses on analyzing operations strategy & supply chain problems and develops skills for balanced technical arguments relating to problem solving, by understanding the current condition of organizational and inter-organizational context of professional SCM. Given the strategic focus, students shall concentrate on strategic decision-making including investments in profitable sectors, process configurations, product designs, and partnership development with valuable suppliers and channels. *Prerequisites: LSCM 225 and LSCM 226*

LSCM 412   Global Logistics and Supply Chain Management   (3 crs)

The course is designed to equip the students with essential knowledge, information and the required skill set which enables them to critically analyze the concepts of global logistics & supply chain and implement them in the form of business models and approaches to deal with the various issues related to global logistics and supply chain management. The elements of the course integrate the scope and application of global logistics and supply chain management in the international public, private and voluntary sector business organizations. *Prerequisite: LSCM 226 and LSCM 227*

LSCM 413   Retail and Service Logistics   (3 crs)

This course seeks to integrate and apply the concepts of retail-based supply chains for an effective and efficient logistics management. The emphasis of this course is on value added logistics in retail and service organizations. The students shall try to develop a problem-solving approach in this subject area. *Prerequisite: LSCM 411*

LSCM 414   Air Cargo Management   (3 crs)

This study includes aiming to provide fundamental knowledge of air transport procedures and prepare students with a comprehensive concept with the latest developments in the air transportation industry. This course covers organizational topics International principles and policies / air transport operating regulations: international conventions, Anti-trust laws, Air Service Agreements, Strategic Alliances, and the roles / responsibilities of operators, shipping companies and connecting groups. The course also focuses on handling equipment and aircraft characteristics for air operations. *Prerequisite: LSCM 412*

LSCM 415   Shipping Logistics Management   (3 crs)
This course deals with the various issues in shipping logistics and operations such as types and designs of ships, maritime geography and current developments in the shipping industry. Specific topics that are covered include basic ship design, construction and layout, vessel operations, cargo types and cargo operations, voyage planning, types of shipping, maritime conventions, customs and quarantine. *Prerequisite: LSCM 413*

MKTG 416   Special Topics in Supply Chain Management   (3 crs)
This subject offers various advanced topics in integrated logistics and management of supply chain. This course includes topics such as strategic procurement and sourcing, dynamic pricing and tactics of management revenue, supply chain risk mitigation through supply contracts, outsourcing of functions and supply chain operations, management and operations of third-party logistics providers and security of management of supply chain. *Prerequisite: LSCM 414*

LSCM 417   Sustainable Logistics and Supply Chain management   (3 crs)
Sustainability is fast emerging as a major strategic consideration for business leaders. Organizations are increasingly under scrutiny from a range of stakeholders, including, customers, investors, legislators, governments, and pressure groups regarding the impact their operations are having on the wider environment and society. Issues such as global warming, depletion of natural reserves, waste management, emerging producer responsibility legislation, air transport, corporate social responsibility reporting are just.
a few examples of the complex nature of the area.
This course is designed to introduce students to the subject of sustainability from a supply chain perspective. Specifically, the objectives of the course are to provide students with:
  → Understanding and critical awareness surrounding the concepts of sustainability.
  → Understanding and critical awareness of the sustainable supply chains and sustainable suppliers
  → Comprehensive understanding of the role of green and reverse logistics
  → Conceptual understanding of emerging supply chain sustainability models with respect to global and multitier supply chains
  → Ability to evaluate and appraise emerging supply chain sustainability models and strategies*. Pre-requisite: LSCM 414*

MNGT418   Final Year Project in LSCM   (3 crs)
Every student has to choose a relevant business situation/problem related to the LSCM major and using the knowledge gained on how to tackle the problem come out with a viable solution. The entire project has to be completed under the supervision of a faculty mentor and the students have to defend the report submitted in front of a jury. *Pre-requisite: BUSS 401*

Department of Management Information Systems

1. Personnel

Chairperson	Samir Hammami
Associate Professor	Samir Hammami, Mohammed Ahmar Khan
Assistant Professors	Tareq Al Housary; Mohammed Yousoof Ismail; Mohammed Aref Abdul Rasheed; Murtaza Farooque, Abdulaziz Aborujilah, Husam Yasin
Lecturer	Shahrazad Omar Majid Al Marhoon
Secretary	Musallam Mohammed AL Amri

2. Mission

To provide quality knowledge and skills on information systems and technology in an open learning environment, fostering research in the field of management information systems and nurturing leaders who are capable of using technology in business and contributing to Omani society and beyond.

3. Programs Offered

The department offers following Diploma and Bachelor programs in MIS major and Bachelor program in Business Analytics major:

a) Diploma Program

1) Diploma in Management Information System

b) Bachelor Program

1) Bachelor in Management Information System
2) Bachelor of Science in Business Analytics.

4. MIS Major (Bachelor and Diploma)

4.1. Program Overview

Bachelor in Management Information System (MIS) is a four-year program encompassing 120 credit hours. As part of their fourth year, students are required to carry out a Final year Project and submit a report. BSc in Business Analytics is a four-year program encompassing 123 credit hours.

Diploma in Management Information System (MIS) consists of the first two years of Bachelor program encompassing 60 credit hours.

In addition, in all programs, after completing the second year (45 credits), students are required to undergo Internship Training in the major for a period of eight weeks.

4.2. Program Objectives

As given in College Section 6.

4.3. Program Learning Outcomes

As given in College Section 7.

4.4. Admission Requirements

As given in College Section 8.a.

4.5. Graduation Requirements

As given in College Section 9.

4.6. University Requirements

As given in College Section 10.

4.7. College Requirements

As given in College Section 11.

4.8. Program Requirements

The Program requirements for MIS major are as follows:

a) Major Compulsory Courses

I) <u>Diploma level</u>

1) MISS 220: Introduction to Data & Information Management
2) MISS 221: Foundation of Programming
3) MISS 222: Business Programming I
4) MISS 233: Systems Analysis and Design
5) MISS 225: Web Application Development
6) MISS 226: Enterprise Systems
7) MISS 227: Introduction to Data Analytics For Business
8) MISS 228: Internship in MIS

II) <u>Bachelor level</u>

The major compulsory requirements for Bachelor level consist of the following additional eight courses, apart from the courses already mentioned above for the diploma program.

1) MISS 410: Business Programming II
2) MISS 412: Database Analysis & Design
3) MISS 413: Business Data Communication and Network
4) MISS 414: Business Intelligence
5) MISS 415: IT Governance, Security and Auditing
6) MISS 416: IS Project Management
7) MISS 417: Data Analysis using R and Python
8) MISS 418: Final year Project in MIS

b) College General Electives

As given in College Section 12.b

4.9. Plan of Study: MIS Major

Term	Course	Title	Credits	Pre-requisites
Year I				
(1) Fall	BUSS 101	Principles of Management	3	FPE 103C
	BUSS 102	Principles of Financial Accounting	3	FPE 103C
	BUSS 103	Principles of Marketing	3	FPE 103C
	ENGL 101	Basic Academic English	3	FPE 103C
	MATH 103B	Mathematics for Business	3	FPM 102B
Total Credits			**15**	
(2) Spring	BUSS 104	Principles of Management Accounting	3	BUSS 102
	BUSS 105	Principles of Financial Management	3	BUSS 102
	BUSS 106	Business Information Technology	3	BUSS 101
	MISS 220	Introduction to Data & Information Management		MATH103B
	MISS 221	Foundation of Programming	3	BUSS101
Total Credits			**15**	
Year II				
(3) Fall	BUSS 201	Principles of Micro Economics	3	BUSS105
	ENGL 102B	English for Business I	3	ENGL 101
	MISS222	Business Programming I	3	MISS220 + MISS221
	MISS 223	Systems Analysis and Design	3	MISS220 + MISS221
	MISS225	Web Application Development	3	MISS220 + MISS221
Total Credits			**15**	
(4) Spring	BUSS 203	Principles of Macroeconomics	3	BUSS105
	BUSS 204	Business Law and Ethics	3	BUSS 201
	ENTR 200	Entrepreneurship - Innovation & Creativity	3	ENGL 102B
	MISS 226	Enterprise Systems	3	MISS222 + MISS223
	MISS227	Introduction to Data Analytics For Business	3	MISS225

	MISS228	Internship in MIS	0	More than 45 credits
Total Credits			**15**	
DIPLOMA of MIS (60 CREDITS)				
Year III				
(5) Fall	BUSS 304	Quantitative Methods in Business	3	MATH 103B & BUSS 203
	BUSS 306	Strategic Management	3	BUSS 203 & BUSS 204
	ARAB 101	Academic Writing in Arabic	3	More than 60 credits
	MISS410	Business Programming II	3	MISS225 + MISS226
	MISS412	Database Analysis & Design	3	MISS227
Total Credits			**15**	
(6) Spring	BUSS 307	Statistics for Business	3	BUSS304
	ENGL 203B	English for Business II	3	ENGL102B
	MISS 413	Business Data Communication and Network	3	MISS410 + MISS412
	MISS 414	Business Intelligence	3	MISS412
		Skills for Life (Elective)	3	More than 60 credits
Total Credits			**15**	
Year IV				
(7) Fall	BUSS 401	Research Methodology	3	BUSS 307
	BUSS 312	e-Business	3	BUSS 306
	ENGL204	Advanced English for Academic Purposes and Research	3	ENGL203B
	MISS 415	IT Governance, Security and Auditing		MISS413
	MISS 416	IS Project Management	3	MISS413 + MISS414
Total Credits			**15**	
(8) Spring	BUSS 403	Business Environment	3	BUSS306 + more than 90 credits
	MISS 417	Data Analysis using R and Python	3	MISS 416

	MISS 418	Final year Project in MIS	3	BUSS401
	SOCS102	Omani Society	3	More than 60 credits
		College Elective 1	3	More than 60 credits
Total Credits			**15**	
BACHELOR of MIS (120 CREDITS)				

4.10.   Course Descriptions: MIS Major

MISS 220   Introduction to Data & Information Management   (3 crs)
An introduction to programming language. Learn how to read and write code as well as how to test and "debug" it. Designed for students with and without prior programming experience. Learn about functions, arguments, return values; variables and types; conditions and Boolean expressions; loops; and objects and methods. Plus, exceptions, file I/O, and libraries. Hands-on opportunities for lots of practice. *Prerequisite: MATH103B*

MISS 221   Foundation of Programming   (3 crs)
This course aims at introducing the field of management information systems (MIS) as a growing academic and professional one. This is given the fact that Information technologies affect every aspect of our economy and society and are transforming work within and across business organizations. This course introduces information management and information systems that are critical to modern business organizations, technology and adoption trends and explores the evolving role of information technologies in business. The course covers components of information technology such as software, hardware, networking communications and other relevant topics to business including decision making, e-Business and e-commerce, CRM and ERP. The need for data security solutions to secure the information assets is also presented. *Prerequisite: BUSS 101*

MISS 222   Business Programming I   (3 crs)
The course introduces to the learners the fundamentals of programming logic. It also exposes the learners the idea of how an information system is built. The programming logic is developed using the tools of Algorithms and flowcharts. Algorithms and flowcharts cover various aspects of programming which includes input, output, process, conditional statements and looping statements. It also provides the learners the hands-on experience to implement the programming logic using Microsoft visual studio 2010.The idea of designing the user interface, changing the properties of controls, writing the source code and debugging are introduced in this course. The programs are categorized in the following topics namely simple arithmetic programs, conditional statement programs, looping statement programs, business application programs and using different controls in the user interface. The course also includes implementation of programs using

object-oriented concepts and database connectivity of Visual basic. *Prerequisite: MISS 220 & MISS 221*

MISS 223   Systems Analysis and design   (3 crs)
This course is on system analysis and design of an information systems specifically for information system development project. Various techniques, methods, tools, and approaches will be used to assist student visually capture a given system. The course contents include system development life cycle phases, system analyst and its required skills, information requirement collections, performing system analysis in order to prepare for systems requirements, designing system in terms of input, output, and database design, and prepare for systems implementation and operation. *Prerequisite: MISS 220 & MISS 221*

MISS 225   Web Application Development   (3 crs)
The course imparts the knowledge in designing, development and hosting any web site for business applications. It includes the topics on web page designing through HTML and JavaScript. Creating and developing web site elements like text, images, table, maps, frames, forms, control statements and Cascading style sheets to develop a dynamic web page. Design and layout of any web site is as important as the efficiency and flow of HTML and JavaScript codes. *Prerequisite: MISS 220 and MISS 221.*

MISS 226   Enterprise Systems   (3 crs)
This course will serve as an understanding of the theoretical and practical aspects of the application of strategic initiative of Enterprise Systems in an organization. The subject will focus on the implementation and working of an integrated Enterprise Systems with organizational processes and information among various functional areas as a database and report sharing system. An efficient and effective enterprise system is an essential tool for top management to acquire and develop new plans and policies as well as to monitor its implementation. The students will have hands-on session to gauge the scope and implementation process of enterprise information systems. *Prerequisite: MISS 222 and MISS 223.*

MISS 227   Introduction to Dat Analytics For Business   (3 crs)
In this course, students can learn the fundamentals of Business Analytics. Through this course, the student will be able to understand the concepts of data analytics in businesses. The student will learn about the usefulness and applications of business analytics in various fields. The student will know the types of Business Analytical techniques. The emphasis will be on learning on descriptive analytics domain to understand the basics of analytics. The students will use the labs to implement the techniques learned through the course. *Prerequisites: MISS 225.*

MISS 228   Internship in MIS   (0 crs)
Students in the second year (completed 45 credits) from MIS major have to undergo practical training in any reputed organization of their choice in the area of MIS. The training course is named as Internship in MIS. Period of training is 240 Hours or Eight weeks. The course is offered on a pass/fail basis only. The purpose of training is to expose the students to real-life work environment in MIS areas. Students get a chance to link their theoretical knowledge in MIS with practical

experiences. Training will also help the students to realize the demands to workplace and identify organizations for their future employment. For the college training helps to establish linkages with the industry and get feedback for our students and College. *Prerequisites: completed more than 45 crs.*

MISS 410   Business Programming II   (3 crs)
Learn the programming language paradigms, including functional and logic programming, and the suitability of language for programming tasks. Students write sample programs in the studied language. The language will be used to represent programming constructs such as scoping and binding, type systems, storage management and operating environments. This is accompanied by concepts like parsing, semantic analysis, symbol tables, memory allocation and code generation. Students complete a series of assignments to implement a language chosen by the instructor. *Prerequisites: MISS 225& MISS 226.*

MISS 412   Database Analysis and Design   (3 crs)
The course aims to introduce the principles of designing a good database. The broad areas of coverage in this course include the logical design of the database which is introduced by using E-R Diagram. Various notations of E-R Diagram are introduced and followed by activities to reinforce the concept. The other area of focus in the course to design tables which are free of anomalies and this is done through the process of database normalization. Various levels of normalization are introduced which includes first, second, third and BCNF. The course also deals with the Database administration part which includes controlling user privileges on accessing data, data backup, recovery, concurrency control etc. The last part of the course deals with DDL, DML and DCL and using different types of queries using SQL. The whole course is summarized at the end with a sample case study which is given as a project, where the students are made to apply all the steps of database design and development. *Prerequisites: MISS 227*

MISS 413   Business Data Communication and Network   (3 crs)
This is a basic (fundamental) course on electronic governance. This course deals with the Information and Communication Technology and its use by various Government Departments as a tool to provide E**fficient Governance** to the people. It focuses but not limited to the reasons to adopt E-governance, Planning and Challenges to E-Government, Interoperations, Supervision, better services to Society and Management of E-Government projects. The E-government Academic Program is dealing with the way in which Internet Technologies (IT) are affecting how people interact with government and how government, in turn, are using and managing technology to better provide information and services to the public. *Prerequisites: MISS 410 & MISS 412*

MISS 414   Business Intelligence   (3 crs)
The course focuses on the use of information systems in the business organization to assist human in decision-making process. The course addresses the use and incorporation of decision support systems into an organizational setting dealing with individual and group decision-making. In addition, the development, implementation, and deployment of decision support and expert systems will be covered. It will also include decision support and decision making, technologies; concept, applications; organizational issues, models;

user interfaces; implementation strategies; data warehousing, data mining and knowledge management. *Prerequisites MISS 412.*

MISS 415   IT Governance, Security and Auditing   (3 crs)

This course provides the overview of information system auditing process and it encompasses the aspects of security and control. It equips the learners with the skills in system auditing in various functional domains of the organization, particularly where information technology plays a dominant role. The course will introduce the learners on the usage of system audit software to provide the practical implementation of concept introduced in the course. *Prerequisites: MISS 413*

MISS 416   IS Project Management   (3 crs)

This course focuses on information systems (IS) project management. Various methods, techniques and tools related to IS project management will be demonstrated in the course. The topics of discussion includes project planning and scheduling, project scopes and evaluation, project costing and controlling and others as needed. A project management software or application will be introduced to illustrate how a project is managed electronically based on selected case studies. *Prerequisites: MISS 413 & MISS 414*

MISS 417   Data Analysis using R and Python   (3 crs)

In the subject Data Analysis using R and Python the students will start using powerful Python libraries used in Data Science project Pandas, NumPy with Python and powerful plot libraries used in Data Science project in R. Extract data from various websites, twitter, pdf files, csv, and RDBMS databases. Start doing the extrapolator data analysis (EDA) on any kind of data and start making meaningful business decisions. Start making visualizations charts - bar chart, box plots which will give meaningful insights. Integrate SQL with python and R program. Solve the real-world problem with case studies. *Prerequisite: MISS 416*

MNGT418   Final Year Project in MIS   (3 crs)

Every student has to choose a relevant business situation/problem related to the MIS major and using the knowledge gained on how to tackle the problem come out with a viable solution. The entire project has to be completed under the supervision of a faculty mentor and the students have to defend the report submitted in front of a jury. *Pre-requisite: BUSS 401*

5. BSc in Business Analytics

5.1. Program Overview

BSc in Business Analytics is a four-year program encompassing 123 credit hours. As part of their fourth year, students are required to carry out a Final year Project and submit a report.

In addition, in this program, after completing the second year (45 credits), students are required to undergo Internship Training in the major for a period of eight weeks.

5.2. Program Objectives

1- To facilitate learners to engage in business. The program is designed to prepare professionals to solve business problems using analytics.
2- To foster the creativity and innovation that contributes to the field.
3- To develop the learner's ability to apply the knowledge to discover the data at the workplace

5.3. Program Learning Outcomes

1) Acquire and apply business analytics knowledge necessary to succeed in business, government, and/or pursue post-graduate studies.
2) Apply information technology in business scenarios to support business processes and decision-making.
3) Analyze associated global and contextual issues.
4) Select and apply appropriate research methods in a work context.
5) Be able to think critically and apply data-driven analytical models.
6) Interpret and communicate information with appropriate stakeholders

5.4. Admission Requirements

In addition to the admission requirments as given in College Section 8.a. BSc in Business Analytics has:

I)   Program Specific Requirements

A General Education Certificate or its equivalent with minimum passing garde 60%.

5.5. Graduation Requirements

As given in College Section 9.

5.6. University Requirements

1) MATH103B: Mathematics for Business
2) ENGL101: Basic Academic English
3) SOCS102: Omani Society
4) ENGL102B: English for Business I
5) ENGL203B: English for Business II
6) ENTR200: Entrepreneurship - Innovation & Creativity

5.7. College Requirements

1) BUSS 101: Principles of Management
2) BUSS 102: Principles of Financial Accounting
3) BUSS 103: Principles of Marketing
4) BUSS 201: Principles of Microeconomics
5) BUSS 204: Business Law and Ethics
6) BUSS 307: Statistics for Business I
7) BUSS 312: e-Business
8) BUSS 401: Research Methods
9) BUSS 404: Final Year Project

5.8. Program Requirements

The Program requirements for BSc in Business Analytics major are as follows:

a) Major Compulsory Courses

1) MISS 221: Introduction to Information Systems
2) MISS 224: Introduction to Information and Data Management
3) BSBA 111: Introduction to Information Security
4) BSBA 211: Introduction to Big Data
5) BSBA 212: Foundations of Decision Analysis
6) BSBA 213: Database Analysis & Design using SQL
7) BSBA 214: Statistics for Business II
8) BSBA 215: Business Programming I
9) BSBA 216: Introduction to Data Analytics for Business
10) MISS 414: Business Intelligence
11) BSBA 311: Knowledge Discovery and Data Mining I
12) BSBA 312: Business Programming II
13) BSBA 313: Business Analytics for Finance
14) BSBA 314: Data Visualization I
15) BSBA 315: Data Analysis and Decision Modeling
16) BSBA 316: Knowledge Discovery and Data Mining II
17) BSBA 317: Accounting Analytics
18) BSBA 300: Internship in BSBA (Two Months)
19) MISS 416: IS Project Management
20) BSBA 411: Social Network Analytics
21) BSBA 412: Data Visualization II
22) BSBA 413: Emerging Topics in Business Analytics
23) BSBA 414: Data Analysis using R and Python

b) **Major Electives Courses**

1) BSBA 415: Cloud Computing for Business
2) MISS 223: Systems Analysis and Design
3) BSBA 416: IoT Application in Business
4) BSBA 417: Building Codeless Applications
5) BSBA 418: Blochchain Application for Business

c) **College General Electives**

As given in College Section 12.b

5.9. Plan of Study: BSc in Business Analytics

Year				
Semester	Course Code	Title	Credits	Pre-requisite
(1)Fall	BUSS 101	Principles of Management	3	FPE 103C
	BUSS 102	Principles of Financial Accounting	3	FPE 103C
	MISS 221	Introduction to Information Systems	3	FPT 102B
	MATH 103B	Mathematics for Business	3	FPM 102B
	ENGL 101	Basic Academic English	3	FPE 103C
Total of Credits			**15**	
(2)Spring	BUSS 103	Principles of Marketing	3	FPE 103C
	SOCS 102	Omani Society	3	BUSS 101
	MISS 224	Introduction to Information and Data Management	3	MISS 221
	ENGL 102B	English for Business I	3	ENGL 101
	BSBA 111	Introduction to Information Security	3	MISS 221
Total of Credits			**15**	
(3)Fall	BSBA 211	Introduction to Big Data	3	MISS 224
	BUSS 307	Statistics for Business I	3	MATH 103B
	ENGL 203B	English for Business II	3	ENGL 102B
	BUSS 201	Principles of Microeconomics	3	BUSS 101/BUSS 102
	BSBA 212	Foundations of Decision Analysis	3	MISS 224 - BSBA 111
Total of Credits			**15**	

(4) Spring	BSBA 213	Database Analysis & Design using SQL	3	MISS 224
	BSBA 214	Statistics for Business II	3	BUSS 307
	BSBA 215	Business Programming I	3	BSBA 111 and BSBA 211
	BSBA 216	Introduction to Data Analytics for Business	3	BSBA 211
	MISS 414	Business Intelligence	3	BSBA 211 & BSBA 212
Total of Credits			**15**	
(5)Fall	BSBA 311	Knowledge Discovery and Data Mining I	3	BSBA 215-BSBA 216
	ENTR 200	Entrepreneurship - Innovation & Creativity	3	ENGL 203B
		Major General Elective Course	3	60 credits or more
	BSBA 312	Business Programming II	3	BSBA 215
	BSBA 313	Business Finance	3	BSBA 215/BSBA 216
Total of Credits			**15**	
(6)Spring	BSBA 314	Data Visualization I	3	BSBA 216
	BUSS 204	Business Law and Ethics	3	BUSS 201
	BSBA 315	Data Analysis and Decision Modeling	3	BSBA 311
	BSBA 316	Knowledge Discovery and Data Mining II	3	BSBA 311 & BSBA 312
	BSBA 317	Accounting Analytics	3	BSBA 313
	BSBA 300	Internship in BSBA (Two Months)	3	completed 81 credits
Total of Credits			**18**	
(7) Fall	BUSS 401	Research Methodology	3	BSBA 314 / BSBA 316
	MISS 416	IS Project Management	3	BSBA 315

	BUSS 312	e-Business	3	BSBA 314
	BSBA 411	Social Network Analytics	3	BSBA 314 and BSBA 315
		Skills for Life (Elective)	3	81 credits or more
Total of Credits			**15**	
(8) Spring	BSBA 412	Data Visualization II	3	BSBA 314
	BSBA 413	Emerging Topics in Business Analytics	3	BSBA 315 and BSBA 317
	BSBA 414	Data Analysis using R and Python	3	BSBA 316
		Major Elective Course	3	99 credits or more
	BUSS 404	Final year Project	3	BUSS 401
Total of Credits			**15**	
BSc in Business Analytics (123 credits)				

Major Electives BSBA - (One course - 3 credits) -Year 4: Semester 8	
BSBA 415	Cloud Computing for Business
MISS 223	Systems Analysis and Design
BSBA 416	IoT Application in Business
BSBA 417	Building Codeless Applications
BSBA 418	Blochchain Application for Business
Major General Electives from the College - (One course - 3 credits)-Year 3: semester 5	
ACCT221	Intermediate Accounting I
ACCT 222	Managerial Cost Accounting
ACCT 223	Financial Statement Analysis
FINA 221	Money and Capital Markets
FINA 222	Commercial Bank Management
FINA 223	Financial Services
MNGT 221	Organizational Behavior
MNGT 222	Human Resources Management

MNGT 223	Operations Management
MKTG 221	Consumer Behavior
LSCM 221	Fundamentals of Logistics and Supply Chain Management
MKTG223	Service Marketing

4.11. Course Description: Business Analytics Major

MISS 221: Introduction to Information Systems   (3 crs)
This course introduces students to the principal concepts, techniques, and tools in management accounting. It aims to provide students with an understanding of management accounting information used in planning and controlling business organizations. Topics in this course include preparing manufacturing final accounts, cash flow statements, cost behavior and analyses, budgeting and budgetary control and relevant cost information for decision making and performance evaluation. *Prerequisite: FPT 102B*

MISS 224: Introduction to Information and Data Management   (3 crs)
Information systems (IS) play a vital role in the organizations' competitive competencies. Information technologies are essential in excelling the IS deployment by organizations that in turn affect every aspect of our economy and society and are transforming work within and across business organizations. This course aims to provide students with comprehensive understanding of database technology. The student will be able to recognize the various database models (hierarchical, networked, object-oriented and relational models) and learn how to program and build a relational database. Emphasis is given to the database programming language SQL to train students how to practically build and work with databases. *Prerequisite: MISS 221*

BSBA 111: Introduction to Information Security   (3 crs)
In this course, the student will learn the principles of information security and its concepts. This course introduces the technical and managerial aspects of information security. The aim of this course is that information security in the modern organization is a problem for management to solve, and not one that technology alone can address by keeping this in mind, the course contains the knowledge of key factors related to information security, covers significant issues of the organization in context of information security. It also includes the threats and technology required for information security. *Prerequisite: MISS 221*

BSBA 211: Introduction to Big Data   (3 crs)
This module aims to address these aspects and challenges of Big Data Analytics by introducing fundamental concepts and algorithms of big data analytics. It starts with introduction of methods and tools of data collection, and then followed by methods of dealing with dirty data such as inconsistent data, missing data, and redundant data, on which techniques of data preparation including data cleaning, data transformation and

integration are addressed. Having discussed those contents, the module will then be continued with methods for structured data and unstructured data, where techniques for structured data include data mining (parallel data mining techniques) and those for unstructured data include social network analysis and text mining. A further aim of the unit is to introduce software systems used for Big Data Analytics such as Hadoop. *Prerequisite: MISS224*

BSBA 212: Foundations of Decision Analysis   (3 crs)
This course provides a coherent approach to decision-making approach. It also will help the learners develop rules of logic to transform complex situations into practical solutions. It will also expose the learners to choose the best possible solutions for a given scenario. The course will also deal with the decision-making principles applied to business and other domains. Computational problem sessions, representation of uncertainty will be discussed in the course. *Prerequisite: MISS224& BSBA 111*

BSBA 213: Database Analysis & Design using SQL   (3 crs)
The course aims to introduce the principles of designing a good database. The broad areas of coverage in this course include the logical design of the database which is introduced by using E-R Diagram. Various notations of E-R Diagram are introduced and followed by activities to reinforce the concept. The other area of focus in the course is to design tables which are free of anomalies, and this is done through the process of database normalization. Various levels of normalization are introduced which includes first, second, third and BCNF. The course also deals with the Database administration part which includes controlling user privileges on accessing data, data backup, recovery, concurrency control etc. The last part of the course deals with DDL, DML and DCL and using different types of queries using SQL. The whole course is summarized at the end with a sample case study which is given as a project, where the students are made to apply all the steps of database design and development. *Prerequisite:* MISS 224

BSBA 214: Statistics for Business II   (3 crs)
This course is designed to provide an advanced understanding and practical knowledge of statistical methods and concepts applied in business areas. The focus of the course is on the practical use of data in business decision-making. It included analysis of categorical data, ANOVA, correlation, and simple and multivariate linear regression analysis. The appropriate available software tools will be used. *Prerequisite:BUSS 307*

BSBA 215: Business Programming I   (3 crs)
An introduction to programming using a language called Python. Learn how to read and write code as well as how to test and "debug" it. Designed for students with and without prior programming experience who'd like to learn Python specifically. Learn about functions, arguments, and return values; variables and types; conditions and Boolean expressions; loops; and

objects and methods. Plus, exceptions, file I/O, and libraries. Hands-on opportunities for lots of practice. *Prerequisite: BSBA 111 &BSBA 211*

BSBA 216: Introduction to Data Analytics for Business   (3 crs)
In this course, students can learn the fundamentals of Business Analytics. Through this course the student will be able to understand the concepts of data analytics in businesses. The student will come to know about the usefulness and applications of business analytics in various fields. The student will know the types of Business Analytical techniques. The emphasis will be on learning on descriptive analytics domain to understand the basics of analytics. The students will use the labs to implement the techniques learned through the course. *Prerequisite:BSBA211*

MISS 414: Business Intelligence   (3 crs)
The course focuses on the use of information systems in business organizations to assist humans in the decision-making process. The course addresses the use and incorporation of decision support systems into an organizational setting dealing with individual and group decision-making. In addition, the development, implementation, and deployment of decision support and expert systems will be covered. It will also include decision support and decision-making, technologies; concept, applications; organizational issues, models; user interfaces; implementation strategies; data warehousing, data mining and knowledge management. *Prerequisite: BSBA 211 & BSBA 212*

BSBA 311: Knowledge Discovery and Data Mining I   (3 crs)
Data Mining (DM) and Knowledge Discovery (KD) are concerned with the extraction of useful knowledge from large quantities of structured information. With the continued growth in large data sets and the inability of manual analytical techniques to cope with such volumes, data mining algorithms and knowledge discovery processes and frameworks have emerged as potential solutions. Specifically, the topic will Introduce the role of common sense, trends in information management, fundamental ideas, developing data mining algorithms, applications of knowledge discovery. *Prerequisite: BSBA 215 & BSBA 216*

BSBA 312: Business Programming II   (3 crs)
An advanced level of Python programming motivates to learn how to analyze the big data. Learn the advance functions, arguments with certain case example using the statements of expressions; loops; and objects and methods. The exercises are inspired by real-world scenarios. *Prerequisite: BSBA 215*

BSBA 313: Business Analytics for Finance   (3 crs)
Business Analytics for Finance OR Financial Analytics is an emerging field in finance that focuses on advanced quantitative techniques to provide critical insights into valuation, portfolio optimization, and risk management. The curriculum includes foundational work in finance,

accounting, and business analytics. The option's strong quantitative and analytical focus leads to a wide range of career opportunities. *Prerequisite: BSBA 215 & BSBA 216*

BSBA 314: Data Visualization I **(3 crs)**
This course is designed to introduce data visualization as an analytical tool, a medium of communication, and the basis for interactive information dashboards. Students will learn best practices in data visualization, sharpen analytical skills, and learn how to design dashboards for use by stakeholders. The students will learn to build dashboards using the tableau software. They will also learn to visualize data and develop dashboards but will develop transferable skills which can apply to many of the most popular software packages in the current marketplace. *Prerequisite: BSBA 216*

BSBA 315: Data Analysis and Decision Modeling **(3 crs)**
Businesses typically collect large volumes of data with relative ease. However, data are often meaningless once they are analyzed for trends, patterns, and relationships and then become useful information. This subject provides integrated knowledge for understanding and managing information resources, building a basic business intelligent system, interpreting business statistics, and developing practical decision models. It will equip students with decision-making tools and illustrate their applications. A key business skill is acting on information to develop solutions and support decision-making. *Prerequisite: BSBA 311*

BSBA 316: Knowledge Discovery and Data Mining II **(3 crs)**
This course includes the advance concepts and future directions in DMKD. Data mining techniques - association rule mining, clustering algorithms, classification and prediction, sequential pattern mining, graph mining, text mining, higher order data mining, visualization techniques, spatial data mining, temporal and longitudinal data mining, interestingness, web mining, ethics in data mining, knowledge discovery frameworks, research methods used in data mining and knowledge discovery. *Prerequisite: BSBA 311 & BSBA 312*

BSBA 317: Accounting Analytics **(3 crs)**
This course focuses on using data analytic tools to enhance the work of accounting professionals. Students will retrieve data from public databases, use data analytical tools to analyze the financial data, and evaluate the important implications of financial and non-financial information gathered from different sources to arrive at the effectual judgment and decision-making on accounting issues. Students will also develop proficiency in addressing issues on the quality and reliability of sources of financial and non-financial data obtained from management and external sources. Students will work on projects aimed at enhancing their competency in critical thinking, problem-solving, written, and oral communication, and data analytic skills. *Prerequisite: BSBA 313*

BSBA 300 Internship in Business Analytics **(3 crs)**
The objectives of a Business Analytics internship are to give the skills and experience needed to succeed in a career in data science. By gaining hands-on experience, learning from experienced data scientists, building a network, and gaining exposure to different industries, the student will have well-positioned for a successful career in this exciting field. *Prerequisite: more than 45 credits*

MISS 416: IS Project Management **(3 crs)**
This course focuses on information systems (IS) project management. Various methods, techniques and tools related to IS project management will be demonstrated in the course. The topic of discussion includes project planning and scheduling, project scopes and evaluation, project costing and controlling and others as needed. A project management software or application will be introduced to illustrate how a project is managed electronically based on selected case studies. *Prerequisite:BSBA 315*

BSBA 411: Social Network Analytics **(3 crs)**
This course discusses the analysis of both social network structures and media content shared on social media platforms. Topics include Social Network Analysis, Network Visualization, Network Measures, Network Clustering, Filtering and Analyzing Social Media Contents, Detecting Trending Topics, Inferring Social Preferences and Tendencies, Sentiment Analysis, Activity Shaping, and Social Marketing. *Prerequisite:BSBA 314 & BSBA 315*

BSBA 412: Data Visualization II **(3 crs)**
This course is designed to introduce data visualization as an analytical tool, a medium of communication, and the basis for interactive information dashboards. Students will learn best practices in data visualization, sharpen analytical skills, and learn how to design dashboards for use by stakeholders. The students will learn to build dashboards using Excel software. They will also learn to visualize data and develop dashboards but will develop transferrable skills which can apply to many of the most popular software packages in the current marketplace. *Prerequisite: BSBA 314*

BSBA 413: Emerging Topics in Business Analytics **(3 crs)**
This course encourages students to explore and expose current research issues and innovation in Business Analytics. The student will explore applications and methods of Business Analytics in real problems and diverse fields. The course prepares the students for individual and group research work through reading, presenting, and discussing research literature addressing relevant topics in Business Analytics. The students will discuss and summarize the literature to help them see how the concepts they have learnt are applied to more complex, real problems. The group project allows the students to collaborate with peers using digital platforms to understand group dynamics and effective teamwork better.

Students will understand the importance of taking responsibility for their actions. The soft skills, including time management, meeting management and agenda setting, and team building, can be developed by students to achieve leadership practice. *Prerequisite: BSBA 315 & BSBA 317*

BSBA 414: Data Analysis using R and Python   (3 crs)
In the subject Data Analysis using R and Python the students will start using powerful Python libraries used in Data Science project Pandas, NumPy with Python and powerful plot libraries used in Data Science project in R. Extract data from various websites, twitter, pdf files, csv, and RDBMS databases. Start doing the extrapolator data analysis (EDA) on any kind of data and start making meaningful business decisions. Start making visualizations charts - bar chart, box plots which will give meaningful insights. Integrate SQL with python and R program. Solve the real-world problem with case studies. *Prerequisite: BSBA 316*

BSBA 415: Cloud Computing for Business   (3 crs)
Both businesses and consumers can now benefit from cloud computing. Cloud computing is a network of remote servers hosted on the internet to store and retrieve data, and it provides a wide range of IT services, such as servers, databases, software, virtual storage, and networking. Cloud systems, parallel processing in the cloud, distributed storage systems, virtualization, cloud security, and multicore operating systems are the concepts covered in this topic. In addition, students will research cutting-edge cloud computing solutions developed by Google, Amazon, Microsoft, and others. *Prerequisite: BSBA216 & BSBA313*

MISS 223: Systems Analysis and Design   (3 crs)
This course is on system analysis and design of information systems specifically for information system development projects. Various techniques, methods, tools, and approaches will be used to assist students visually capture a given system. The course contents include system development life cycle phases, system analyst and its required skills, information requirement collections, performing system analysis to prepare for systems requirements, designing system in terms of input, output, and database design, and prepare for systems implementation and operation. *Prerequisite: MISS221*

BSBA 416: IoT Application in Business   (3 crs)
This course aims to provide students with a solid theoretical foundation, systematic professional knowledge, and strong practical skills in IoT Platform and System Design. The course focuses on understanding the global vision of IoT, its applications, determining its market perspective, using gateways, devices, and data management, building a state-of-the-art architecture in IoT, and its business applications. *Prerequisite: BSBA 312*

BSBA 417: Building Codeless Applications   (3 crs)
This is an introductory course designed to help students become familiar with the core concepts of Codeless UI programming. In addition, the student will learn how to use a visual client-server development platform

to build mobile and web applications. This course focuses on the visual UI builder part of the system; however, it will also look into the client-server integration aspect of app development. *Prerequisite: BSBA 312*

BSBA 418: Blockchain Application for Business   (3 crs)
Blockchain will profoundly alter business and even the nature of business itself. This technology will change how companies are funded and managed, how they create value, and even how basic functions like marketing and accounting are performed. This course will teach the student how blockchain technology will be integrated into organizational structures. The course covers the technological underpinning of blockchain operations in theoretical and practical implementation of blockchain technology solutions. Students will be able to identify the various layers of the blockchain technology stack and explain how they impact blockchain system governance. *Prerequisite: BSBA 216*

COLLEGE OF ENGINEERING (CE)

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COLLEGE OF ENGINEERING

1. Officers of the College

Dean	Dr. Issam Mahfoodh Bait Bahdoor
Asst. Dean	Dr. El Manaa Salah Barhoumi
Secretaries	Ms. Salma Naseeb Safrar
	Ms. Atsloom Ali Zaid Al-Amri
	Ms. Asma Said Hassan Bait Said

2. Organizational Structure

The CE is headed by a Dean overseeing the following **Five Departments**:

1) Department of Architectural Engineering (AE)
2) Department of Chemical Engineering (CHE)
3) Department of Civil & Environmental Engineering (CVE)
4) Department of Electrical and Computer Engineering (ECE)
5) Department of Mechanical and Mechatronics Engineering (MME)

3. Vision

The CE at DU foresees a future in which its graduates are branded for their breadth and depth of knowledge, exemplary technical and personal skills, awareness of the world around them, commitment to excellence, passion to achieve, and for their abilities to work in and manage diverse teams.

4. Mission

The CE shall create the conditions that promote academic excellence, nurture responsibility, breed professionalism, drive personal growth so that students define their purpose and develop the skills and character that enable them to transform 21st century challenges into possibilities, advance their lives, affect their community, and impact the world.

5. Academic Programs Offered

The College offers five (5) Diploma and Seven (7) Bachelor Programs. The medium of instruction in all these programs is English.

These programs are:

a) Diploma Programs

1) Diploma in Interior Architecture Engineering
2) Diploma in Chemical Engineering
3) Diploma in Civil Engineering
4) Diploma in Electrical and Computer Engineering
5) Diploma in Mechanical Engineering

b) Bachelor Programs

1) Bachelor of Science in Architectural Engineering
2) Bachelor of Science in Interior Architecture Engineering
3) Bachelor of Science in Chemical Engineering
4) Bachelor of Science in Civil Engineering
5) Bachelor of Science in Computer and Communications Engineering
6) Bachelor of Science in Electrical and Electronics Engineering
7) Bachelor of Science in Mechanical Engineering

6. Admission Requirements

a) Undergraduate Programs

I) General Requirements

For admission to any of the undergraduate programs offered by the CE, a student must have:

- A General Education Certificate or its equivalent and
- Passed FP from DU or any other HEI recognized by MoHERI
- For Bachelor of Science in Interior Architectural Engineering, 70 percent is required in English, Math and IT

OR

Be exempted from FP English, Maths and IT courses based on placement tests conducted by DU FP

II) Program Specific Requirements

Program Specific admission requirements, if any, are given in the concerned section in this catalogue.

7. Graduation Requirements

To receive a Diploma in any of the majors in the CE students must satisfactorily complete the required credit hours for his/her major, with a cumulative average of 65 percent.

To receive a Bachelor's Degree in any of the majors in the CE, the student must satisfactorily complete the required credit hours for his/her major with an overall minimum average of 65 percent, (Except for Bachelor of Science in Architectural Engineering where it is 70 percent) and a cumulative average of 70 percent in the major courses.

The total number of required credits varies by major. The following table summarizes the number of credits normally required for each undergraduate program in CE.

| Program | Requirements | | | | Total Credit Hours |
| | University | College | Program (Major) | | |
			Core	Elective	
Diploma in Interior Architecture Engineering	18	3	53	-	74
Diploma in Chemical Engineering	18	21	36	-	75
Diploma in Civil Engineering	18	18	39	-	75
Diploma in Electrical and Computer Engineering	18	24	33	-	75
Diploma in Mechanical Engineering	18	21	36	-	75
Bachelor of Science in Architectural Engineering	30	15	96	9	150
Bachelor of Science in Interior Architecture Engineering	27	3	98	9	137
Bachelor of Science in Chemical Engineering	27	39	60	12	138
Bachelor of Science in Civil Engineering	27	33	69	9	138
Bachelor of Science in Computer and Communications Engineering	27	33	62	16	138
Bachelor of Science in Electrical and Electronics Engineering	27	33	61	17	138
Bachelor of Science in Mechanical Engineering	27	36	61	14	138

8. University Requirements

The University requirements for Diploma program consist of six (6) courses comprising 18 credit hours. The University requirements for Bachelor programs consist of nine (9) courses comprising of 27 credit hours. These courses are:

1) ARAB 101: Academic writing in Arabic
2) ENGL 101: Basic Academic English
3) ENGL 102E: English for Engineering and Sciences I

4) ENGL 203E: English for Engineering and Sciences II
5) ENGL 204: Advanced English for Academic Purposes and Research
6) ENGL 305: Advanced English Language and Communication Skills
7) ENTR 200: Entrepreneurship: Innovation and Creativity
8) MATH 199: Calculus I
9) SOCS 102: Omani Society

The University requirements for Bachelor program in Architectural Engineering has one additional course of three credits:
1) CMPS 100B: Introduction to Technical Computing for the Sciences

9. College Requirements

The College requirements for Diploma programs vary from 3 to 21 credit hours. For course details, please refer to the concerned program page within the catalogue.

The college requirements for Bachelor programs vary from 3 to 39 credit hours depending on the program. For more information regarding the courses listed in college requirements for Bachelor's degrees please refer to the concerned program page in the catalogue.

10. Program (Major) Requirements

Program requirements vary from 33 to 107 credit hours from within and outside the department, depending on the chosen major in which the student is enrolled. These are listed in the respective sections in this catalogue.

11. Practical Training and Final Year Project

a) Practical Training (Internship)

Fourth year Bachelor students of engineering are required to acquire practical training experience through an internship period of eight weeks. This graduation requirement ensures that each student gains practical training experience during the summer prior to graduation, with either a company or another academic institution. Diploma students also are required to undergo the internship by the end of the second year. Practical training could be registered during Fall or Spring semesters only along with the last 6 credits.

b) Final Year Project

As part of their fourth year, students are required to carry out a project and submit a technical report. This project is a substantial piece of work that will require creative activity and original thinking. Students (individually or in groups, normally three per group), are supervised while working on a project accounting for three credits (five credits for Interior Architecture Engineering) extending over a full academic year. The project aims to provide students with a transitional experience from the academic world to the professional world. It is designed to serve as a platform in which students in teams engage in a meaningful design experience requiring the solution of engineering design projects.

12.   Course Description - General Engineering Courses

To meet the College requirements, a set of general courses are offered in programs at the CE. The following are the outlines of these courses.

ENGR 100   Introduction to Engineering   (3 crs)
This course introduces engineering students to engineering communication and ethics, report writing, dimensions and units - length, time, mass, force, temperature, electric current - and their related parameters - energy and power.

ENGR 105   Engineering Graphics   (2 crs)
This course covers geometrical construction, orthographic projection, first angle and third angle projections, drawing convention or standards, sections, dimensions, oblique and isometric, tolerances, limits and fits. Students will also learn how to prepare engineering drawings using Computer Aided Drawing (CAD) software such as AutoCAD and solid work.

ENGR 110   Engineering Workshop   (1 crs)
This course covers - safety training and practices; lathe machine components and different operations; principle of milling, grinding, drilling and welding machines; The course includes hands-on practical experience on various machines.

ENGR 300   Engineering Economy   (3 crs)
This course introduces economic decision processes in the design and implementation of real engineering projects, investment, financing, depreciation, economic selection, and replacement. Prerequisites: ENGR 100, MATH 199.

Department of Architectural Engineering

1. Personnel

Chairperson:	Dr. Abbas Hassan
Assistant Professor:	Dr. Fatemeh Khozaei Ravari
	Dr. Yasser Arab
Lecturer:	Ms. Lamiaa Abdrabu
Laboratory Technician:	Mr. Marwan Ahmed Bait Farhan

2. Vision

To provide high quality education in Architectural Engineering and to serve the architectural engineering construction industry through design, research, innovation using the latest cutting-edge technologies.

3. Mission

Architectural Engineering attempts to create an academic team dedicated to teaching using modern delivery methods oriented to educate students to be engaged in self-development, lifelong learning and professional practice and development after graduation.

4. Programs Offered

The department offers the following Diploma and Bachelor programs:

a) Diploma Program

1) Diploma in Interior Architecture Engineering

b) Bachelor's Program

1) Bachelor of Science in Architectural Engineering
2) Bachelor of Science in Interior Architecture Engineering

5.1. Program Overview

The Architectural Engineering program is a 150-credit-hour program distributed over four and half academic years. The program promotes the implementation of the latest advances in construction, information and visualization technologies which respond to the needs of industry. The curriculum is focused on buildings' construction and its application in buildings' structure design and with a comprehensive knowledge in mechanical and electrical building's systems.

5.2. Program Objectives

The objectives of the Architectural Engineering program are to:

1) Educate students in the fundamental principles of architectural engineering buildings and architectural support systems' design, construction, supervision and maintenance by integrating design principles, technical knowledge, using modern engineering tools.
2) Help students develop the ability to use architectural engineering principles in analyzing and solving problems of practical importance to the built environment and society at large.
3) Educate students to be engaged in self-development, lifelong learning and professional practice and development after graduation.
4) Train students to communicate effectively, be able to work in teams and become leaders in the architectural engineering society and develop the requisite professional and ethical demeanor for a successful architectural engineering career.

5.3. Program Learning Outcomes

A student graduating from the Architectural Engineering program will be able to:

1) Apply knowledge of the fundamentals of mathematics, physics, science and engineering including advanced subjects that further the learning of specific architectural engineering areas.
2) Design and conduct experiments, to gather and analyze data as well as apply the results to address architectural engineering problems.
3) Design building systems, components or processes that meet desired needs within realistic constraints such as sustainability, economics, functionality, health and safety, and constructability.
4) Function in and collaborate within multi-disciplinary teams.
5) Identify, convey as well as to solve engineering problems.
6) Practice architectural engineering, including its technical and professional responsibilities and its ethical components.
7) Demonstrate excellent communication skills - writing coherent and accurate technical reports, and making effective oral presentations.
8) Evaluate the impact of architectural engineering solutions in a global, political, environmental and social context.
9) Appreciate the need for and have an ability to be engage in lifelong learning.

10) Demonstrate knowledge in multidisciplinary aspects of architectural engineering design and of contemporary problems.

11) Use the techniques and architectural engineering tools necessary for engineering practice.

5.4. Admission Requirements

Admission requirements for a Bachelor of Science in Architectural Engineering Program are as specified in **College Section 6A.**

5.5. Graduation Requirements

To graduate with a Bachelor of Science Degree in Architectural Engineering, students must satisfactorily complete 150 credits with an overall minimum average of 70 percent, and a cumulative average of 70 percent in the major courses. The University, College, and program (major) requirements are as given in the following table:

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
30	15	96	9	150

5.6. University Requirements

The University requirements consist of nine (9) courses comprising of 27 credit hours as specified in **College Section 8.**

5.7. College Requirements

The College requirement consist of five (5) courses comprising of 15 credit hours as given below:

Code	College Courses	Credit Hours
PHYS 170	Fundamentals of Physics I	3
MATH 200	Calculus II	3
MATH 205	Calculus III	3
MATH 210	Differential Equations	3
EECE 210	Electrical Circuits I	3

5.8. Program Requirements

I) Core Requirements

The program's core requirements consist of 35 courses encompassing 96 credit hours.

II) Elective Requirements

This includes the following 10 courses. A student has to take a total of 6 credit hours from this. In addition, a student must take one science elective of 3 credit hours.

Code	Elective Requirements Courses	Credit Hours
ARCH 321	Advanced BIM for Architecture	3
ARCH 322	Modelling and Rendering	3
ARCH 323	Ecological Building Materials	3
ARCH 324	Local Vernacular Architecture, Construction Materials, Methods and Craftworks	3
ARCH 421	Special Topics in Interior Architecture	3
ARCH 422	Green Buildings (Codes, Standards and Rating Systems)	3
ARCH 423	Bio-climatic Integration into Architecture Context	2
ARCH 424	Identification and Evaluation of the Historic Built Environment	3
ARCH 425	Environmental Design Research	2
ARCH 426	Human Factors	2

5.9. Plan of Study: Bachelor of Architectural Engineering

Year I		
Fall Semester		**15 Credits**
Code	**Course Title**	**Credit Hours**
ARCH 101	Architectural Drawing I	3
ENGL 101	Basic Academic English I	3
ARAB 101	Academic Writing in Arabic	3
MATH 199	Calculus I	3
PHYS 170	Fundamentals of Physics I	3
Spring Semester		**15 Credits**
Code	**Course Title**	**Credit Hours**
ARCH 111	Architectural Drawing II	3
ARCH 102	Introduction to Architectural Building Science and Engineering Ethics	3
CIVE 210A	Mechanical Statics for Architectural Engineers	3
ENGL 102E	English for Engineering and Sciences	3
CMPS 100B	Introduction to Technical Computing for the Sciences	3
Summer Semester		**9 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 203E	English for Engineering and Science II	3
MATH 200	Calculus II	3
SOCS 102	Omani Society	3
Year II		
Fall Semester		**16 Credits**
Code	**Course Title**	**Credit Hours**
ARCH 201	Architectural Design I	3
ARCH 202	Introduction to Computer Aided Drawing	3
MECH 270A	Properties of Materials for Architectural Engineers	3
CIVE 213A	Strength of Materials for Architectural Engineers	3
CIVE 265A	Surveying & GPS for Architectural Engineers	3
CIVE 265L	Surveying & GPS Laboratory	1

Spring Semester		16 Credits
Code	Course Title	Credit Hours
ARCH 211	Architectural Design II	3
ARCH 212	Introduction to Building Information Modeling for Architects	3
EECE 210	Electrical Circuits I	3
CIVE 221A	Construction Materials for Architectural Engineers	3
CIVE 221L	Construction Materials Laboratory	1
MATH 205	Calculus III	3
Summer Semester		**9 Credits**
Code	Course Title	Credit Hours
MATH 221	Differential Equations	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3
ENGL 204	Advanced English for Academic Purposes and Research	3
Year III		
Fall Semester		**14 Credits**
Code	Course Title	Credit Hours
ARCH 301	Architectural Design III	3
ARCH 302	Advanced Architectural Design Theories	3
ARCH 303	Building Construction, I - Concrete Design	3
ARCH 304	Building Construction Methods	3
ARCH 306	History of Architecture I	2
Spring Semester		**15 Credits**
Code	Course Title	Credit Hours
ARCH 311	Architectural Design IV	4
ARCH 313	Building Constructions II - Wood and Masonry Constructions Design	3
ARCH 305	Ecology and Building Environmental Control Systems I	3
ARCH 316	History of Architecture II	2
ENGR 300	Engineering Economy	3
Summer Semester		**3 Credits**
Code	Course Title	Credit Hours
ENGL 305	Advanced English Language and Communication Skills	3
Year IV		
Fall Semester		**15 Credits**
Code	Course Title	Credit Hours
ARCH 404	Architectural Design V	4
ARCH 405	Ecology and Building Environmental Control Systems II	3
ARCH 403	Building Constructions III - Steel and Glass Design	3
ARCH 407	Sustainable Architectural Design	2
CIVE 480	Construction Management	3

Spring Semester		12 Credits
Code	**Course Title**	**Credit Hours**
ARCH 401	Final Project I	3
ARCH 408	Working Drawings	3
ARCH 415	Building Lighting and Acoustical Design	3
XXX	Science Elective	3
Summer Semester		**0**
Code	**Course Title**	**Credit Hours**
ARCH 400	Approved Professional Experience	0
Year V		
Fall Semester		**11 Credits**
Code	**Course Title**	**Credit Hours**
ARCH 402	Final Project II	3
ARCH 506	Construction Projects Specification and Quantities	2
ARCH XXX	Major Elective	3
ARCH XXX	Major Elective	3

5.10. Course Description

ARCH 101   Architectural Drawing I   (3 crs)

Aiming to provide students with architectural hand drawing and presentation skills, the course includes line, scale and dimensions, free hand drawing, shapes and forms, tones and textures, shading technique, lettering and orthographic projections. Three dimensional isometric projections are introduced as well. The class is a combination of lecture (2) and practical modules (1) and includes theory, exercises, tools and class/home assignments for architectural drawing.

**ARCH 102   Introduction to the Architectural Building Science &   (3 crs)
                Engineering Ethics**

Attitude to the building Science and Architectural Engineering as profession and the concepts of Engineering Ethics are introduced. Building systems and human being needs for comfort are studied. Architectural design as a process is introduced where subjects such as building site, area, volume, necessity of fresh air, light, temperature, sunlight, and view are considered. The class in composed of theoretical modules and includes homework, presentations, quizzes, and exams.

ARCH 111   Architectural Drawing II   (3 crs)

Aiming to provide students with architectural hand drawing skills, the course includes line, scale and dimensions, lettering, orthographic and three-dimensional drawings as well as floor plans, sections and graphic diagrams. Symbols and standards are introduced for facilitating the students to read architectural and engineering drawings. The class is a combination of lecture (2) and practical modules (1) and includes theory, exercises, tools and class/home assignments for architectural drawing. Prerequisite: ARCH 101.

ARCH 201   Architectural Design I   (3 crs)

Introduction to architectural design process through simple projects than provide understanding of place, order, context, form, aesthetic, and function. Project phases such as programming and concept development are presented. Meaning of project site, contextual constraints, building materials and structural aspects are introduced for developing a complete drawing set for architectural design projects. Introduction to the building design philosophy is provided. The class is studio based and includes class/home projects for architectural design development. Prerequisite: ARCH 102; ARCH 111

ARCH 202   Introduction to Computer Aided Drawing   (3 crs)

The course introduces computers as tool in architectural projects production with emphasis in AutoCAD program. Study procedures of computer drawing and graphics for producing 2D buildings plans, section and elevations; three-dimensional building model. Skills such as computer drafting in 2D and 3D, image processing, rendering, and plotting are obtained through series of assignments. The class is a combination of lecture (2) and practical modules (1) and includes theory, exercises, tools and class/home assignments for computer aided drawing. Prerequisite: ARCH 111; CMPS 100B.

ARCH 211   Architectural Design II   (3 crs)

Research, theory and field studies generate solving architectural design problems associated with client's needs. The concept of the project brief is presented. The course develops the ability of function, environment, climate, culture, and construction materials and systems integration within the project. Horizontal and vertical communication within the building is introduced. Simple but complex projects contribute to the progress of project visualization. The class is studio based and includes class/home projects for architectural design development. Prerequisite: ARCH 201.

ARCH 212   Introduction to BIM Architecture   (3 crs)

The course provides students with computer drafting skills enhancement and understanding of methods for BIM generating. Students obtain necessary abilities for construction drawings production. The class is a combination of lecture (2) and practical modules (1) and includes theory, exercises, tools and class/home assignments for building modelling. Prerequisites: ARCH 202.

ARCH 301   Architectural Design III   (3 crs)

The complex nature of architectural projects is understood. The course provides knowledge in urban context analysis for developing design criteria of intervention strategies, evaluation of alternatives and selecting final design solution. Projects' contextual constrains and construction documentation phase are introduced. The class is studio based and includes class/home projects for architectural design development. Prerequisite: ARCH 211; ARCH 212.

ARCH 302   Advanced Architectural Design Theories   (3 crs)

Course examines design theory to develop cognitive and problem-solving skills. The difference between theory and design theory of architecture is explored. Also explored are issues of order and organization, phenomena of perception,

elements and organizing principles of form and space, ordering principles, design typology, designers and design thinking, and design process. The course provides comprehensive knowledge in buildings of different scale and function architectural design requirements. The class is composed of theoretical modules and includes lectures, homework, presentations, quizzes, and exams. Prerequisite: ARCH 211.

ARCH 303   Building Construction I – Concrete Design   (3 crs)
Structural principles and requirements in concrete design are studied. Primary and secondary loads, loads combination, static of structural elements, design of foundations, columns, beams, slabs and stairs, and deflections and cracks are emphasized. Structural calculations and construction methods in concrete work are highlighted. The class is a combination of lecture (2) and practical modules (1) and includes theory, exercises, tools and class/home assignments, and projects. Prerequisite: ARCH 212; CIVE 221A.

ARCH 304   Building Construction Methods   (3 crs)
This course concentrates in building construction methods including ecological. Types of buildings' structures and their construction methods and techniques are studied. Foundation, floor, wall and roof systems, moisture and thermal protection, building details, building joints and movements and pre-fabricating techniques are emphasized. Construction techniques of special form: dome, vault, shell, space frame and metal structure. The role of architectural engineer in construction supervision, its duties and responsibilities are studied. The class is a combination of lecture (2) and practical modules (1) and includes theory, exercises, tools and class/home assignments, and projects. Prerequisites: ARCH 211; CIVE 221A.

ARCH 305   Ecology and Building Environmental   (3 crs)
                Control Systems I
This course provides students with basic principles and the application of Environmental Control Systems involved in buildings impacting its physical, structural, and functional dimensions as well as performance. Systems integration into building envelope, their impact on building performance, selection criteria based on sustainable design principles is understood. Plumbing and sanitary (water supply and distribution, sanitary including drainage, plumbing design and drawing), electrical (electrical safety, electrical distribution and circuit design, wiring, and electrical drawing) and safety system (fire safety design and drawing) are studied detailed. The class is a combination of lecture (2) and practical modules (1) and includes theory, exercises, tools and class/home assignments, and projects. Prerequisite: ARCH 212; ARCH 302.

ARCH 306   History of Architecture I   (2 crs)
Architecture chronological evolution from the prehistoric period, through ancient to early Christian, Gothic, Renaissance, Baroque, and Industrial Revolution to the Modern movements is briefly studied. Vernacular architecture, building types and construction methods of the region are comprehended. The class is composed of theoretical modules and includes lectures, homework, presentations, quizzes, and exams. Prerequisite: ARCH 211.

ARCH 311   Architectural Design IV   (4 crs)

Production of construction drawings used in the building industry is introduced. Knowledge in construction drawings content including structure, floor plans, elevation and sections, roof and site plans, walls, floors, roof sections and details, interior finishes elevation and details, schedules of building elements (windows, doors and other) and finishes and other are studied. Students drawing skills are developed for full set of construction drawings production. The class is studio based and includes class/home projects for architectural design development. Prerequisites: ARCH 301.

ARCH 313   Building Constructions II - Wood and   (3 crs)
                        Masonry Constructions Design

Structural principles and requirements in wooden constructions are studied. Building assemblies, members and joints are considered. Masonry work, types and applications in buildings are comprehended. Materials employed in masonry constructions are highlighted. Both wood and masonry structural calculations and construction methods are emphasized. The class is a combination of lecture (2) and practical modules (1) and includes theory, exercises, tools and class/home assignments, and projects. Pre-requisite: ARCH 303.

ARCH 316   History of Architecture II   (2 crs)

Islamic architecture chronological development from Umayyad in Syria and Iraq through classical periods in Spain, North Africa, Middle East, Fatimad, Ayyubid, Mamluk to the Ottoman period is studied. Distinctive Islamic features and Islamic architecture influence on other architectural styles are comprehended. Emphasis on contemporary regional architecture is made. The class is composed of theoretical modules and includes lectures, homework, presentations, quizzes, and exams. Prerequisite: ARCH 306.

ARCH 400   Approved Professional Experience   (0 cr)

Bachelor students are required to undergo eight weeks of on-the-job experience with an approved professional firm. Prerequisite: ARCH 404.

ARCH 401   Final Project I   (3 crs)

The first part of the final project, which is research oriented is aimed to develop a comprehensive architectural solution that serves the society. Starts with project topic selection, programming studies, site selection, and ends with a research report completion. This part will consider general requirements for structural, environmental, and building services. Focus in assessment is on the architectural solution. Each student prepares an individual program for this course, concluding with a formal and bound document. The students work individually on research under the supervision of the instructor. Prerequisite: ARCH 404.

ARCH 402   Final Project II   (3 crs)

Involves individual projects design resolution based upon the solutions and findings initiated in ARCH 404. It focuses on integrating the structural and building system designs with the previously accomplished architectural design in part one. The first phase of the course is devoted to design structural and services systems and preparation of related working drawing. The project encompasses all phases including working drawings and specifications preparation. The final project is

developed under the guidance and advice of a faculty supervisor and is presented and defended in a formal public jury. Prerequisite: ARCH 401.

ARCH 403   Building Constructions III - Steel and   (3 crs)
**   Glass Design**

The course concentrates on steel constructions structural principles and constraints. Types of steel structural members, assemblies and joints are studied. The applications of glass in building construction including curtain walls are highlighted. Both steel and glass structural calculations and construction methods are emphasized. The class will include hands-on applications, exercises, homework, quizzes, and exams. The class is a combination of lecture (2) and practical modules (1) and includes theory, exercises, tools and class/home assignments, and projects. Prerequisite: ARCH 313.

ARCH 404   Architectural Design V   (4 crs)

Last project phase – project implementation is introduced, and the entire process of architectural design is understood. Studio explores design at the scale of the urban context. Scope covers design of architectural elements and their situation in the urban context. Attention is paid to contextual issues, such as site, location, and climate. Social, cultural and behavioral issues are also addressed. Commercial factors influencing projects are introduced. The class is studio based and includes class/home projects for architectural design development. Prerequisite: ARCH 311.

ARCH 405   Ecology and Building Environmental   (3 crs)
**   Control Systems II**

The course provides knowledge in Heating, Ventilating, and Air-conditioning systems' types. Systems selection criteria based on sustainable and ecological design is studied. Comprehension of systems performance and total building management system is offered. HVAC systems technology, equipment and calculations, design thermal load calculations, air distribution and duct design and sizing, and central refrigeration systems are studied. The class is a combination of lecture (2) and practical modules (1) and includes theory, exercises, tools and class/home assignments, and projects. Prerequisites: ARCH 305.

ARCH 407   Sustainable Architectural Design   (2 crs)

Sustainability in building design is introduced and environmental factors impact on design process is studied. This course accents on indoor thermal comfort provision by considering comfort zones, site location, climate, solar geometry, shading and radiation, wind speed and direction. Alternative sources of energy for buildings operation and green buildings are also comprehended. The class is a combination of lecture (1) and practical modules (1) and includes theory, exercises, tools and class/home assignments, projects for architectural drawing. Prerequisite: ARCH 302.

ARCH 408   Working Drawings   (3 crs)

Production of construction drawings used in the building industry is introduced. Knowledge in construction drawings content including structure, floor plans, elevation and sections, roof and site plans, walls, floors, roof sections and details, interior finishes elevation and details, schedules of building elements (windows, doors and other) and finishes and other are studied. Students drawing skills are

developed for full set of construction drawings production. The class is a combination of lecture (2) and practical modules (1) and includes theory, exercises, tools and class/home assignments, and projects. Prerequisites: ARCH 404.

ARCH 415   Building Lighting and Acoustical Design   (3 crs)
Electrical and natural light sources are studied. Lighting design process steps are enlightened. Quality and quantity of illumination, calculation, selection and positioning of light sources is emphasized. Acoustical considerations in architectural design are highlighted. Acoustical properties of materials and room shapes, sound absorption and transmission, noise control and materials selection are understood. The class is a combination of lecture (2) and practical modules (1) and includes theory, exercises, tools and class/home assignments, and projects. Prerequisite: ARCH 405.

ARCH 506   Construction Projects Specification and Quantities   (2 crs)
Contract documents, divisions of specifications, types of specifications, technical divisions options and alternatives, contracts, time and money, changes bonds liens, government contracts, general conditions, special conditions, proposal form, instruction to bidders, invitations to bid, checking, interpretation of specifications, and computerized specifications. Local standard public works contract. The class is a combination of lecture (1) and practical modules (1) and includes theory, exercises, tools and class/home assignments, and projects. Prerequisite: ARCH 408.

CIVE 210A   Mechanical Statics for Architectural Engineers   (3 crs)
This course covers the following topics: force vector, 2-D system of vectors, moment, couple, resultants, static equilibrium of 2-D forces and moments, centroid, truss, friction. Prerequisite: PHYS 170.

CIVE 213A   Strength of Materials for Architectural Engineers   (3 crs)
This course covers five sections. 1) Lathe - machine components and different operations; 2) Basic principles of arc (AC and DC) and gas welding; 3) machine-shop, basic principle of milling, grinding, and drilling machines; 4) soldering of electronic components, and 5) electric wiring. The class is composed of theoretical modules and includes lectures, homework, presentations, quizzes, and exams. Prerequisite: CIVE 210A.

CIVE 221A   Construction Materials for Architectural Engineers   (3 crs)
This course covers the composition and properties of engineering construction materials through hands-on laboratory experiments. The course introduces students to developments in construction equipment and technologies and Includes field demonstrations. The class is composed of theoretical modules and includes lectures, homework, presentations, quizzes, and exams. Prerequisite: CIVE 213A.

CIVE 221L   Construction Materials Laboratory   (1 cr)
The Construction Materials Laboratory is established to train students to carry out tests on common construction materials such as concrete, steel, wood, and masonry. The tests are conducted to determine the engineering properties in terms of strength, strain, fatigue, creep, elasticity, stiffness durability, and workability.

CIVE 265A   Surveying and GPS for Architectural Engineers   (3 crs)

This course deals with the theory of measurements and errors; linear measurements; surveying instruments; leveling; angles, bearings, and azimuths; stadia measurements; traversing–field aspects; traverse computations and adjustment; topographic surveying; triangulation. Prerequisite: MATH 200; ARCH 102.

CIVE 265L   Surveying and GPS Laboratory   (1 cr)
In the Surveying Laboratory, students learn how to conduct distance measurements, transits and theodolites, vertical control, directions, angular measurement, topographic surveys, area and volume of earthworks, curve setting out, planimetric adjustment, GPS observable; basic principles of GPS operations; GPS error analysis; field procedures; data collection, processing; applications. Prerequisites: MATH 200, ARCH 102.

MECH 270A   Properties of Materials for Architectural Engineers   (3 crs)
This course covers the different types of materials: metals, ceramics, polymers; type of bonds: Ionic, covalent and metallic bonds; unit cells and crystal structures, points, directions and planes within a unit cell; mechanical properties of materials: strength, toughness, ductility, resilience; failure: fatigue, creep. Thermal properties of materials: heat capacity, thermal expansion, thermal conductivity. Prerequisite: ARCH 102.

CIVE 480   Construction Management   (3 crs)
A course on organizing construction projects; pre-construction activities; bidding and contracts; fundamentals of construction planning, monitoring, and control; application of construction control tools: CPM, materials management, operations analysis, and quality control.

ARCH 321   Advanced BIM for Architecture   (3 crs)
The course provides students with computer advanced skills enhancement and methods for BIM generating. Students obtain necessary abilities buildings structural and environmental systems and materials integration into construction drawings production. Pre-requisite: ARCH 212.

ARCH 322   Modelling and Rendering   (3 crs)
Rationalized, geometrical approach to the perception and description of form. Selected examples of architectural form are first rigorously analyzed to re-derive their constructional logic and then are "built" as detailed electronic models. Students explore the potential of digital design technologies as instruments to achieve vivid, authentic, holistic simulations of architectural reality, appropriate to the testing of architectural ideas. Taught in a modified studio format. Pre-requisite: ARCH 202.

ARCH 323   Ecological Building Materials   (3 crs)
The course introduces the students the large range of ecological materials used in building industry. The appreciation of materials' impact on environment and indoor air quality is comprehended. The understanding of materials and finishes selection criteria and usage of them based on analyses of human factors will be introduced. The importance of using local materials as well as considering local market availability will be studied. Pre-requisite: CIVE 221.

**ARCH 324   Local Vernacular Architecture, Construction   (3 crs)
                      Materials, Methods and Craftworks**

The course provides knowledge on local vernacular architecture, construction materials and methods. The recognition of vernacular architecture's effect on modern design methods and buildings features is comprehended. Pre-requisite: ARCH 306.

ARCH 421   Special Topics in Interior Architecture   (3 crs)

This independent course will cover a particular topic suggested by a faculty member in the program and conducted by a student having the required pre-requisites. Pre-requisite: Permission of the Instructor, and approval of the Department.

ARCH 422   Green Buildings (Codes, Standards and Rating Systems)   (3 crs)

The course provides knowledge of the International Green Construction Code, ASHRAE 189.1 Standard for the Design of High-Performance Green Buildings, Green Building Assessment Protocol (ANSI/GBI01-2010) and LEED. It will examine site development and land use, material resource conservation, energy efficiency, water resource conservation, indoor environmental quality, building commissioning, operations, and maintenance. Pre-requisite: ARCH 311.

ARCH 423   Bio-climatic Integration into Architecture Context   (2 crs)

The course provides theoretical and practical skills in bio-climatic design and is composed of two modules: Outdoor/indoor comfort and natural ventilation assessment. The outdoor and indoor comfort module determines the areas of possible wind discomfort to make spaces more pleasant and safer for its users. The natural ventilation module estimates and optimizes natural ventilation of buildings and evaluates indoor comfort and air quality. Pre-requisite: ARCH 315.

**ARCH 424   Identification and Evaluation of the Historic Built   (3 crs)
                      Environment**

Methods, techniques and theories of researching, analyzing, documenting and evaluating the historic built environment. Includes architectural survey field methods, documentation techniques, archival research and approaches to evaluating historic significance. Pre-requisite: ARCH 306.

ARCH 425   Environmental Design Research   (2 crs)

Advanced skills for identifying research questions and methods for accomplishing research in the environmental field. A design research project is planned. Emphasis on research process including problem identification, literature review, data collection and analysis. Pre-requisite: ARCH 311.

ARCH 426   Human Factors   (2 crs)

The psychology of the client or user is a crucial factor influencing the design of the environment and the practice of interior architecture. Facts will be gathered about the interaction of the environment and user's culture, gender, stage of life cycle and physical characteristics. Pre-requisite: ARCH 405.

6. Bachelor of Science in Interior Architecture Engineering

6.1. Program Overview

The IAE program is designed to meet the Foundation for Interior Design Education Research (FIDER) standards. Interior Architecture Engineering combines art and science to create a distinct, functional, and eco-friendly living and working space by focusing on peoples' lifestyle, culture, comfort, health and safety.

6.2. Program Objectives

The objectives of the program are to:

1) Provide students with solid, up-to-date information, professional experience, and practice in the discipline.
2) Develop creative designers/interior architects who can formulate, propose, and carry out design solutions relevant to the needs of people and the environment.
3) Encourage research and creative thinking to identify and solve problems in response to user needs.
4) Prepare students to play an active role in the community.
5) Qualify graduates to work with competence and esthetical professionalism in the field.
6) Equip students with the academic tools necessary to pursue a graduate degree in international academic institutions.

6.3. Program Learning Outcomes

A student graduating from the Interior Architecture Engineering program will be able to:

1) Identify design issues, conduct research, and to provide solutions.
2) Deal with a large scope of design projects, and to understand the different materials and technologies.
3) Demonstrate creative and technical abilities for problem solving, and the capacity for critical thinking.
4) Apply skills and knowledge in a studio area of concentration with an original creative concept brought into visual form with effective presentation.
5) Define and integrate an understanding of the roles graphic designers/ interior architects have in today's world.
6) Practice interior architecture in various contexts and cultures.
7) Operate in a multidisciplinary environment.
8) Serve the community in organizations in or within both the public and private sectors.

6.4. Admission Requirements

Admission requirements for a Bachelor of Interior Architectural Engineering Program are as specified in **College Section 6.a.**

6.5. Graduation Requirements

To graduate with a Bachelor's Degree in Interior Architecture Engineering, students must satisfactorily complete 137 credits taken over eleven semesters within four academic years, with an overall minimum average of 65 percent, and a cumulative average of 70 percent in the major courses. The University, College, and Program requirements are as given in the following table:

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
27	3	98	9	137

6.6. University Requirements

The University requirements consist of nine courses comprising of 27 credit hours as specified in **College Section 8.**

6.7. College Requirements

The College requirement consist of one (1) course of 3 credit hours as given below:

Code	College Courses	Credit Hours
EECE 130	Computers and Programming I	3

6.8. Program Requirements

I) Core Requirements

The program's core requirements consist of 35 courses encompassing 98 credit hours.

II) Elective Requirements

This includes the following 7 courses. A student has to take a total of 9 credit hours from this list.

Code	Elective Requirements Courses	Credit Hours
INTA 321	Advanced BIM for Architecture	3
INTA 422	Green Buildings (Codes, Standards and Rating Systems)	3
INTA 423	Bio-climatic Integration into Architecture Context	2
INTA 497	Special Topics in Interior Architecture	3

6.9. Plan of Study: Bachelor of Interior Architecture Engineering

Year I		
Fall Semester		**18 Credits**
Code	**Course Title**	**Credit Hours**
INTA 130	Architectural Drawing I	3
ENGL 101	Basic Academic English I	3
INTA 120	Basic Drawing for Interior Architects	3
ARAB 101	Academic Writing in Arabic	3
INTA 121	Color Fundamentals for Interior Architects	3
EECE 130	Computers and Programming I	3

Spring Semester		17 Credits
Code	**Course Title**	**Credit Hours**
INTA 150	History of Architecture & Interior Design I	3
INTA 220	Introduction to Computer Aided Drawing	3
ENGL 102E	English for Engineering and Sciences I	3
INTA 131	Architectural Drawing II	3
INTA 201	Interior Architecture Foundation Studio I	5

Summer Semester		6 Credits
Code	**Course Title**	**Credit Hours**
SOCS 102	Omani Society	3
ENGL 203E	English for Engineering and Sciences II	3

Year II		

Fall Semester		18 Credits
Code	**Course Title**	**Credit Hours**
INTA 151	History of Architecture & Interior Design II	3
INTA 202	Interior Architecture Studio II	5
INTA 202A	Design Theories I	1
ENGL 204	Advanced English for Academic Purposes and Research	3
INTA 221	Introduction to Building Information Modeling	3
MATH 199	Calculus I	3

Spring Semester		18 Credits
Code	**Course Title**	**Credit Hours**
INTA 203	Interior Architecture Studio III	5
INTA 203A	Design Theories II	1
ENTR 200	Entrepreneurship: Innovation and Creativity	3
INTA 234	Modeling & Rendering	3
INTA 240	Interior Construction	3
ENGL 305	Advanced English Language and Communication Skills	3

Year III		

Fall Semester		15 Credits
Code	**Course Title**	**Credit Hours**
INTA 304	Interior Architecture Studio IV	5
INTA 304A	Design Theories III	1
INTA 334	Lighting Design	2
INTA 241	Materials in Interior Design	2
INTA 232	Visual Presentation Technique	2
INTA 250	Environmental Control System in Interiors	3

Spring Semester		15 Credits
Code	**Course Title**	**Credit Hours**
INTA 305	Interior Architecture Advanced Studio V	5
INTA 305A	Design Theories IV	1
INTA 242	Professional Practice for Interior Architecture	3
INTA 344	Advanced Detailing	3
INTA 335	Modern Practices in Interior Design	3

Summer Semester		0 Credits
Code	**Course Title**	**Credit Hours**
INTA 400	Practical Training	0
Year IV		
Fall Semester		**15 Credits**
Code	**Course Title**	**Credit Hours**
INTA 406	Interior Architecture Advanced Studio VI	5
INTA 406A	Design Theories V	1
INTA 491	Final Year Project I	3
INTA 390	Exhibition Design	3
XXX	Major Elective Course	3
Spring Semester		**15 Credits**
Code	**Course Title**	**Credit Hours**
INTA 342	Furniture Design	2
INTA 492	Final Year Project II	5
INTA 445	Design Management	2
XXX	Major Elective Course	3
XXX	Major Elective Course	3

6.10. Course Description

INTA 130   Architectural Drawing I   (3 crs)
The course will supply the students with basic skills in the graphic communication of visual expressions. Practice will be provided for the control of the line thickness in plans, elevations and sections drawing as well as for generating clarity in spacing and crossing of lines in defining planar elements. These skills will emphasize space geometry expression in two-dimensional drawings. Skills to be addressed include orthographic and parallel lines drawing techniques as well as lettering.

INTA 120   Basic Drawing for Interior Architects   (3 crs)
Freehand drawing with emphasis on the development of skills in perceiving lines, shape, form, proportions, shading and rendering techniques in various types of pencils, charcoal and ink. Material and methodology: still life, landscape, and life drawing, along with basics in perspective drawing.

INTA 131   Architectural Drawing II   (3 crs)
This course deals with more complex exercises on parallel line and orthographic drawings as well as with interiors perspective drawings. The knowledge of understanding and use of international conventions of architectural drawing symbols will be given. Architectural drawing phases as well as their content will be highlighted. Skills to be addressed include orthographic and perspective drawing, interior architecture drawing symbols. Prerequisite: INTA 130.

INTA 121   Color Fundamentals for Interior   (3 crs)
               Architects
Fundamentals of colour theory and its application for graphic designer, class lectures and demonstrations followed with exercises in colour perception, colour

mixing, and the use of colour symbolism from different cultural perspectives. Application of traditional and digital media.

INTA 150   History of Architecture and Interior Design I   (3 crs)
This course provides an overview of architecture and interior design's history development as a collective expression of art, architecture, science and culture times and as a resource to stimulate new ideas of eras spanning from prehistoric times up to the end of the Gothic period. Awareness of design typology, specific elements of interior decoration and ornamentation, furniture design evolution, metal works, ceramic and textile.

INTA 151   History of Architecture and Interior Design II   (3 crs)
This course is an overview of architecture and interior design's history development from early Renaissance until the beginning of Industrial Revolution (18th Century). The course provides the students with comprehensive knowledge of Islamic Architecture and Interior Design's history as well as with awareness of design typology, specific elements of interior decoration and ornamentation, furniture design evolution, metal works, ceramic and textile. Prerequisite: INTA 150.

INTA 201   Interior Architecture Studio I   (5 crs)
The course is designed to provide students with communication skills and visual studies through 2D and 3D drawings. A set of projects given during the course will provide students with basics knowledge of design elements such as concept, space, scale, proportion, movement, texture, color, and light. Skills to be addressed: small scale residential buildings interiors design (space types and relationships, sizes and functions) projects; projects presentation; modeling. Prerequisites: INTA 120, INTA 130.

INTA 202   Interior Architecture Studio II   (5 crs)
The course continues the content and purpose of INTA 201 and concentrates on students' design skills improvement. Skills to be addressed: medium scale residential buildings (two-three-four storied dwellings) interiors design projects, and projects visualization (including modeling). Prerequisite: INTA 201.

INTA 202A   Design Theories I   (1 cr)
The course is theoretical support to the course Interior Design Studio II and provides students with comprehensive knowledge required for studio projects implementations. Co-requisite: INTA 202.

INTA 220   Introduction to Computer Aided Drawing   (3 crs)
Provides training for basic CAD applications using the Windows operating system. Develops basic familiarities and proficiency with applications commonly encountered during professional training. Prerequisite: EECE 130.

INTA 240   Interior Construction   (3 crs)
Basic interior detailing, millwork and cabinetry elements. These elements must be developed and coordinated to construct interior space. Detailing, technical drawings, specifications and scheduling are therefore integral to design development. Prerequisites: INTA 201, INTA 131.

INTA 203   Interior Architecture Studio III   (5 crs)
Advanced concepts are used in the development and application of planning techniques and spatial concepts. Emphasis is on research and analysis of existing structures, contextual development of interior solutions, building constraints, accessibility standards and specialized product and materials specifications. Attention will be attracted to the space/form shaping and compositions within the limits of the built environment. Students will obtain skills in designing large-scale residential projects. Projects topics may include large scale residences, blocks of flats, etc. Prerequisite: INTA 202.

INTA 203A   Design Theories II   (1 cr)
The course is theoretical support to the course Interior Design Studio III and provides students with comprehensive knowledge required for studio projects implementations. Co-requisite: INTA 203.

INTA 221   Introduction to Building Information Modeling   (3 crs)
The course provides students with computer drafting skills enhancement and understanding of methods for BIM generating. Students obtain necessary abilities for construction drawings production. The class is a combination of lecture (2) and practical modules (1) and includes theory, exercises, tools and class/home assignments for building modelling. Prerequisites: INTA 220.

INTA 234   Modeling and Rendering   (3 crs)
Rationalized, geometrical approach to the perception and description of form. Selected examples of architectural form are first rigorously analyzed to re-derive their constructional logic and then are "built" as detailed electronic models. Students explore the potential of digital design technologies as instruments to achieve vivid, authentic, holistic simulations of architectural reality, appropriate to the testing of architectural ideas. Taught in a modified studio format. Prerequisites: INTA 220.

INTA 299   Practical Training   (0 cr)
Diploma students are required to undergo 8- weeks of professional training in Interior Architecture with a qualified firm.

INTA 232   Visual Presentation Techniques   (2 crs)
This course intends to emphasize interior design visual communication as a range of styles and techniques. The students will be provided with up-to-date information of visual presentation techniques. Different phases of the design are studied in terms of connection between design process and presentation. Skills to be addressed: presentation of interior spaces in written and visual language; presentation technique tools and means including modeling. Pre-requisite: INTA 234.

INTA 334   Lighting Design   (2 crs)
The fundamentals, principles and art of light and colour, as well as their visual and physical effects in interior design are studied. The course explores light and colour as important elements in interior space through the study of related perceptual and physical factors. It introduces relevant terminology to define light and colour as attributes of architectural and interior space: illumination levels and temperatures,

light sources, fixtures, materials, etc. Prerequisites: INTA 121, INTA 201.

INTA 241   Materials in Interior Design   (2 crs)

The course introduces to the students the large range of materials used in interior architecture. The understanding of materials, furnishings and accessories' selection criteria and usage of them based on analyses of human factors will be introduced. The importance of using local and ecological materials in interiors as well as considering local market availability will be studied. Skills to be addressed: material for interiors (including ecological), materials selection criteria. Prerequisite: INTA 240.

INTA 242   Professional Practice   (3 crs)

This course prepares students for the professional world. Starting with self-promotion, resume writing, building up a portfolio then addressing ways to set up a professional practice, client handling, scheduling projects, writing estimates, billing, etc., while covering the basic knowledge of construction planning, and site inspection. The material is covered through lectures, discussions, assignments, field trips to Interior and/or Architectural agencies and construction sites. Pre/Co-Requisite: INTA 203.

INTA 250   Environmental Control Systems in Interiors   (3 crs)

Provides an integrated presentation of environmental control systems (lighting, heating, ventilating, air conditioning, sanitary and acoustics) with special attention to the needs of interior designers. Systems are presented as they influence one another and as they constrain interior space planning and design. Prerequisite: INTA 240.

INTA 304   Interior Architecture Studio IV   (5 crs)

The course continues the content and purpose of INTA 203 with a special emphasis on planning techniques and volumetric concepts for the design of large-scale buildings' interiors. Course components include research applied to selected client identities, design criteria for special population groups, building constraints and accessibility standards, modular design, project specifications and creative presentation methods. Projects topics may include educational facilities, office buildings, shopping centers, etc. Prerequisite: INTA 203.

INTA 304A   Design Theories III   (1 cr)

The course is theoretical support to the course Interior Design Studio IV and provides students with comprehensive knowledge required for implementation of studio projects. Co-requisite: INTA 304.

INTA 342   Furniture Design   (2 crs)

Exploration of the basic function and design of furniture as it relates to human factors, such as anthropometrics and ergonomics. The course provides a link between historical, theoretical and practical experience. It defines the elements of form, function and aesthetic by exploring experimental concepts and adopting alternative ways of thinking about the objects that surround us. Furniture models built to scale, or other presentation techniques, will be applied as needed to effectively support the evolution of new concepts. Prerequisite: INTA 240.

INTA 305   Interior Architecture Advanced Studio V   (5 crs)

A comprehensive design project management, integrating all aspects of design, theoretical, technological and representational, allows students to perform various scales of investigation within one design problem. Students will obtain skills in drawing's production. Projects topics may include governmental facilities, small structural changes and additions to buildings, headquarters, T.V. studios, etc. Prerequisite: INTA 304.

INTA 305A   Design Theories IV   (1 cr)

The course is theoretical support to the course Interior Design Studio IV and provides students with comprehensive knowledge required for implementation of studio projects. Co-requisite: INTA 305.

INTA 335   Modern Practices in Interior Design   (3 crs)

Focus on 19th and 20th century interior design theories and practices, exposing students to the various international schools of thought. Lectures and discussions focus on practitioners who have influenced contemporary practices worldwide. Prerequisite: INTA 151.

INTA 344   Advanced Detailing   (3 crs)

Development of a greater focus on holistic and sustainable approaches to design. Issues such as demand and supply of energy and water, and the generation of waste are covered. Principles of reduce, reuse and recycle are reiterated. Predominant emphasis is on practical strategies directly applicable in design. Material is presented as lectures and seminars, supplemented with readings. Students should present a detailed project at the end of the course. Prerequisite: INTA 240.

INTA 390   Exhibition Design   (3 crs)

Essential research, planning and design tools to prepare and produce persuasive exhibition and environments such as product shows, museums and gallery interiors. The course explores topics of planning, lighting, stagecraft, narrative composition and human perception. Prerequisites: INTA 344, INTA 305, INTA 334.

INTA 400   Practical Training   (0 cr)

Bachelor students are required to undergo eight weeks of on-the-job experience with an approved professional firm. Prerequisite: INTA 305.

INTA 406   Interior Architecture Advanced Studio VI   (5 crs)

This is research directed design studio. Students pursue directed research in support of a design investigation. It focuses on topics related the aspects of architectural design such as history/theory, technology, representation, and heritage resource management etc. Solutions for the problems in interior architecture related to the high levels of complexity, with emphasis on reuse and adaptabilities are covered. Project topics may include: leisure facilities buildings and public spaces design.   Prerequisite: INTA 305.

INTA 406A   Design Theories V   (1 cr)

The course is theoretical support to the course Interior Design Studio VI and provides students with comprehensive knowledge required for studio projects implementations. Co-requisite: INTA 406.

INTA 491   Final Year Project I   (3 crs)

Students are required to choose a design topic with the guidance of a supervisor and approval of faculty. Each student prepares an individual program for INTA 492, concluding with a formal and bound document. Prerequisite: INTA 305.

INTA 492   Final Year Project II   (5 crs)

Involves individual design resolution based upon the research findings initiated in INTA 491. The final project is developed under the guidance and advice of a faculty supervisor and is presented and defended in a formal public jury. Prerequisite: INTA 491.

INTA 445   Design Management   (2 crs)

Principles and practices of the economic and commercial aspects of architectural and design practice in a global economy. As for microeconomics theory as it applies to private enterprise: basic business economics, planning and management. Attention is also given to the processes and skills required in establishing an independent architectural office. Prerequisites: GRDS 340, INTA 406.

INTA 321   Advanced BIM for Architecture   (3 crs)

The course provides students with computer advanced skills enhancement and methods for BIM generating. Students obtain necessary abilities buildings structural and environmental systems and materials integration into construction drawings production. Pre-requisite: INTA 221.

**INTA 422   Green Buildings (Codes, Standards and Rating   (3 crs)
              Systems)**

The course provides knowledge of the International Green Construction Code, ASHRAE 189.1 Standard for the Design of High Performance Green Buildings, Green Building Assessment Protocol (ANSI/GBI01-2010) and LEED. It will examine site development and land use, material resource conservation, energy efficiency, water resource conservation, indoor environmental quality, building commissioning, operations, and maintenance. Pre-requisite: INTA 250.

INTA 423   Bio-climatic Integration into Architecture Context   (2 crs)

The course provides theoretical and practical skills in bio-climatic design and is composed of two modules: Outdoor/indoor comfort and natural ventilation assessment. The outdoor and indoor comfort module determines the areas of possible wind discomfort to make spaces more pleasant and safer for its users. The natural ventilation module estimates and optimizes natural ventilation of buildings and evaluates indoor comfort and air quality. Pre-requisite: INTA 250.

INTA 497   Special Topics in Interior Architecture   (3 crs)

This independent course will cover a particular topic suggested by a faculty member in the program and conducted by a student having the required pre-requisites. Prerequisite: Permission of the Instructor, and approval of the Department.

**INTA 501   Identification and Evaluation of the Historic Built   (3 crs)
Environment**

Methods, techniques and theories of researching, analyzing, documenting and evaluating the historic built environment. Includes architectural survey field methods, documentation techniques, archival research and approaches to evaluating historic significance. Prerequisite: INTA 151.

INTA 502   Environmental Design Research   (3 crs)

Advanced skills for identifying research questions and methods for accomplishing research in the environmental field. A design research project is planned. Emphasis on research process including problem identification, literature review, data collection and analysis. Prerequisite: INTA 250.

INTA 504   Human Factors   (3 crs)

The psychology of the client or user is a crucial factor influencing the design of the environment and the practice of interior architecture. Facts will be gathered about the interaction of the environment and user's culture, gender, stage of life cycle and physical characteristics. Prerequisite: INTA 241.

7. Diploma in Interior Architecture Engineering

7.1. Program Overview

The IAE Program is designed to meet the Foundation for Interior Design Education Research (FIDER) standards. Interior Architecture Engineering combines art and science to create a distinct, functional, and eco-friendly living and working space by focusing on people's lifestyle, culture, comfort, health and safety.

Refer to Bachelor in Interior Architecture Engineering **Section 6.1.**

7.2. Program Objectives

Refer to Bachelor in Interior Architecture Engineering **Section 6.2.**

7.3. Program Learning Outcomes

Refer to Bachelor in Architecture Engineering **Section 6.3.**

7.4. Admission Requirements

Admission requirements for a Diploma in Architectural Engineering Program are as specified in **College Section 6.a .**

7.5. Graduation Requirements

To graduate with a Diploma in Interior Architecture Engineering, students must satisfactorily complete 74 credits with an overall minimum average of 65 percent. The University, College, and Program requirements are as given in the following table:

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
18	3	53	-	74

7.6. University Requirements

The University requirements for Diploma in Interior Architecture Engineering program consist of six (6) courses comprising of 18 credit hours as shown below.

Code	University Courses	Credit Hours
ENGL 101	Basic Academic English	3
ENGL 102E	English for Engineering and Sciences I	3
ENGL 203E	English for Engineering and Sciences II	3
ENTR 200	Entrepreneurship – Innovation and Creativity	3
MATH 199	Calculus I	3
SOCS 102	Omani Society	3

7.7. College requirements

The College requirement consist of one (1) course of 3 credit hours as given below:

Code	College Courses	Credit Hours
EECE 130	Computers and Programming I	3

7.8. Program Requirements

I) Core Requirements

The program core requirements consist of 18 courses encompassing 53 credit hours.

II) Elective Requirements

There are no elective requirements for this program.

7.9. Plan of Study: Diploma in Interior Architecture Engineering

Year I		
Fall Semester		**18 Credits**
Code	**Course Title**	**Credit Hours**
INTA 130	Architectural Drawing I	3
ENGL 101	Basic Academic English I	3
INTA 120	Basic Drawing for Interior Architects	3
INTA 121	Color Fundamentals for Interior Architects	3
SOCS 102	Omani Society	3
EECE 130	Computers and Programming I	3
Spring Semester		**17 Credits**
Code	**Course Title**	**Credit Hours**
INTA 150	History of Architecture & Interior Design I	3
ENGL 102E	English for Engineering and Sciences I	3
INTA 131	Architectural Drawing II	3
INTA 201	Interior Architecture Foundation Studio I	5
INTA 220	Introduction to Computer Aided Drawing	3

Summer Semester		6 Credits
Code	Course Title	Credit Hours
ENGL 203E	English for Engineering and Sciences II	3
MATH 199	Calculus I	3
Year II		
Fall Semester		15 Credits
Code	Course Title	Credit Hours
ENTR 200	Entrepreneurship: Innovation and Creativity	3
INTA 202	Interior Architecture Studio II	5
INTA 202A	Design Theories I	1
INTA 221	Introduction to Building Information Modeling	3
INTA 151	History of Architecture & Interior Design II	3
INTA 240	Interior Construction	3
Spring Semester		15 Credits
Code	Course Title	Credit Hours
INTA 203	Interior Architecture Studio III	5
INTA 203A	Design Theories II	1
INTA 242	Professional Practice for Interior Architecture	3
INTA 234	Modeling & Rendering	3
INTA 250	Environmental Control System in Interiors	3
Summer Semester		0 Credits
Code	Course Title	Credit Hours
INTA 299	Practical Training	0

7.10. Course Description

Refer to Bachelor Science in Interior Architecture Engineering S**ection 6.10.**

Department of Chemical Engineering

1. Personnel

Department Chairperson:	Dr. Muhammad Shariq Khan
Associate Professor:	Dr. Mazhar Ul-Islam
	Dr. Md. Wasi Ahmad
	Dr. Muhammad Shariq Khan
Assistant Professor:	Dr. Shaukat Khan
	Dr. Refat Al-Shannaq
Laboratory Technician:	Ms. Sumaya Yasir Said Bait Aamir
	Ms. Amira Ahmed Ali Kashoob

2. Vision

To be the regional leader in providing quality education in Chemical Engineering and to serve the industry through research, innovation and state-of-the-art technology.

3. Mission

The mission of the Department of Chemical Engineering is to provide high school graduate students with a strong foundation in the technical aspects of chemical engineering as well as communication, teamwork, and problem-solving skills required for professional success. This is achieved by offering students high-quality education supported by practical skills, scientific and technological breakthroughs of knowledge and professional training in the field.

4. Programs Offered

The department offers the following Diploma and Bachelor programs:

a) Diploma Program

1) Diploma in Chemical Engineering

b) Bachelor Program

1) Bachelor of Science in Chemical Engineering

5. Bachelor of Science in Chemical Engineering

5.1. Program Overview

The Bachelor of Science in Chemical Engineering is designed to engage students for at least 30 credit hours of basic sciences and mathematics, at least 66 credit hours of engineering sciences, engineering design, communications skills, and at least 15 credit hours of humanities and social sciences, excluding language and technical writing courses. Laboratory hands-on experience and emphasis on design are important elements that are integrated throughout the curriculum.

The curriculum is designed to grant students the Bachelor of Sciences degree upon the successful completion of the four-year program. The first common year with other engineering majors allows students to switch between the engineering majors at the start of the second year of their study. The program can also be concluded with a Diploma Degree upon the successful completion of a two-year program.

The University, College, and Program requirements for this program are listed in the College introductory pages.

5.2. Program Objectives

The objectives of the program are to:

1) Enable students with sound technical skills required for successful careers in various chemical engineering disciplines.
2) Promote excellence in research since program graduates will be expected to conduct innovative and independent research activities.
3) Provide services to the community at large with special consideration to the needs and circumstances of the Sultanate of Oman, and the region.
4) Prepare students for leadership roles in a highly competitive and challenging environment in major fields of chemical engineering such as industry, government, and academia.
5) Prepare students for life-long learning, critical and independent thinking, sound judgment, professional ethics, and innovation.

5.3. Program Learning Outcomes

Each student graduating from the Chemical Engineering program will possess:

1) An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2) An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3) An ability to communicate effectively with a range of audiences.
4) An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5) An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6) An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7) An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

5.4. Admission Requirements

Admission requirements for a Bachelor of Science in Chemical Engineering Program are as specified in **College Section 6.a**.

5.5. Graduation Requirements

To graduate with a Bachelor of Science Degree in Chemical Engineering, students must satisfactorily complete 138 credits taken over four academic years, with an overall minimum average of 65 percent, and a cumulative average of 70 percent in the major courses. The University, College, and Program requirements are as given in the following table:

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
27	39	60	12	138

5.6. University Requirements

The University requirements consist of nine courses comprising of 27 credit hours as specified in **College Section 8**.

5.7. College Requirements

The college requirements consist of 15 courses comprising of 39 credit hours as given below:

Code	College Courses	Credit Hours
EECE 130	Computers and Programming I	3
ENGR 100	Introduction to Engineering	3
ENGR 105	Engineering Graphics	2
ENGR 110	Engineering Workshop	1
ENGR 300	Engineering Economy	3
MATH 200	Calculus II	3
MATH 205	Calculus III	3
MATH 210	Differential Equations	3
MATH 250E	Probability and Statistics	3
MATH 335	Mathematics for Science and Engineering	3
PHYS 170	Fundamentals of Physics I	3
CHEE 401	Final Year Project I	0
CHEE 402	Final Year Project II	3
XXX	Science Elective	3
XXX	General Elective	3

5.8. Program Requirements

I) Core Requirements

The program core requirements consist of 22 courses (19 courses and 3 laboratories) encompassing 60 credit hours.

II) Elective Core Requirements

A student has to take a total of 6 courses (3 courses and 3 laboratories) comprising of 12 credit hours from the following list:

Code	Elective Requirement Courses	Credit Hours
CHEE 450	Materials Engineering	3
CHEE 455	Introduction to Nanotechnology	3
CHEE 460	Computational Engineering	3
CHEE 465	Fundamentals of Natural Gas Process	3
CHEE 475	Chemical Reactor Design	3
CHEE 480	Biochemical Engineering	3
CHEE 485	Fuel Cell Technology	3
CHEE 487	Polymer Engineering	3
CHEE 488	Instrumentation and Process Control	3
CHEE 489	Pharmaceutical Biotechnology	3
CHEE 490	Renewable Energy	3
CHEE 495	Wastewater Treatment	3
CHEE 311L	Reactive Process Engineering Laboratory	1
CHEE 341L	Biotechnology Laboratory	1
CHEE 411L	Separation Process Engineering Laboratory	1
CHEE 421L	Chemical Engineering Process Design Lab	1
CHEE 476L	Chemical Reactor Design Laboratory	1
CHEE 486L	Fuel Cell Laboratory	1
CHEE 487L	Polymer Engineering Laboratory	1

5.9. Plan of Study: Bachelor of Science in Chemical Engineering

Year I		
Fall Semester		**15 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 101	Basic Academic English I	3
SOCS 102	Omani Society	3
ENGR 105	Engineering Graphics	2
CHEM 140	Chemistry I	3
CHEM 140L	Introductory Chemistry Laboratory	1
MATH 199	Calculus I	3
Spring Semester		**16 Credits**
Code	**Course Title**	**Credit Hours**
ENGR 100	Introduction to Engineering	3
ENGL 102E	English for Engineering and Sciences I	3
ENGR 110	Engineering Workshop	1
EECE 130	Computers and Programming I	3
CHEM 180	Chemistry II	3
MATH 200	Calculus II	3
Summer Semester		**6 Credits**
Code	**Course Title**	**Credit Hours**

| ENGL 203E | English for Engineering and Sciences II | 3 |
| MATH 205E | Probability and Statistics | 3 |

Year II

Fall Semester		**18 Credits**
Code	**Course Title**	**Credit Hours**
PHYS 170	Fundamentals of Physics I	3
CHEM 260	Analytical Chemistry	3
CHEE 270	Fluid Mechanics for Chemical Engineers	3
CHEE 275	Thermodynamics for Chemical Engineers	3
CHEE 201	Principles of Chemical Engineering	3
CHEM 210	Organic Chemistry I	3

Spring Semester		**17 Credits**
Code	**Course Title**	**Credit Hours**
ENTR 200	Introduction to Entrepreneurship	3
CHEE 208	Instrumentation	3
CHEM 250	Organic Chemistry II	3
CHEM 250L	Organic Chemistry Laboratory	1
CHEE 270L	Fluid Mechanics Laboratory	1
CHEE 280	Mass Transfer	3
CHEM 370	Physical Chemistry	3

Summer Semester		**6 Credits**
Code	**Course Title**	**Credit Hours**
MATH 205	Calculus III	3
MATH 210	Differential Equations	3

Year III

Fall Semester		**18 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 204	Advanced English for Academic Purposes and Research	3
CHEE 300	Computational Methods in Chemical Engineering	3
CHEE 330	Materials Science	3
MATH 335	Mathematics for Science and Engineering	3
CHEE 340	Introduction to Biotechnology	3
CHEE 380	Heat Transfer	3

Spring Semester		**17 Credits**
Code	**Course Title**	**Credit Hours**
ENGR 300	Engineering Economy	3
ENGL 305	Advanced English Language and Communication Skills	3
CHEE 310	Reactive Process Engineering	3
CHEE 470	Chemical Process Dynamics and Control	3
CHEE XXX	Major Elective	3
CHEE XXX	Major Elective Laboratory	1
CHEE XXX	Major Elective Laboratory	1

Summer Semester		0 Credits
Code	**Course Title**	**Credit Hours**
CHEE 400	Practical Training	0
Year IV		
Fall Semester		**15 Credits**
Code	**Course Title**	**Credit Hours**
ARAB 101	Academic Writing in Arabic	3
CHEE 401	Final Year Project I	0
CHEE 410	Separation Processes	3
CHEE 420	Chemical Engineering Process Design	3
CHEE XXX	Major Elective	3
XXX	Science Elective	3
Spring Semester		**10 Credits**
Code	**Course Title**	**Credit Hours**
CHEE 402	Final Year Project II	3
CHEE XXX	Major Elective	3
XXX	General Elective	3
CHEE XXX	Major Elective Laboratory	1

5.10. Course Description

CHEE 201   Principles of Chemical Engineering   (3 crs)
This course covers: Converting the earth's Resources into Useful Products; Process Flows: Variables, Diagrams; Mathematical Analysis of Material Balance Equations and Process Flow Sheets; Synthesis of Reactor Flow Sheets and Selection of Reactor Process Conditions. Prerequisite: CHEM 180, MATH 205.

CHEE 208   Instrumentation   (3 crs)
The course covers the instrumentation of different chemical analysis techniques including: Chromatography (HPLC, GC, and TLC), UV-Visible spectroscopy, IR- and FTIR spectroscopy, X-ray spectrometry, and Atomic Absorption Fluorescence spectroscopy. Prerequisite: CHEM 260.

CHEE 270   Fluid Mechanics for Chemical Engineers   (3 crs)
The course covers the concepts of density, volume, mass, weight, viscosity, gravitational force, fluid statics, buoyancy, balance equation, first law of thermodynamics, Bernoulli's equation, fluid friction and momentum balance. Prerequisites: MATH 205, CHEM 180.

CHEE 275   Thermodynamics for Chemical Engineers   (3 crs)
The course covers the basic concepts of thermodynamics, the three laws of thermodynamics, system and control volume analysis of thermodynamic processes, irreversibility, relations for ideal gas mixtures, Carnot Cycle, and the thermodynamic properties of chemical reactions. Prerequisites: ENGR 100, MATH 205, CHEM 370.

CHEE 280   Mass Transfer   (3 crs)
The course covers an introduction to mass transfer phenomena as relevant to the chemical and process industry, theories of mass transfer, the flux laws for mass transfer, diffusion of the gases, diffusion in liquid and solid, mass transfer

coefficient, convective mass transfer, multi direction diffusion, and design principles for mass transfer equipment.   Prerequisites: CHEE 201, MATH 205.

CHEE 300   Computational Methods in Chemical Engineering   (3 crs)
The course covers numerical solutions including root finding, numerical differentiation and integration, series expansions and approximation, finite difference methods, solution of first-order ordinary differential equations, nonlinear systems. Use of MATLAB software for interpolation, extrapolation, newton method, Euler, Trapezoidal rule, Runge-Kutta methods, Mid points and curve fitting. Prerequisites: EECE 130, CHEE 201, Corequisite: MATH 335.

CHEE 310   Reactive Process Engineering   (3 crs)
This course covers principles of kinetics, analysis of both homogeneous and heterogeneous systems, reactor design, mass and energy balances for homogenous ideal reactors, batch, semi-batch, continuous stirred tank reactor, and plug flow reactor, minimization of by-product and pollution production, thermal effects on reactions. Prerequisites: CHEE 370, CHEE 280, CHEE 275, Co-requisites: CHEE 300

CHEE 330   Materials Science   (3 crs)
The course covers and describes the relationship between the structures and properties of materials. This includes the atomic structure and interatomic bonding, The structure of crystalline solids, Crystallographic points, directions, and planes. Imperfections in solids. Prerequisite: MATH 335, CHEM 370.

CHEE 340   Introduction to Biotechnology   (3 crs)
This course aims to cover the basic introductory concepts of biotechnology. Topics include Introduction to microbiology and biochemistry, Enzymes kinetics; immobilization techniques, Fermentation, and Sterilization Techniques. Prerequisite: CHEM 250.

CHEE 380   Heat Transfer   (3 crs)
Modes of heat transfer: conduction, convection and radiation. Thermal conductivity. Steady and unsteady state heat conduction. Convective heat transfer coefficients, external flow, internal flow, free convection, heat transfer with laminar and turbulent flows, design of heat exchange equipment: double-pipe, shell- and-tube heat exchangers, condensers and re-boilers. Radiation heat transfer. Prerequisites: CHEE 280, Co-requisite: CHEE 300.

CHEE 400   Practical Training (BS Students)   (0 cr)
This course requires eight weeks of practical training in chemical engineering with an established firm.

CHEE 401   Final Year Project I   (0 cr)
A supervised project, normally in groups of three students, aimed at providing practical experience in some aspects of chemical engineering. Students are expected to complete a literature survey, project specification, critical analysis, and to acquire the necessary material needed for their intended product.

CHEE 402   Final Year Project II   (3 crs)
The course teaches students the skill to integrate the knowledge gained in different courses, by asking them to deliver a product that has passed through the design,

analysis, testing and evaluation stages. It includes production of a professional report, design process and outcome, implementation and testing, verification and validation, and critical appraisal of the project. Prerequisite: CHEE 401.

CHEE 410   Separation Processes   (3 crs)
This course covers basic concepts of separation processes, distillation, absorption, drying, evaporation, liquid-liquid extraction, filtration, cyclone system, crystallization, leaching, membrane based separations. Prerequisites: CHEE 208, CHEM 370, and co-requisite: CHEE 380.

CHEE 420   Chemical Engineering Process Design   (3 crs)
The course covers design of equipment, processes and systems of interest in chemical engineering through application of scientific, technological, economic principles. Emphasis is placed on problem formulation and the conceptual, analytical, and decision aspects of open-ended design situations. The work integrates knowledge and skills gained in previous and concurrent courses. Prerequisite: CHEE 310, CHEE 410.

CHEE 450   Materials Engineering   (3 crs)
The course covers processes and performances of materials depending on materials science. This includes applications and processing of Metal Alloys, structures, properties, applications and processing of Ceramics, Polymers: classifications, properties, and applications, composites, corrosion and degradation of materials. Prerequisite: CHEE 330.

CHEE 455   Introduction to Nanotechnology   (3 crs)
This course will cover an overview of history, manufacturing, and applications of nanomaterials. Topics will include Introduction and classification of nanomaterials, synthetic and consolidation techniques. Properties of nanomaterials, Socio – economic impact of nanotechnology, short and long term implications of nanotechnology, Environmental aspects of nanotechnology. Prerequisite: CHEE 330.

CHEE 465   Fundamentals of Natural Gas Processing   (3 crs)
The course provides fundamental understanding of the NG industry starting from the gas being brought at the wellhead to the gas entering the marketplace. The course covers overview of gas processing plant, Inlet receiving and field operations, Gas gathering, Pipeline fieldwork, Gas metering, Hydrate Inhibition, Solid separation, Gas dehydration, Acid gas removal, Hydrocarbon recovery by Mechanical Refrigeration, Absorption, NG liquefaction peak shaving and baseload facilities, NG liquefaction cycles Joule-Thompson, Expander, Cascade, LNG storage, LNG transportation, LNG regasification, Capital cost of gas processing plant. Prerequisite: CHEE 420.

CHEE 470   Chemical Process Dynamics and Control   (3 crs)
The course covers introduction to modeling, control of dynamic chemical processes, the development of first-principles models, linearization and state space form, input-output (transfer function) form, design and tuning of PID controllers, model-based control, frequency response for robustness analysis, case studies in multivariable control, numerical analysis and simulation. Prerequisites: MATH 335, CHEE 300, CHEE 310.

CHEE 480   Biochemical Engineering   (3 crs)

This course aims to cover the topic of the application of chemical engineering principles to biochemical processes. Major topics include major metabolic pathways, cell growth kinetics and cell measuring techniques, bioreactors design and types of reactors, stoichiometry of microbial growth and product formation, Product recovery and purification techniques, mixed cultures, genetic engineering. Prerequisite: CHEE 340.

CHEE 485   Fuel Cell Technology   (3 crs)

The course covers the basics of fuel cell, various types of fuel cells; cell equilibrium, standard potentials, Nernst equation, transport and adsorption in proton-exchange membranes and supported liquid electrolytes, kinetics, and catalysis, the Butler-Volmer equation, reaction routes, mechanisms; applications of fuel cells. Prerequisite: CHEE 275, CHEE 330.

CHEE 487   Polymer Engineering   (3 crs)

The course covers basic concept of synthesis and characterization of polymer, composition, molecular weight and molecular structure of the polymer, degree of polymerization, tacticity, isomerism, copolymers, crystallinity in polymers, mechanical properties of polymers, elastomers, thermoplastics, thermosets, application, polymer rheology, degradation and recycle of polymer. Prerequisite: CHEM 250.

CHEE 488   Instrumentation and Process Control   (3 crs)

The course covers principles of control theory and their application to chemical processes, single-loop feedback and feed forward control; laboratory sessions cover measurement fundamentals, signal transmission, dynamic testing, control system synthesis, implementation and adjustment. Prerequisite: CHEE 470.

CHEE 489   Pharmaceutical Biotechnology   (3 crs)

The course covers introduction to biotechnology, pharmaceuticals, therapeutic products derived from living organisms (e.g., proteins, peptides, DNA, RNA) and from the production plant, the challenges of keeping these products "active" as they are stored, shipped, and administered to patients. Prerequisite: CHEE 340.

CHEE 490   Renewable Energy   (3 crs)

The course covers energy conversion, utilization and storage for renewable technologies such as wind, solar, biomass, fuel cells and hybrid systems, energy supply from renewable resources as a result of solar power (such as direct solar radiation, and indirect forms such as bioenergy, water and wind power), geothermal energy, and modern technologies used in renewable energy. Prerequisite: CHEE 275, CHEE 330.

CHEE 495   Wastewater Treatment   (3 crs)

This course covers the fundamentals of the treatment of wastewater. Topics include the study types of wastewaters, effects of wastewater on the environment, pretreatment of wastewater, primary treatment, secondary treatment, and analyze station of wastewater treatment. Prerequisite: CHEE 410.

CHEE 270L   Fluid Mechanics Laboratory   (1 cr)

The laboratory covers experiments that include the basic principles of fluid mechanics. The course helps students to combine elements of theory and

practice. During this laboratory several experiments will be conducted that covers the course CHEE 270. Co-requisite: CHEE 270.

CHEE 311L   Reactive Process Engineering Laboratory   (1 cr)
The laboratory covers exercises in the design, operation and implementation of various types of simple chemical reactors. Co-requisite: CHEE 310.

CHEE 341L   Biotechnology Laboratory   (1 cr)
The laboratory covers exercises in techniques and instrumentation in biotechnology. Co-requisite: CHEE 340.

CHEE 411L   Separation Processes Laboratory   (1 cr)
The laboratory covers exercises in techniques and instrumentation in separation processes. Co-requisite: CHEE 410.

CHEE 421L   Chemical Engineering Process Design Laboratory   (1 cr)
The laboratory covers exercises in chemical engineering process design.
 Co-requisite: CHEE 420.

CHEE 476L   Chemical Reactor Design Laboratory   (1 cr)
The laboratory covers exercises in advanced chemical reactor design.
Co-requisite: CHEE 475.

CHEE 486L   Fuel Cell Laboratory   (1 cr)
The laboratory covers modern techniques for the design and assessment of fuel cells, and the deployment in hybrid electric systems. Co-requisite: CHEE 485.

CHEE 487L   Polymer Engineering Laboratory   (1 cr)
The laboratory covers experimental techniques to measure rheological and physical properties of various polymers. Co-requisite: CHEE 487.

6. Diploma in Chemical Engineering

6.1. Program Overview

Refer to Bachelor in Chemical Engineering **Section 5.1.**

6.2. Program Objectives

Refer to Bachelor in Chemical Engineering **Section 5.2.**

6.3. Program Learning Outcomes

Refer to Bachelor in Chemical Engineering **Section 5.3**.

6.4. Admission Requirements

Admission requirements for a Diploma in Chemical Engineering Program are as specified in **College Section 6a.**

6.5. Graduation Requirements

To graduate with a Diploma in Chemical Engineering, students must satisfactorily complete 75 credits taken over two academic years, with an overall minimum average of 65 percent. The University, College, and Program requirements are as given in the following table:

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
18	21	36	-	75

6.6. University Requirements

The University requirements for Diploma in Chemical Engineering program consist of 6 courses comprising of 18 credit hours as shown below.

Code	College Courses	Credit Hours
ENGL 101	Basic Academic English	3
ENGL 102E	English for Engineering and Sciences I	3
ENGL 203E	English for Engineering and Sciences II	3
ENGR 200	Entrepreneurship: Innovation and Creativity	3
Math 199	Calculus I	3
SOCS 102	Omani Society	3

6.7. College Requirements

The College requirements consist of 8 courses comprising of 21 credit hours as given below:

Code	College Courses	Credit Hours
CHEM 260	Analytical Chemistry	3
EECE 130	Computers and Programming I	3
ENGR 100	Introduction to Engineering	3
ENGR 105	Engineering Graphics	2
ENGR 110	Engineering Workshop	1
MATH 200	Calculus II	3
MATH 205	Calculus III	3
PHYS 170	Fundamentals of Physics I	3

6.8. Program Requirements

I) Core Requirements

The program core requirements consist of 15 courses (12 courses and 3 laboratories) encompassing 36 credit hours.

II) Elective Requirements

There are no elective requirements for this program.

6.9. Plan of Study: Diploma in Chemical Engineering

Year I		
Fall Semester		**15 Credits**
Code	Course Title	Credit Hours
ENGL 101	Basic Academic English I	3
SOCS 102	Omani Society	3

ENGR 105	Engineering Graphics	2
CHEM 140	Chemistry I	3
CHEM 140L	Introductory to Chemistry Laboratory	1
MATH 199	Calculus I	3

Spring Semester		16 Credits
Code	**Course Title**	**Credit Hours**
ENGR 100	Introduction to Engineering	3
ENGL 102E	English for Engineering and Sciences I	3
ENGR 110	Engineering Workshop	1
EECE 130	Computers and Programming I	3
CHEM 180	Chemistry II	3
MATH 200	Calculus II	3

Summer Semester		9 Credits
Code	**Course Title**	**Credit Hours**
ENGL 203E	English for Engineering and Sciences II	3
MATH 205	Calculus III	3
MATH 250E	Probability and Statistics	3

Year II		
Fall Semester		**18 Credits**
Code	**Course Title**	**Credit Hours**
PHYS 170	Fundamentals of Physics I	3
CHEE 201	Principles of Chemical Engineering	3
CHEM 210	Organic Chemistry I	3
CHEM 260	Analytical Chemistry	3
CHEE 270	Fluid Mechanics for Chemical Engineers	3
CHEE 275	Thermodynamics for Chemical Engineers	3

Spring Semester		17 Credits
Code	**Course Title**	**Credit Hours**
ENTR 200	Introduction to Entrepreneurship	3
CHEE 208	Instrumentation	3
CHEM 250	Organic Chemistry II	3
CHEM 250L	Organic Chemistry Laboratory	1
CHEE 270L	Fluid Mechanics Laboratory	1
CHEE 280	Mass Transfer	3
CHEM 370	Physical Chemistry	3

Summer Semester		0 Credits
Code	**Course Title**	**Credit Hours**
CHEE 299	Practical Training	0

6.10. Course Description

Refer to Bachelor in Chemical Engineering **Section 5.10**.

Department of Civil and Environmental Engineering

1. Personnel

Chairperson:	Dr. Mahaad Shammas
Associate Professor:	Dr. Mahaad Shammas
Assistant Professors:	Dr. Wesam Beitelmal
	Dr. Khalid Al Kaaf
	Dr. Md Akter Hosen
Laboratory Technicians:	Mr. Said Al Awaid
	Ms. Ayah Mohammed Abdullah AL Amri
Department Assistant:	Ms. Laila Al Fatih Albahar

2. Vision

To be the regional leader in providing quality education in Civil and Environmental Engineering and to serve the industry through research, innovation and state-of-the-art technology.

3. Mission

The mission of the undergraduate program in Civil Engineering is to present a high standard of education, which prepares graduating students to provide quality professional services, contribute to the state of the knowledge and practice in civil engineering, and exposes them to a global perspective and an awareness of their leadership role in regional development.

4. Programs Offered

The department offers the following Diploma and Bachelor programs:

a) Diploma Program

1) Diploma in Civil Engineering

b) Bachelor Program

1) Bachelor of Science in Civil Engineering

5. Bachelor of Science in Civil Engineering

5.1. Program Overview

The Bachelor of Science in Civil Engineering curriculum is designed to comply with local education framework and benchmarked with international institutions. It includes 32 credits in basic sciences and mathematics, 103 credits engineering sciences and engineering design and communications skills, and 3 credits of humanities and social sciences excluding language and technical writing courses. Lab hands-on experience and emphasis on practical aspects are important elements that are integrated throughout the curriculum. It is designed to grant students the Bachelor of Sciences degree upon the successful completion of the four-year program.

The program is also offered in Diploma Degree upon the successful completion of a two-year program. The first common year with other college majors allows students to switch between the majors at the same college at the start of the second year of their study.

5.2. Program Objectives

The objectives of the program are to:

1) Provide students with a broad purposeful education targeting fundamental principles and concepts of civil engineering.
2) Endow students with the technical skills required to forge successful careers in the various civil engineering disciplines.
3) Develop and distribute, across the curriculum, open-ended activities that stimulate students' creativity.
4) Commit to continually improve the curriculum to induce the latest and best practices in civil engineering education while conforming to the established standards of the national and international bodies.
5) Affix high priority to continually improve the learning conditions for students to attain the mathematical, scientific, computational, technical, and experimental skills required to formulate and solve multidisciplinary, complex, contemporary, and socially relevant civil engineering problems.
6) Inspire students to embrace the principles of life-long learning and endow them with the credentials that enable them to pursue higher education in reputable institutions.
7) Engage students in activities that harness their social skills so that they can comfortably work in multidisciplinary teams, effectively communicate their ideas and positions, and successfully assume leadership roles in the arena of their professional life.
8) Strengthen students' understanding of social, economic, professional, ethical, and environmental issues in an interconnected world.

5.3. Program Learning Outcomes

Each student graduating from the Civil Engineering program will have:

1) An ability to apply knowledge of mathematics, science, and engineering.
2) An ability to identify, formulate and solve engineering problems.
3) An ability to design and conduct experiments, as well as to analyze and interpret data.
4) An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
5) An ability to use the techniques, skills, and modern tools necessary for engineering practice.
6) The broad education necessary to understand the impact of engineering solutions in a local and global, economic, environmental, and societal context.
7) An ability to function in multidisciplinary teams.

8) An ability to communicate effectively.
9) An understanding of professional and ethical responsibility.
10) Knowledge of contemporary issues.
11) Recognition of the need for, and an ability to engage in life-long learning.

The teaching and learning strategies adopted by individual instructors and students will have to target the satisfaction of the above listed program outcomes, which are in line with the program objectives.

5.4. Admission Requirements

Admission requirements for a Bachelor of Science in Civil Engineering Program are as specified in **College Section 6A.**

5.5. Graduation Requirements

To graduate with a Bachelor of Science Degree in Civil Engineering, students must satisfactorily complete 138 credits taken over four academic years, with an overall minimum average of 65 percent, and a cumulative average of 70 percent in the major courses. The university, college, and program requirements are as given in the following table:

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
27	33	69	9	138

5.6. University Requirements

The University requirements consist of nine (9) courses comprising of 27 credit hours as given below:

Code	University Courses	Credit Hours
ARAB 101	Academic Writing in Arabic	3
ENGL 101	Basic Academic English	3
ENGL 102E	English for Engineering and Sciences I	3
ENGL 203E	English for Engineering and Sciences II	3
ENGL 204	Advanced English for Academic Purposes and Research	3
ENGL 305	Advanced English Language and Communication Skills	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3
MATH 199	Calculus I	3
SOCS 102	Omani Society	3

5.7. College Requirements

The College requirements consist of 13 courses comprising of 33 credit hours as given below:

Code	College Courses	Credit Hours
CIVE 400	Practical Training	0
EECE 130	Computers and Programming I	3
ENGR 100	Introduction to Engineering	3

ENGR 105	Engineering Graphics	2
ENGR 110	Engineering Workshop	1
ENGR 300	Engineering Economy	3
MATH 200	Calculus II	3
MATH 205	Calculus III	3
MATH 210	Differential Equations	3
MATH 250E	Probability and Statistics	3
MATH 335	Mathematics for Science and Engineering	3
PHYS 170	Fundamentals of Physics I	3
XXX	Science Elective	3

5.8. Program Requirements

I) Core Requirements

The program core requirements consist of 30 courses and laboratories encompassing 69 credit hours.

II) Elective Requirements

A student has to take a total of 3 courses encompassing 9 credit hours from the following list:

Code	Elective Requirement Courses	Credit Hours
CIVE 410	Structural Analysis II	3
CIVE 430	Foundation Engineering	3
CIVE 440	Hydraulics + Laboratory	3
CIVE 485	Specifications and Cost Estimation	3
CIVE 510	Bridges	3
CIVE 511	Advanced Structural Analysis	3
CIVE 520	Plain Concrete	3
CIVE 522	Pre-stressed Concrete	3
CIVE 530	Applied Foundation Engineering	3
CIVE 532	Soil and Site Improvement	3
CIVE 540	Hydraulic Structures	3
CIVE 541	Surface Water Hydrology	3
CIVE 542	Groundwater Hydrology	3
CIVE 550	Methods of Environmental Sampling and Analysis	3
CIVE 553	Water and Sewage Works Design	3
CIVE 554	Solid Waste Management I	3
CIVE 560	Pavement Design	3
CIVE 561	Urban Transportation Planning I	3
CIVE 562	Traffic Engineering	3
CIVE 570	Introduction to Geographic Information Systems	3
CIVE 590	Structural Dynamics	3

5.9. Plan of Study: Bachelor of Science in Civil Engineering

Year I	
Fall Semester	**16 Credits**

Code	Course Title	Credit Hours
ENGL 101	Basic Academic English	3
MATH 199	Calculus I	3
PHYS 170	Fundamentals of Physics I	3
PHYS 170L	Introductory Physics Laboratory	1
ENGR 100	Introduction to Engineering	3
ENGR 110	Engineering Workshop	1
ENGR 105	Engineering Graphics	2

Spring Semester		**16 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 102E	English for Engineering and Sciences I	3
MATH 200	Calculus II	3
CHEM 140	Chemistry I	3
CHEM 140L	Introductory Chemistry Laboratory	1
CIVE 210	Statics	3
SOCS 102	Omani Society	3

Summer Semester		**6 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 203E	English for Engineering and Sciences II	3
MATH 250E	Probability and Statistics	3

Year II	
Fall Semester	**16 Credits**

Code	Course Title	Credit Hours
CIVE 215	Engineering Geology	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3
PHYS 210	Fundamentals of Physics II	3
CIVE 265	Surveying & GPS	3
CIVE 265L	Surveying & GPS Laboratory	1
CIVE 213	Strength of Materials	3

Spring Semester		**15 Credits**
Code	**Course Title**	**Credit Hours**
CIVE 230	Geotechnical Engineering	3
CIVE 230L	Geotechnical Engineering Laboratory	1
CIVE 221	Construction Materials	3
CIVE 221L	Construction Materials Laboratory	1
CIVE 250	Structural Analysis I	3
CIVE 250L	Structural Analysis I Laboratory	1
CIVE 241	Fluid Mechanics	3

Summer Semester		**6 Credits**
Code	**Course Title**	**Credit Hours**
MATH 205	Calculus III	3
MATH 210	Differential Equations	3

Year III		
Fall Semester		**16 Credits**
Code	**Course Title**	**Credit Hours**
MATH 335	Mathematics for Science and Engineering	3
CIVE 325	Concrete I	3
ECEE 130	Computers and Programming	3
CIVE 340	Engineering Hydrology	3
CIVE 241L	Fluid Mechanics Laboratory	1
ENGR 300	Engineering Economy	3
Spring Semester		**16 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 204	Advanced English for Academic Purposes and Research	3
CIVE 361	Transportation Engineering	3
CIVE 451	Water and Wastewater Treatment	3
CIVE 451L	Water and Wastewater Treatment Laboratory	1
CIVE 420	Concrete II	3
ARAB 101	Academic Writing in Arabic	3
Summer Semester		**0 Credits**
Code	**Course Title**	**Credit Hours**
CIVE 400	Practical Training	0
Year IV		
Fall Semester		**15 Credits**
Code	**Course Title**	**Credit Hours**
CIVE 401	Final Year Project I	0
CIVE 331	Steel Design	3
CIVE 350	Environmental Engineering	3
CIVE 480	Construction Management	3
ENGL 305	Advanced English Language and Communication Skills	3
CIVE XXX	Major Elective	3
Spring Semester		**16 Credits**
Code	**Course Title**	**Credit Hours**
CIVE 402	Final Year Project II	3
CIVE 470	Highway Design	3
CIVE 470L	Highway Engineering Laboratory	1
CIVE XXX	Major Elective	3
CIVE XXX	Major Elective	3
XXX	Science Elective	3

5.10. Course Description

CIVE 210   Statics   (3 crs)

This course covers the following topics: force vector, 2-D system of vectors, moment, couple, resultants, static equilibrium of 2-D forces and moments, centroid, truss, friction. Prerequisite: ENGR 100, PHYS 170, Prerequisite MATH 199.

CIVE 213   Strength of Materials   (3 crs)
This course covers the different types of stress and strain induced by different types of loading: axial loading, torsion, pure bending: shear force and bending moment diagrams; stress concentration; analysis and design of beams in bending; shearing stresses in beams and thin-walled members; deflection of beams. Prerequisite: CIVE 210.

CIVE 215   Engineering Geology   (3 crs)
This course covers the fundamentals of geology related to Civil Engineering. Topics include rock and mineral types, soil properties, geological structures, plate tectonic and earthquake hazards, site investigations. Prerequisite: ENGR 100, PHYS 170

CIVE 221   Construction Materials   (3 crs)
This course covers the composition and properties of engineering construction materials through hands-on laboratory experiments. The course introduces students to developments in construction equipment and technologies and Includes field demonstrations. Prerequisite: CIVE 213.

CIVE 230   Geotechnical Engineering   (3 crs)
A course on engineering geology, soil classification and index properties; soil structure and moisture; compaction; seepage; effective stress concept; compressibility and consolidation; stress and settlement analysis; shear strength. Laboratory tests are conducted to familiarize students with soil characterization and the engineering behavior of soils. Prerequisite: CIVE 213 and CIVE 215.

CIVE 241   Fluid Mechanics   (3 crs)
This course covers the basic concepts of fluid mechanics: properties of fluids, pressure and fluid statics, hydrostatic forces, fluid kinematics, conservation of mass, conservation of energy, fluids in rigid body translational and rotational motions, Bernoulli's equation, momentum analysis of flow systems. Prerequisite: CIVE 210 and MATH 200.

CIVE 250   Structural Analysis I   (3 crs)
This is an introductory course covering influence lines; deflection of beams and frames by double integration method, moment-area theorems, and conjugate beam; introduction to indeterminate structures; approximate analysis of building frames. Prerequisite: CIVE 210.

CIVE 265   Surveying & GPS   (3 crs)
This course deals with the theory of measurements and errors; linear measurements; surveying instruments; leveling; angles, bearings, and azimuths; stadia measurements; traversing–field aspects; traverse computations and adjustment; topographic surveying; triangulation. Prerequisite: MATH 200.

CIVE 299   Practical Training (Diploma Students)   (0 cr)
An 8-weeks professional training course in Civil Engineering.

CIVE 325   Concrete I   (3 crs)
This course covers the mechanical properties of concrete materials; ultimate strength theory of flexure and shear; flexural and shear design of beams; service

load behavior; bond properties of reinforcing bars; design of solid and ribbed one-way slabs. Prerequisite: CIVE 250 and CIVE 221.

CIVE 331   Steel Design   (3 crs)
This is an introductory course to design steel structures using the LRFD method. Topics covered include tension members; compression members; beam design; serviceability requirements; beam-column design; bolted and welded connections. Prerequisite: CIVE 250 and CIVE 213.

CIVE 340   Engineering Hydrology   (3 crs)
This course focuses on hydrologic principles, rainfall-runoff analysis, flood routing, frequency analysis, and ground water hydrology. Prerequisite: CIVE 241.

CIVE 350   Environmental Engineering   (3 crs)
This course introduces the fundamentals of environmental engineering. A screening course of major topics in environmental engineering including water and wastewater, environmental hydrology, environmental hydraulics and pneumatics, air, solid waste, noise, environmental modeling, and hazardous waste. Prerequisite: CIVE 340.

CIVE 361   Transportation Engineering   (3 crs)
This course introduces the field of transportation engineering through a presentation of the basics of traffic engineering, traffic flow theory, and pavement design. Prerequisite: CIVE 265.

CIVE 400   Practical Training (BS Students)   (0 cr)
This is an 8-week practical training course in Civil Engineering.

CIVE 401   Final Year Project I   (0 cr)
A chosen design topic and preparation of a detailed execution program for CIVE 402, through comprehensive research with the guidance and approval of the faculty. Fourth Year Level.

CIVE 402   Final Year Project II   (3 crs)
A supervised project in groups of normally three students aimed at providing practical design experience in a civil and environmental engineering application. Prerequisite: CIVE 401.

CIVE 420   Concrete II   (3 crs)
A course that builds upon Concrete I and covers continuous beams; short columns, slender columns, and biaxially bent columns; wall footings, concentrically and eccentrically loaded single column footings, and combined footings; staircases; bearing walls; shear walls; two-way slabs. Prerequisite: CIVE 325.

CIVE 451   Water and Wastewater Treatment   (3 crs)
This course examines the quality and treatment methods of water and wastewater, testing for physical, chemical, and biological parameters. Prerequisite: CHEM 140 and CIVE 241.

CIVE 470   Highway Design   (3 crs)
A course that examines road vehicle performance; principles of geometric design and highways; horizontal and vertical alignment; earthwork; intersections and

interchanges; parking facilities; basic traffic models; queuing theory and traffic analysis; travel demand forecasting. Prerequisite: CIVE 361.

CIVE 480   Construction Management   (3 crs)
A course on organizing construction projects; pre-construction activities; bidding and contracts; fundamentals of construction planning, monitoring, and control; application of construction control tools: CPM, materials management, operations analysis, and quality control. Prerequisite: CIVE 221 and CIVE 325.

CIVE 485   Specifications and Cost Estimation   (3 crs)
This course deals with the structure of construction documents and their interrelationships; bidding requirements; general and particular contract conditions; administrative and procedural requirements for construction; technical specifications; construction cost estimations process; unit rates determination. Prerequisite: CIVE 221 and CIVE 325.

CIVE 570   Introduction to Geographic Information Systems   (3 crs)
This is an introductory course on Geographic Information Systems (GIS) and their applications in the planning and engineering fields, alternatives in computer-based graphics, date concepts and tools, network data management and planning applications, and implementation issues. Prerequisite: CIVE 265.

CIVE 410   Structural Analysis II   (3 crs)
This course covers stability and determinacy of structures; energy theorems and applications to trusses, beams, and frames; solution of statically indeterminate structures by flexibility (force) and stiffness methods; introduction to the direct stiffness method; influence lines for indeterminate structures. Prerequisite: CIVE 250.

CIVE 510   Bridges   (3 crs)
This course discusses the types of bridges; influence lines; loads and their distribution on bridges; serviceability of bridges; methods of design of bridge deck, superstructure, and substructure. Prerequisites: CIVE 410, CIVE 420, and CIVE 331.

CIVE 511   Advanced Structural Analysis   (3 crs)
This course offers a review of matrix algebra; basic principles of structural analysis: stiffness, flexibility, and energy methods; direct stiffness method for plane and space trusses and frames; linear and nonlinear problems; special problems; computer programming. Prerequisite: CIVE 410.

CIVE 520   Plain Concrete   (3 crs)
This course examines Portland cements; aggregates; fly ash and silica fume; admixtures for concrete; proportioning normal concrete mixtures; pumping concrete; consolidating, finishing, and curing concrete; durability; testing hardened concrete; high-strength concrete; light and heavy weight concretes; hot and cold weather concreting. Prerequisites: CIVE 221.

CIVE 522   Pre-stressed Concrete   (3 crs)
This course covers material characteristics; pre-stress losses; working strength design procedures; composite construction; ultimate flexural strength and

behavior; shear design; continuous pre-stressed concrete members. Prerequisite: CIVE 420.

CIVE 430   Foundation Engineering   (3 crs)
A course that covers site investigations; evaluation of data from field and laboratory tests; estimation of stresses in soil masses; applications of principles of soil mechanics to determination of bearing capacity and settlement of spread footings, mats, single piles, and pile groups. Prerequisite: CIVE 230.

CIVE 530   Applied Foundation Engineering   (3 crs)
A course on braced excavations, retaining structures, deep foundations, slope stability, and computer applications. Prerequisite: CIVE 430.

CIVE 532   Soil and Site Improvement   (3 crs)
This course covers compaction, admixture stabilization, foundation soil treatment, reinforced soil and composite materials, and material sites reclamation. Prerequisite: advanced standing level. CIVE 230.

CIVE 560   Pavement Design   (3 crs)
A course examining highway and airport pavement design; flexible and rigid pavement types and wheel loads; stresses in flexible and rigid pavements; pavement behavior under moving loads; soil stabilization. Prerequisite: CIVE 361.

CIVE 561   Urban Transportation Planning I   (3 crs)
This introductory course covers methods and models used in transportation planning with emphasis on the urban context. Prerequisite: CIVE 361.

CIVE 562   Traffic Engineering   (3 crs)
This course outlines traffic engineering studies; traffic control of signalized and un-signalized intersections; signal control hardware and maintenance; arterial performance and operations; network optimization. Prerequisite: CIVE 361.

CIVE 440   Hydraulics + Laboratory   (3 crs)
This lab deals with flow in conduits, flow in open channels, flow measurements, and laboratory experiments. Prerequisite: CIVE 241 and CIVE 241L.

CIVE 540   Hydraulic Structures   (3 crs)
This course covers closed conduit flow, water distribution systems, transient analysis, open channel flow, flood control, culvert hydraulics, design of various hydraulic structures. Prerequisite: CIVE 440.

CIVE 541   Surface Water Hydrology   (3 crs)
This course covers design storm, rainfall-runoff modeling, overland flow, flood routing, reservoir routing, simulation models, hydrologic design, urban hydrology, and stochastic hydrology. Prerequisite: CIVE 340.

CIVE 542   Ground water Hydrology   (3 crs)
A course that deals with properties of groundwater, groundwater movement, general flow equations, steady – state well hydraulics, seepage forces, unsteady well hydraulics, infiltration, and groundwater modeling. Prerequisite: CIVE 340.

CIVE 550   Methods of Environmental Sampling and Analysis   (3 crs)

A course on sampling techniques and instrumental methods in environmental sciences; determination of pollutants in water, air and soil; analytical techniques and adaptation of procedures to specific matrices; case studies. Prerequisite: CIVE 350 and CIVE 451

CIVE 553   Water and Sewage Works Design   (3 crs)
A course that examines the design of water and water schemes, including design reports and a literature search on the development of conventional treatment processes. Prerequisite: CIVE 350and CIVE 451

CIVE 554   Solid Waste Management I   (3 crs)
A course on nature and effects of solid wastes including hazardous wastes; engineering management principles, practices, and techniques for management of solid wastes administration; solid waste generation, storage, collection and transport, processing, resource recovery, and disposal; trip to a local facility. Prerequisite: CIVE 350.

CIVE 590   Structural Dynamics   (3 crs)
A course covering characteristics of a dynamic problem, equation of motion, methods of discretization, damping properties, single and multiple degrees of freedom models, models response to free vibration, harmonic loading, periodic loading and impulse loading. Prerequisite: CIVE 250.

CIVE 221L   Construction Materials Laboratory   (1 cr)
The Construction Materials Laboratory is established to train students to carry out tests on common construction materials such as concrete, steel, wood, and masonry. The tests are conducted to determine the engineering properties in terms of strength, strain, fatigue, creep, elasticity, stiffness durability, and workability. Pre/Co-requisite: CIVE 221.

CIVE 230L   Geotechnical Engineering Laboratory   (1 cr)
The lab is meant to consolidate the course CIVE 230. Experiments will include water content, organic content, specific gravity, grain size analysis, hydraulic conductivity (permeability), consolidation, direct shear, unconfined compression, triaxial shear. Pre/Co-requisite: CIVE 230.

CIVE 241L   Fluid Mechanics Laboratory   (1 cr)
This laboratory covers different experiments that may include measurement of flow rate, Bernoulli's theorem, center of pressure, floatation characteristics, centrifugal pumps, cavitations in centrifugal pumps, characteristics of two pumps in series, pipe friction losses, friction in bends and fittings, momentum of flow, Pelton turbine, hydraulic Ram Pump, free and forced vortices. Pre/Co-requisite: CIVE 241.

CIVE 250L   Structural Analysis Laboratory   (1 cr)
This computer laboratory is designed to enhance student understanding of theoretical structural analysis concepts using computer simulations and commercially available software packages. This laboratory covers modeling structures with geometric and material properties, application of the loads, interpretation of analysis results, internal forces and deformations, load combinations and design forces. Pre/Co-requisite: CIVE 250.

CIVE 265L   Surveying & GPS Laboratory   (1 cr)

In the Surveying Laboratory, students learn how to conduct distance measurements, transits and theodolites, vertical control, directions, angular measurement, topographic surveys, area and volume of earthworks, curve setting out, planimetric adjustment, GPS observable; basic principles of GPS operations; GPS error analysis; field procedures; data collection, processing; applications. Pre/Co-requisite: CIVE 265.

CIVE 451L   Water and Wastewater Treatment Laboratory   (1 cr)

This laboratory will cover experiments related to the following topics: water supply and wastewater collection systems. Water transmission mains, water distribution systems, pumping, storm sewers, and sanitary sewer systems, wastewater collection and wastewater treatment. Pre/Co-requisite: CIVE 451.

CIVE 470L   Highway Engineering Laboratory   (1 cr)

This laboratory is designed to provide students with knowledge of standard tests and procedures required to test highway materials. Experiments include traffic counting and analysis, aggregate testing, asphalt testing, asphalt content of hot-mix asphalt by ignition method, Marshall Test, traffic impact studies, etc. Pre/Co-requisite: CIVE 470.

6. Diploma in Civil Engineering

6.1. Program Overview

Refer to Bachelor in Civil Engineering **Section 5.1.**

6.2. Program Objectives

Refer to Bachelor in Civil Engineering **Section 5.2.**

6.3. Program Learning Outcomes

Refer to Bachelor in Civil Engineering **Section 5.3**.

6.4. Admission Requirements

Admission requirements for a Diploma in Civil Engineering Program are as specified in **College Section 6**A**.**

6.5. Graduation Requirements

To graduate with a Diploma in Civil Engineering, students must satisfactorily complete 75 credits taken over two academic years, with an overall minimum average of 65 percent. The University, College, and Program requirements are as given in the following table.

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
18	18	39	-	75

6.6. University Requirements

The University requirements for Diploma in Civil Engineering program consist of six (6) courses comprising of 18 credit hours as shown below:

Code	University Courses	Credit Hours
ENGL 101	Basic Academic English	3
ENGL 102E	English for Engineering and Sciences I	3
ENGL 203E	English for Engineering and Sciences II	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3
MATH 199	Calculus I	3
SOCS 102	Omani Society	3

6.7. College Requirements

The College requirements consist of eight (8) courses comprising of 18 credit hours as given below:

Code	College Courses	Credit Hours
CIVE 299	Practical Training	0
ENGR 100	Introduction to Engineering	3
ENGR 105	Engineering Graphics	2
ENGR 110	Engineering Workshop	1
MATH 200	Calculus II	3
MATH 205	Calculus III	3
MATH 250E	Probability and Statistics	3
PHYS 170	Fundamentals of Physics I	3

6.8. Program Requirements

I) Core Requirements

The program core requirements consist of 17 courses and labs encompassing 39 credit hours.

II) Elective Requirements

There are no elective requirements for this program.

6.9. Plan of Study: Diploma in Civil Engineering

Year I		
Fall Semester		**16 Credits**
Code	Course Title	Credit Hours
ENGL 101	Basic Academic English I	3
MATH 199	Calculus I	3
PHYS 170	Fundamentals of Physics I	3
PHYS 170L	Introductory Physics Laboratory	1
ENGR 100	Introduction to Engineering	3
ENGR 110	Engineering Workshop	1
ENGR 105	Engineering Graphics	2

Spring Semester		16 Credits
Code	Course Title	Credit Hours
ENGL 102E	English for Engineering and Sciences I	3
MATH 200	Calculus II	3
SOCS 102	Omani Society	3
CHEM 140	Chemistry I	3
CHEM 140L	Introductory Chemistry Laboratory	1
CIVE 210	Statics	3
Summer Semester		**9 Credits**
Code	Course Title	Credit Hours
ENGL 203E	English for Engineering and Sciences II	3
MATH 205	Calculus III	3
MATH 250E	Probability and Statistics	3
Year II		
Fall Semester		**16 Credits**
Code	Course Title	Credit Hours
ENTR 200	Entrepreneurship: Innovation and Creativity	3
PHYS 210	Fundamentals of Physics II	3
CIVE 215	Engineering Geology	3
CIVE 265	Surveying & GPS	3
CIVE 265L	Surveying & GPS Laboratory	1
CIVE 213	Strength of Materials	3
Spring Semester		**18 Credits**
Code	Course Title	Credit Hours
CIVE 230	Geotechnical Engineering	3
CIVE 230L	Geotechnical Engineering Laboratory	1
CIVE 221	Construction Materials	3
CIVE 221L	Construction Materials Laboratory	1
CIVE 250	Structural Analysis I	3
CIVE 250L	Structural Analysis I Lab	
CIVE 241	Fluid Mechanics	3
CIVE 361	Transportation Engineering	3
Summer Semester		**0 Credits**
Code	Course Title	Credit Hours
CIVE 299	Practical Training for Diploma Students	0

6.10. Course Description

Refer to Bachelor in Civil Engineering **Section 5.10**.

Department of Electrical and Computer Engineering

1. Personnel

Chairperson:	Dr. El Manaa Salah Barhoumi
Associate Professor:	Dr. El Manaa Salah Barhoumi
	Dr. Prajoona Valsalan
Assistant Professor:	Dr. Sohaib Tahir
Lecturer:	Dr. Mohammad Maroof Siddiqui
Laboratory Technician:	Engr. Omer Fraz Khan
	Engr. Abdul Aziz Ali AL Shaashaii

2. Vision

We aspire to the ECE at DU to provide excellent education for our students. We seek to develop within our students the fundamental knowledge in the broad venues of Electrical and Computer Engineering along with robust professional skills that will allow them to progressively support the national economy of Oman.

3. Mission

The ECE is aiming at developing students coming from high schools with scientific background, to attain the fundamental skills, knowledge, and practice in the disciplines of electrical, electronics and computer engineering. Graduates from this department will be prepared to undertake careers in service, design, operation, and control of electrical engineering systems. The department strives to create the academic environment necessary for training innovators and leaders for the future, as well as to conduct scholarly research.

4. Programs Offered

The department offers the following Diploma and Bachelor programs:

a) Diploma Program

1) Diploma in Electrical and Computer Engineering

b) Bachelors Program

1) Bachelor of Science in Computer and Communications Engineering.
2) Bachelor of Science in Electrical and Electronics Engineering.

5. Bachelor of Science in Computer and Communications Engineering

5.1. Program Overview

The Bachelor of Sciences in Computer and Communications Engineering curriculum is designed to comply with local education framework and benchmarked with

international institutions. It includes at least 30 credits in basic sciences and mathematics, at least 62 credits engineering sciences and engineering design and communications skills, and at least 9 credits of humanities and social sciences excluding language and technical writing courses. Lab hands-on experience and emphasis on practical aspects are important elements that are integrated throughout the curriculum. It is designed to grant students the Bachelor of Sciences degree upon the successful completion of the four-year program.

The program is also offered in Diploma Degree as Electrical and Computer Engineering upon the successful completion of a two-year program. The first common year with other college majors allows students to switch between the majors at the same college at the start of the second year of their study.

5.2. Program Objectives

The objectives of the program are:

1) To prepare graduates for successful careers in engineering by gaining skills and knowledge that qualify them for professional practice in computer and communications engineering.
2) To provide graduates with fundamental knowledge, appropriate mathematical principles and computing tools for analysis and design in the fields of computer and communications engineering.
3) To sustain atmosphere in which graduates can conduct professional projects, including internships with industry, which help in securing employment in the industrial sector.
4) To provide graduates with an educational foundation that fosters creativity, teamwork, leadership, and communication skills, and prepares them for life-long learning.

5.3. Program Learning Outcomes

Each student graduating from the Computer and Communication Engineering program will have an ability to:

1) Apply essential mathematical and engineering techniques for modeling and analysis of practical and hypothetical computer and communications engineering systems.
2) Relate basic principles of information technology to computer and communications engineering applications in a global and society context and through life–long learning.
3) Develop solutions to practical engineering problems through analysis of data and ideas.
4) Identify the essential design principles appropriate to computer and communications systems' equipment and components.
5) Develop systems or components by integrating ideas from various resources.
6) Recognize the professional and ethical responsibilities of engineers.
7) Generate high quality technical reports.

5.4. Admission Requirements

Admission requirements for a Bachelor of Science in Computer and Communication Engineering Program are as specified in **College Section 6.a**.

5.5. Graduation Requirements

To graduate with a Bachelor of Science Degree in Computer and Communications Engineering, students must satisfactorily complete 138 credits taken over four academic years, with an overall minimum average of 65 percent, and a cumulative average of 70 percent in the major courses. The University, College, and Program requirements are as given in the following table:

University Requirements	College Requirements	Major Requirements			Total Credit Hours
		Core	Elective	General	
27	33	62	13	3	138

5.6. University Requirements

The University requirements consist of nine (9) courses comprising of 27 credit hours as specified in **College Section 8**.

5.7. College Requirements

The College requirements consist of twelve (12) courses comprising of 33 credit hours as given below:

Code	College Courses	Credit Hours
EECE 130	Computers and Programming I	3
ENGR 100	Introduction of Engineering	3
ENGR 105	Engineering Graphics	2
ENGR 110	Engineering Workshop	1
ENGR 300	Engineering Economy	3
MATH 200	Calculus II	3
MATH 205	Calculus III	3
MATH 210	Differential Equations	3
MATH 250E	Probability and Statistics	3
MATH 335	Mathematics for Science and Engineering	3
PHYS 170	Fundamentals of Physics I	3
XXX	Science Elective	3

5.8. Program Requirements

I) Core Requirements

The program core requirements consist of 28 courses and laboratories encompassing 62 credit hours.

Code	Courses	Credit Hours
EECE130L	Computers and Programming Laboratory	1
EECE 210	Electric Circuits I	3
EECE 210L	Electric Circuits Laboratory I	1
EECE 211	Electric Circuits II	3
EECE 211L	Electric Circuits Laboratory II	1
EECE 212	Basic Electronics	3

EECE 212L	Basic Electronics Laboratory	1
EECE 220	Digital Systems Design	3
EECE 220L	Digital Systems Laboratory	1
EECE 221	Microprocessor Systems	3
EECE 221L	Microprocessor Laboratory	1
EECE 222	Discrete Mathematics for Engineers	3
EECE 230	Computers and Programming II	3
EECE 311	Data Structures and Algorithms	3
EECE 320	Computer Organization and Architecture	3
EECE 330	Software Engineering	3
EECE 340	Signals and Systems	3
EECE 342	Communication Systems	3
EECE 342L	Communication System Laboratory	1
EECE 343	Electromagnetic Field Theory	3
EECE 400	Practical Training	0
EECE 401	Final Year Project I	0
EECE 402	Final Year Project II	3
EECE 470	Computer Networks	3
EECE 490	Digital Signal Processing	3
MATH 277	Linear Algebra I	3
PHYS 170L	Introductory Physics Laboratory	1
PHYS 210	Fundamentals of Physics II	3

II) Elective Requirements

A student has to take a total of 5 courses encompassing 15 credit hours and 1 laboratory course encompassing 1 credit hours from the following list:

Code	Elective Requirement Courses	Credit Hours
EECE 350	Fundamentals of Electric Power Engineering	3
EECE 360	Control Systems	3
EECE 361	Power Systems I	3
EECE 362	Fundamentals Of Electrical Machines	3
EECE 410	Advanced Computer Architecture	3
EECE 411	Computer Systems Analysis	3
EECE 412	Computer Graphics	3
EECE 413	Embedded System Design	3
EECE 414	Fault Tolerant Computing	3
EECE 424	Data Communication Networks	3
EECE 430	Design and Applications of Information Systems	3
EECE 432	Distributed Object-Oriented Systems	3
EECE 433	Database Management Systems	3
EECE 437	Optimizing Compilers	3
EECE 439	Object-Oriented Systems	3
EECE 440	Fiber Optics	3
EECE 443	Microwave Communication Systems	3
EECE 444	Environmental Impacts of Energy Systems	3

EECE 450	Artificial Intelligence	3
EECE 452	Neural Networks	3
EECE 460	Digital Control	3
EECE 461	Instrumentation	3
EECE 462	Power Electronics	3
EECE 463	Power Systems II	3
EECE 330L	Object Oriented Technologies Laboratory	1
EECE 361L	Power Systems Simulation Laboratory	1
EECE 370L	Web Programming Laboratory	1
EECE 413L	Embedded System Design Laboratory	1
EECE 421L	Computer Interfacing Laboratory	1
EECE 422L	Information Theory and Coding Laboratory	1
XXX	General Elective	3

5.9. Plan of Study: Bachelor of Science in Computer and Communications Engineering

Year I		
Fall Semester		**15 Credits**
Code	**Course Title**	**Credit Hours**
SOCS 102	Omani Society	3
ENGL 101	Basic Academic English I	3
MATH 199	Calculus I	3
PHYS 170	Fundamentals of Physics I	3
PHYS 170L	Introductory Physics Laboratory I	1
ENGR 105	Engineering Graphics	2
Spring Semester		**17 Credits**
Code	**Course Title**	**Credit Hours**
EECE 130	Computers and Programming I	3
EECE 130L	Computers and Programming Laboratory	1
EECE 210	Electric Circuits I	3
ENGL 102E	English for Engineering and Sciences I	3
ENGR 100	Introduction to Engineering	3
MATH 200	Calculus II	3
ENGR 110	Engineering Workshop	1
Summer Semester		**6 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 203E	English for Engineering and Sciences II	3
MATH 205	Calculus III	3
Year II		
Fall Semester		**17 Credits**
Code	**Course Title**	**Credit Hours**
EECE 211	Electric Circuits II	3
EECE 210L	Electric Circuits Laboratory I	1
EECE 220	Digital Systems Design	3
EECE 230	Computers and Programming II	3
EECE 222	Discrete Mathematics for Engineers	3

| PHYS 210 | Fundamentals of Physics II | 3 |
| EECE 211L | Electric Circuits Laboratory II | 1 |

Spring Semester		17 Credits
Code	Course Title	Credit Hours
EECE 212	Basic Electronics	3
EECE 212L	Basic Electronics Laboratory	1
EECE 220L	Digital Systems Laboratory	1
EECE 221	Microprocessor Systems	3
MATH 210	Differential Equations	3
MATH 250E	Probability and Statistics	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3

Summer Semester		3 Credits
Code	Course Title	Credit Hours
MATH 277	Linear Algebra I	3

Year III		

Fall Semester		16 Credits
Code	Course Title	Credit Hours
EECE 221L	Microprocessor Laboratory	1
EECE 311	Data Structure and Algorithms	3
EECE 343	Electromagnetic Field Theory	3
ENGL 204	Advanced English for Academic Purposes and Research	3
MATH 335	Mathematics for Science and Engineering	3
ENGR 300	Engineering Economy	3

Spring Semester		16 Credits
Code	Course Title	Credit Hours
EECE 320	Computer Organization and Architecture	3
EECE 330	Software Engineering	3
EECE 340	Signals and Systems	3
EECE XXX	Major Elective	3
EECE XXX	Major Elective	3
EECE XXXL	Major Elective Laboratory	1

Summer Semester		0 Credits
Code	Course Title	Credit Hours
EECE 400	Practical Training	0

Year IV		

Fall Semester		16 Credits
Code	Course Title	Credit Hours
EECE 401	Final Year Project I	0
EECE 470	Computer Networks	3
EECE 342	Communication Systems	3
EECE 342L	Communication Systems Laboratory	1
ARAB 101	Academic Writing in Arabic	3
ENGL 305	Advanced English Language and Communication Skills	3
XXX	Science Elective	3

Spring Semester		15 Credits
Code	Course Title	Credit Hours
EECE 402	Final Year Project II	3
EECE 490	Digital Signal Processing	3
EECE XXX	Major Elective	3
EECE XXX	Major Elective	3
XXX	General Elective	3

5.10. Courses Description

EECE 130   Computers and Programming I   (3 crs)

This course covers the fundamental concepts of programming using C++ as a high level language, basic programming tools, input and output functions, variable declaration, mathematical and logical operations, programming control structures, program composition of functions, scope of identifiers, principles and basic operations of arrays.

EECE 130L   Computers and Programming Laboratory   (1 cr)

This course covers the basic programming concepts with particular application to the solution of engineering problems using a high-level programming language namely C++: fundamental concepts of C++, solving mathematical functions, control structures, functions, and arrays. Pre/Co-requisite: EECE 130.

EECE 210   Electric Circuits I   (3 crs)

This course covers the fundamentals of DC electric circuit: quantities such as current, voltage and power; active and passive elements; laws of DC circuit analysis; analyzing simple resistive circuits using DC circuit analysis standard techniques; and introduction to AC circuits. Prerequisite: PHYS 170.

EECE 210L   Electric Circuits Laboratory I   (1 cr)

This course deals with the experiments on DC circuits using modern experiment modules, measurement and display devices. The experiments include the practical realization, simulation, testing, and analysis of electric circuits: verification of basic circuit laws, series and parallel circuits, network analysis, analysis of DC circuits using MULTISIM. Pre/Co-requisite: EECE 210.

EECE 211   Electric Circuits II   (3 crs)

This course presents the principles of AC circuit analysis: phasors; representation of electric circuit elements in AC circuits; laws of AC circuit analysis; standard techniques such as the node-voltage method; three-phase AC circuits; three-phase power calculations; Laplace transform; and solving electric circuits in the s-domain. Pre-requisite: EECE 210

EECE 211L   Electric Circuits Laboratory II   (1 cr)

This course deals with a wide range of experiments on DC circuits and AC circuits using modern experiment modules, measurement and display devices. The experiments include the practical realization, simulation, testing, and analysis of electric circuits: series and parallel circuits, network analysis, response of R, RL and RC circuits in frequency domain and circuit analysis using MULTISIM.
 Pre/Co-requisite: EECE 211.

EECE 212   Basic Electronics   (3 crs)

This course covers the fundamentals of basic electronics: Introduction to semiconductors, PN-junctions, Diode circuits, models and applications: rectifiers, comparators, voltage limiters, clippers, clampers and power dissipation. LEDs, Zener diode regulator, BJT and MOSFET characteristics and applications. Operational amplifiers. Prerequisite: EECE 210.

EECE 212L   Basic Electronics Laboratory   (1 cr)

This course covers the characteristics and application of electronic devices: study of the characteristics of diodes, and BJTs, some applications of diodes such as rectifiers, voltage regulators, and characteristics as well as applications of OP-AMPS. The experiments are performed using modern experiment modules, measurement and display devices. MULTISIM is used for simulation and analysis of electronic circuits. Pre/Co-requisite: EECE 212.

EECE 220   Digital Systems Design   (3 crs)

This course covers principles of digital systems design: Number systems and codes, combinational circuit analysis, synthesis and practices; minimization methods, sequential logic design principles, latches and flip-flops, synchronous circuits, state machines, and an introduction to VHDL. Prerequisite: EECE 210.

EECE 220L   Digital Systems Laboratory   (1 cr)

This course covers experiments on logic gates, flip-flops, ALU, and timers: verification of logic gates and flip-flops, design of encoders and decoders, adders, comparators, code converters, counters and shift registers. Experiments are to include hardware realization and implementation using modern experiment modules, simulation of circuits using MULTISIM software. Pre/Co-requisite: EECE 220.

EECE 221   Microprocessor Systems   (3 crs)

This course covers an introduction to microprocessor systems; memory types, buses, and programming model; assembly language programming; addressing modes; assemblers. Translating high-level programs to assembly language; arithmetic operations, logic operations, selection statements, looping, pointers, subroutines, macros, etc. Interfacing techniques; interfacing ICs. Prerequisite: EECE 220.

EECE 221L   Microprocessor Laboratory   (1 cr)

This course covers realization of engineering application using assembly language programming on microprocessor/microcontroller kits: hands-on design experience with micro-computer systems and applications including busses, interfaces, usage of ports and registers, realization of control of DC motor and stepper motor, traffic signal control and washing machine controller. Prerequisite: EECE 221.

EECE 222   Discrete Mathematics for Engineers   (3 crs)

This course covers realization of engineering application using assembly language programming on microprocessor/microcontroller kits: hands-on design experience with micro-computer systems and applications including busses, interfaces, usage of ports and registers, realization of control of DC motor and stepper motor, traffic signal control and washing machine controller. Co-requisite: EECE 221.

EECE 230   Computers and Programming II   (3 crs)
This course covers advanced programming concepts with particular application to the solution of engineering problems using C++ programming language: strings, pointers, structures, object-oriented programming, classes, objects, constructors, destructors, inheritance and an introduction to data structures and algorithms. Prerequisite: EECE 130.

EECE 311   Data Structures and Algorithms   (3 crs)
This course covers algorithm design and programming techniques in large programs: recursion, sorting and searching algorithms, different data structures (stacks, queues, lists, trees, binary search trees) are described as abstract data types with their methods by training extensive examples and applications. Prerequisite: EECE 230.

EECE 299   Diploma Practical Training   (0 cr)
This is a supervised project/internship course aimed at providing practical experience for Electrical and Computer Engineering diploma students. Prerequisite: Permission of the advisor.

EECE 320   Computer Organization and Architecture   (3 crs)
This course covers and introduction to computer systems, CISC and RISC, performance of computer systems, the MIPS microprocessor architecture, ISA design principles, instruction mapping into registers, hardware floating point arithmetic, data path design, control unit design, pipelining, memory, I/O. Prerequisite: EECE 221.

EECE 230L   Object Oriented Technologies Laboratory II   (1 cr)
This course covers Object oriented technologies using Java programming language: requirements analysis and system design using UML; documentation; debugging; testing; use of software development tools; graphical user interface; concurrent programming; database connectivity; web and networking applications and web services.

EECE 330   Software Engineering   (3 crs)
This course covers the fundamentals of software engineering to create practical and cost-effective solutions to software systems including understanding system requirements, effective methods of design, coding, testing, evaluation and maintenance. Prerequisite: EECE 311.

EECE   Object Oriented Technologies   (1
330L   Laboratory   cr)
This course covers Object oriented technologies using Java programming language: requirements analysis and system design using UML; documentation; debugging; testing; use of software development tools; graphical user interface; concurrent programming; database connectivity; web and networking applications and web services. Prerequisite: EECE 230.

EECE 340   Signals and Systems   (3 crs)
This course covers the main concepts of signals and systems: definition, classification and examples of signals and systems, signals properties and operations, systems properties and interconnection; convolution theorem; La

place transform and inverse Laplace transform of system examples; and Fourier series representation of signals. Prerequisites: EECE 210 and MATH 335.

EECE 342   Communication Systems   (3 crs)
This course covers baseband and pass band transmission techniques includes continuous-wave modulation; pulse modulation (PAM, PWM, PPM), PCM, differential PCM, delta modulation, baseband data transmission and digital modulation techniques, ISI, Nyquist theorem, eye pattern, signal-space analysis, ASK, FSK, PSK, DPSK and M-ary modulation. Prerequisite: EECE 340.

EECE 342L   Communication Systems Laboratory   (1 cr)
This course covers various experiments related to analog and digital communication techniques: modulation and demodulation techniques such as AM and FM, PAM, PCM, and PWM; multiplexing and de-multiplexing, ASK, PSK, and FSK, and Signal broadcasting, some MATLAB based programming and modeling are introduced. Pre/Co-requisite: EECE 342.

EECE 343   Electromagnetic Field Theory   (3 crs)
This course covers the concepts of electrostatics and magneto statics fields theory: vector analysis. static electric fields, Coulomb's law, Gauss's law and applications, capacitance, electrostatic forces, Poisson's equation, static magnetic fields, Biot-Savart law, Ampere's law, Faraday's law, vector magnetic potential, inductance, and magnetic energy, plane wave propagation, transmission lines. Prerequisites: MATH 335 and PHYS 210.

EECE 350   Fundamentals of Electric Power Engineering   (3 crs)
This course comprises the fundamentals of electric power engineering: an overview of electric power network; magnetic materials, basic laws and properties such as hysteresis loop and saturation; single-phase transformer, circuit analysis, modeling, efficiency and parameters calculation using open and short-circuit tests; induction motor; and synchronous generators. Prerequisite: EECE 211.

EECE 360   Control Systems   (3 crs)
This course includes the fundamentals of control systems engineering: definition, configuration and design of open loop and closed loop systems; mathematical modeling of dynamic control systems such as electric circuits; block diagrams, transfer functions; stability analysis; transient response and steady state error calculations of first and second order systems; and root locus. Prerequisite: EECE 340.

EECE 361   Power Systems I   (3 crs)
This course introduces the main features of electrical power systems: configuration; modeling of transmission lines; design procedure and parameters calculation of power feeders; per-unit system calculations; introduction to symmetrical components; Prerequisite: EECE 211.

EECE 361L   Power Systems Simulation Laboratory   (1 cr)
This course presents the MATLAB programming environment: introduction to linear algebra and operations on matrices; MATLAB commands; m-files; and MATLAB applications such as series expansions of trigonometric functions, solving simultaneous equations, plotting graphs, and simulation of electric

circuits using SIMULINK toolbox. Prerequisite: EECE 211.

EECE 362   Fundamentals Of Electrical Machines   (3 Crs)
Basic construction of electrical machines, DC machines: construction, EMF equation, efficiency, generator and motor field connections. Synchronous machine construction, theory of operation, efficiency. Three phase induction motor construction, theory of operation, and efficiency.

EECE 370L   Web Programming Laboratory   (1 cr)
This course covers fundamental technologies and techniques for creating applications on the world wide web (www) from client and server sides: introduction to the internet and web, HTMl, XHTML, CSS, JavaScript and PHP programming languages Prerequisite: EECE 130.

EECE 400   Practical Training   (0 cr)
This is a supervised project/internship course aimed at providing practical experience for Electrical and Computer Engineering BS students. Prerequisite: Permission of the advisor.

EECE 401   Final Year Project I   (0 cr)
A supervised project, normally in groups of three students, aimed at providing practical experience in some aspects of computer, communications, and electrical engineering. Students are expected to complete a literature survey, project specification, critical analysis, and to acquire the necessary material needed for their intended product.

EECE 402   Final Year Project II   (3 crs)
A course that seeks to impart in students the skill to integrate the knowledge gained in different courses by asking them to deliver a product that has passed through the design, analysis, testing, and evaluation stages. This course includes production of a professional report, design process and outcome, implementation and testing, verification and validation, and critical appraisal of the project. Prerequisite: EECE 401.

EECE 410   Advanced Computer Architecture   (3 crs)
This course covers evolution of advanced computer architectures; classification of parallel processing systems; a study of scalable and parallel computer architectures for achieving a proportional increase in performance with increasing system resources; cutting-edge technologies in scalable parallel computing are presented with emphasis on design aspects. Prerequisite: EECE 320.

EECE 411   Computer Systems Analysis   (3 crs)
This course covers the development of analytical models of computer systems and application of such models to performance evaluation. Topics covered include scheduling policies, paging algorithms, multi-programmed resource management, and queuing theory. Prerequisite: EECE 320. Alternate years.

EECE 412   Computer Graphics   (3 crs)
This course covers fundamentals of computer graphics: interactive graphics, vector generation and point-plotting displays, graphical input devices, windowing, clipping, viewports, zooming, geometrical transformations (2D and

3D), advanced display architecture, Raster algorithms, Raster display architecture, representation of 3D shapes and applications: CAD, menu-driven packages, and simulation. Prerequisite: EECE 320. Alternate years.

EECE 413   Embedded System Design   (3 crs)
This course covers the design of embedded systems: embedded hardware design, system design process, embedded computing platforms, software design tools and technologies, CAD tools, compilers, and assemblers; hardware design tools and technologies, hardware-description languages, high-level synthesis tools, ASIC and FPGA design flows; memory; interfacing. Prerequisite: EECE 221.

EECE 413L   Embedded System Design Laboratory   (1 cr)
This course covers embedded hardware design. Main topics includes embedded computing platforms, software design tools and technologies: CAD tools, compilers, and assemblers; hardware design tools and technologies: (VHDL and/or Verilog), high-level synthesis tools (Handel-C), ASIC and FPGA design flows; memory; interfacing; Pre– or co-requisite: EECE 413 or Permission of the Instructor.

EECE 414   Fault Tolerant Computing   (3 crs)
This course covers the concepts and terminologies of fault-tolerant system design; reliability of series/parallel systems; redundancy management, voting, information redundancy, MTTF, M-of-N systems, reliability block diagrams, systems diagnosis; software fault tolerance, fault tolerant networks, common network topologies, fault tolerant routing. Prerequisite: EECE 220.

EECE 421L   Computer Interfacing Laboratory   (1 cr)
This course covers realization of engineering application by interfacing hardware with C++ programming language: debug environment, using parallel ports, I/O operation, realization of control of LEDs, seven segment displays and simple motor control through parallel ports. Introduction to VHDL. Co-requisites: EECE 130, EECE 220.

EECE 422   Information Theory and Coding   (3 crs)
This course covers and introduction to information theory, entropy and mutual information; discrete memory-less sources, discrete memory-less channels and their capacity-cost functions; concepts of source coding, lossy and lossless compression techniques; concepts of channel coding and error control, linear codes, convolutional codes, and Turbo codes. Prerequisite: MATH 335.

EECE 422L   Information Theory and Coding Laboratory   (1 cr)
This course covers encoding and decoding of linear block codes; convolution codes: generator polynomial, state diagram, Trellis diagram, Viterbi decoding algorithm, turbo codes: effect of change of frame size, iterations, code rate, MAP and SOVA decoding algorithms. Co-requisite: EECE 422.

EECE 424   Data Communication Networks   (3 crs)
This course covers data communication networks: network topology; data transmission fundamentals; error control; multi-layer network architecture and protocols; network management; network security and privacy; network performance measurements. Prerequisite: EECE 470. Alternate years.

EECE 430   Design and Applications of Information Systems   (3 crs)
This course covers fundamentals of design and applications of information systems: investigating hardware and software selection criteria; case studies; application software maintenance; resource allocation; scheduling; staffing requirements; processing organizations; applications. Prerequisite: EECE 330.

EECE 432   Distributed Object-Oriented Systems   (3 crs)
This course covers the subject of distributed object-oriented systems: middleware for distributed objects; dynamic object requests; distributed objects life cycle, persistence, transactions, and security. Prerequisite: EECE 330. Alternate years.

EECE 433   Database Management Systems   (3 crs)
This course covers the fundamentals of database technology: introduction to data base management systems, relational DB, relational model, relational algebra, SQL query languages, DB design and the E-R model and application design and development. Prerequisite: EECE 230. Alternate years.

EECE 437   Optimizing Compilers   (3 crs)
This course covers the area of optimizing compilers: characteristics of building modern optimizing compilers including intermediate representations, basic blocks and flow graphs, data flow analysis, partial evaluation and redundancy elimination, loop optimizations, register allocation, instruction scheduling, and inter-procedural analysis. Prerequisites: EECE 311 and EECE 320. Alternate years.

EECE 439   Object-Oriented Systems   (3 crs)
This course covers the object-oriented technology used for building software systems: languages, databases, analysis and designs, and systems: software lifecycles, layered architectures, object reusability, and multi-developer support. Prerequisite: EECE 330. Alternate years.

EECE 440   Fiber Optics   (3 crs)
This course covers fiber optics: generation and propagation of light, interaction of light and matter, geometric optics, ray tracing and aberration theory, superposition of waves, coherence and interference, and Fresnel and Fraunhofer diffraction; special topics: lasers and holography. Prerequisite: EECE 343.

EECE 443   Microwave Communication Systems   (3 crs)
This course covers microwave communication systems: transmission principles and media including lines, radio links, optical fibers; antennas: L.F., H.F., earth stations, and satellites; design and performance of microwave links; satellite communications; cellular networks. Prerequisite: EECE 342.

EECE 444   Environmental Impacts of Energy Systems   (3 crs)
This course covers the environmental impacts of energy systems: world energy resources and classifications; sources and effects of air pollution; air quality modeling, Gaussian dispersion models; motor vehicles emissions and noise pollution, mitigation strategies; environmental impacts of electricity generation, pollution control systems, electromagnetic radiations. Prerequisite: ENGR100.

EECE 450   Artificial Intelligence   (3 crs)
This course covers the fundamentals of artificial intelligence: search techniques,

knowledge representation, logic and theorem proving; expert systems; natural language understanding, vision; learning from experience and prolog. Prerequisite: EECE 311. Alternate years.

EECE 452   Neural Networks   (3 crs)
This course covers back propagation, and adaptive neural networks; transformation by layered networks, statistical neurodynamics, associative memory and neural learning; applications to functional approximations, signal filtering, and pattern classification. Prerequisite: EECE 311. Alternate years.

EECE 460   Digital Control   (3 crs)
This course covers the analysis and design of digital control systems: z-transform techniques; state-space representation; single-input-single-output linear time invariant discrete and continuous systems; controllability, observability; and controllers. Prerequisite: EECE 360.

EECE 460L   Control Systems Laboratory   (1 cr)
This laboratory comprises the analysis of linear continuous control systems: first and second order systems; transient and steady-state system responses; and the effect of system poles and zero's location on the overall system performance and stability. Co-requisite: EECE 360.

EECE 461   Instrumentation   (3 crs)
This course covers instrumentation systems, including measurements, sensors, data acquisition, and component integration. Application areas and course projects include industrial control, lab measurements, and automation systems. Prerequisite: EECE 221.

EECE 462   Power Electronics   (3 crs)
Power Diode, Power Bipolar Junction Transistor (BJT), Thyristor, Power MOSFET and IBGT, Single phase Rectifiers, Three-phase Rectifiers, Inverters, DC-to-DC Switching Converters (Choppers), Voltage Regulators, Application of Power Electronic Device in Power Networks such as Flexible AC Transmission Systems (FACTS) and High Voltage Direct Current (HVDC) Technologies. Prerequisite: EECE 212,

EECE 463   Power Systems II   (3 crs)
This course is considered as an advanced course in electrical power systems which comprises the short-circuit analysis of electric power networks; three phase symmetrical and asymmetrical fault calculations; formation of Y-Bus and Z-Bus; load flow; and power flow calculations using numerical iterative techniques. Prerequisite: EECE 361.

EECE 470   Computer Networks   (3 crs)
This course covers networking concepts and   technologies, networking architectures and protocols, internetworking and applications, data communications; wide area networks; circuit and packet switching; routing; congestion control; local area networks. Prerequisite: MATH 335. Co-requisite: EECE 342.

EECE 490   Digital Signal Processing   (3 crs)

The course aims to develop necessary mathematical and analytical skills to analyze digital signals and systems in the time as well as in the frequency domain. The course includes an introduction to the discrete time signals and systems, frequency domain representation and analysis, z-transform, and its application in discrete time LTI systems, discrete time Fourier transform, Fast Fourier transform, introduction to filters (including FIR and IIR filters) and their design. Prerequisite: EECE 340.

6. Bachelor of Science in Electrical and Electronics Engineering

6.1. Program Overview

The Bachelor of Sciences in Electrical and Electronics Engineering curriculum is designed to comply with local education framework and benchmarked with international institutions. It includes at least 30 credits in basic sciences and mathematics, at least 62 credits engineering sciences and engineering design and communications skills, and at least 9 credits of humanities and social sciences excluding language and technical writing courses. Lab hands-on experience and emphasis on practical aspects are important elements that are integrated throughout the curriculum. It is designed to grant students the Bachelor of Sciences degree upon the successful completion of the four-year program.

The program is also offered in Diploma Degree as Electrical and Computer Engineering upon the successful completion of a two-year program. The first common year with other college majors allows students to switch between the majors at the same college at the start of the second year of their study.

6.2. Program Objectives

The objectives of the program are:

1) To prepare graduates for successful careers in engineering by gaining skills and knowledge that qualify them for professional practice in electrical and electronics engineering.
2) To provide graduates with fundamental knowledge, appropriate mathematical principles and computing tools for analysis and design in the fields of   electrical and electronics engineering.
3) To sustain atmosphere in which graduates can conduct professional projects, including internships with industry, which help in securing employment in the industrial sector.
4) To provide graduates with an educational foundation that fosters creativity, teamwork, leadership, and communication skills, and prepares them for life-long learning.

6.3. Program Learning Outcomes

Each student graduating from the Electrical and Electronics Engineering program will have an ability to:

1) Apply essential mathematical and engineering techniques for modeling and analysis of practical and hypothetical electrical and electronic engineering systems.
2) Relate basic principles of information technology to electrical and electronic engineering applications.
3) Develop solutions to practical engineering problems through analysis of data and ideas.
4) Identify the essential design principles appropriate to electrical power systems' equipment and components.
5) Develop systems or components by integrating ideas from various resources.
6) Recognize the professional and ethical responsibilities of engineers.
7) Generate high quality technical reports.

6.4. Admission Requirements

Admission requirements for a Bachelor of Science in Electrical and Electronics Engineering Program are as specified in **College Section 6A.**

6.5. Graduation Requirements

To graduate with a Bachelor of Science Degree in Electrical and Electronics Engineering, students must satisfactorily complete 138 credits taken over four academic years, with an overall minimum average of 65 percent, and a cumulative average of 70 percent in the major courses. The University, College, and Program requirements are as given in the following table:

University Requirements	College Requirements	Major Requirements			Total Credit Hours
		Core	Elective	General	
27	33	61	14	3	138

6.6. University Requirements

The University requirements consist of nine courses comprising of 27 credit hours as specified in **College Section 8**.

6.7. College Requirements

Refer to Bachelor of Science in Computer and Communication Engineering **Section 5.7**.

6.8. Program Requirements

I) **Core Requirements**

The program core requirements consist of 27 courses and laboratories encompassing 61 credit hours.

Code	Courses	Credit Hours
EECE 130L	Computers and Programming Laboratory	1
EECE 210	Electric Circuits I	3
EECE 210L	Electric Circuits Laboratory I	1
EECE 211	Electric Circuits II	3

EECE 211L	Electric Circuits Laboratory II	1
EECE 212	Basic Electronics	3
EECE 212L	Basic Electronics Laboratory	1
EECE 220	Digital Systems Design	3
EECE 220L	Digital Systems Laboratory	1
EECE 221	Microprocessor Systems	3
EECE 221L	Microprocessor Laboratory	1
EECE 222	Discrete Mathematics for Engineers	3
EECE 230	Computers and Programming II	3
EECE 311	Data Structures and Algorithms	3
EECE 320	Computer Organization and Architecture	3
EECE 330	Software Engineering	3
EECE 340	Signals and Systems	3
EECE 342	Communication Systems	3
EECE 342L	Communication System Laboratory	1
EECE 343	Electromagnetic Field Theory	3
EECE 400	Practical Training	0
EECE 401	Final Year Project I	0
EECE 402	Final Year Project II	3
EECE 470	Computer Networks	3
EECE 490	Digital Signal Processing	3
MATH 277	Linear Algebra I	3
PHYS 170L	Introductory Physics Laboratory	1
PHYS 210	Fundamentals of Physics II	3

II) Elective Requirements

A student has to take a total of 5 courses encompassing 15 credit hours and 2 laboratory courses encompassing 2 credit hours from the following list:

Code	Elective Requirement Courses	Credit Hours
EECE 330	Software Engineering	3
EECE 330L	Object Oriented Technologies Laboratory	1
EECE 342L	Communication Systems Laboratory	1
EECE 361L	Power Systems Simulation Laboratory	1
EECE 370L	Web Programming Laboratory	1
EECE 410	Advanced Computer Architecture	3
EECE 411	Computer Systems Analysis	3
EECE 412	Computer Graphics	3
EECE 413	Embedded System Design	3
EECE 413L	Embedded System Design Laboratory	1
EECE 414	Fault Tolerant Computing	3
EECE 421L	Computer Interfacing Laboratory	1
EECE 422	Information Theory and Coding	3
EECE 422L	Information Theory and Coding Laboratory	1
EECE 424	Data Communication Networks	3

EECE 430	Design and Applications of Information Systems	3
EECE 432	Distributed Object-Oriented Systems	3
EECE 433	Database Management Systems	3
EECE 437	Optimizing Compilers	3
EECE 439	Object-Oriented Systems	3
EECE 440	Fiber Optics	3
EECE 443	Microwave Communication Systems	3
EECE 444	Environmental Impacts of Energy Systems	3
EECE 450	Artificial Intelligence	3
EECE 452	Neural Networks	3
EECE 460	Digital Control	3
EECE 460L	Control Systems Laboratory	1
EECE 461	Instrumentation	3
EECE 462	Power Electronics	3
EECE 463	Power Systems II	3
EECE 470	Computer Networks	3
XXX	General Elective	3

6.9. Plan of Study: Bachelor of Science in Electrical and Electronics Engineering

Year I		
Fall Semester		**15 Credits**
Code	**Course Title**	**Credit Hours**
SOCS 102	Omani Society	3
ENGL 101	Basic Academic English I	3
MATH 199	Calculus I	3
PHYS 170	Fundamentals of Physics I	3
PHYS 170L	Introductory Physics Laboratory	1
ENGR 105	Engineering Graphics	2
Spring Semester		**17 Credits**
Code	**Course Title**	**Credit Hours**
EECE 130	Computers and Programming I	3
EECE 130L	Computers and Programming Laboratory	1
EECE 210	Electric Circuits I	3
ENGL 102E	English for Engineering and Sciences I	3
ENGR 100	Introduction to Engineering	3
MATH 200	Calculus II	3
ENGR 110	Engineering Workshop	1
Summer Semester		**6 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 203E	English for Engineering and Sciences II	3
MATH 205	Calculus III	3

Year II		
Fall Semester		**17 Credits**
Code	**Course Title**	**Credit Hours**
EECE 211	Electric Circuits II	3
EECE 210L	Electric Circuits Laboratory I	1
EECE 220	Digital Systems Design	3
EECE 230	Computers and Programming II	3
EECE 222	Discrete Mathematics for Engineers	3
PHYS 210	Fundamentals of Physics II	3
EECE 211L	Electric Circuits Laboratory II	1
Spring Semester		**17 Credits**
Code	**Course Title**	**Credit Hours**
EECE 212	Basic Electronics	3
EECE 212L	Basic Electronics Laboratory	1
EECE 220L	Digital Systems Laboratory	1
EECE 221	Microprocessor Systems	3
MATH 250E	Probability and Statistics	3
MATH 210	Differential Equations	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3
Summer Semester		**3 Credits**
Code	**Course Title**	**Credit Hours**
MATH 277	Linear Algebra I	3
Year III		
Fall Semester		**16 Credits**
Code	**Course Title**	**Credit Hours**
EECE 221L	Microprocessor Laboratory	1
EECE 343	Electromagnetic Field Theory	3
EECE 350	Fundamentals of Electric Power Engineering	3
ENGL 204	Advanced English for Academic Purposes and Research	3
ENGR 300	Engineering Economy	3
MATH 335	Mathematics for Science and Engineering	3
Spring Semester		**16 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 305	Advanced English Language and Communication Skills	3
EECE 340	Signals and Systems	3
EECE 361	Power Systems I	3
EECE 362	Introduction to Electric machines	3
EECE XXXL	Major Elective Laboratory	1
Code	Science Elective	3
Summer Semester		**0 Credits**
Code	**Course Title**	**Credit Hours**
EECE 400	Practical Training	0

Year IV		
Fall Semester		**16 Credits**
Code	**Course Title**	**Credit Hours**
EECE 401	Final Year Project I	0
EECE 342	Communication Systems	3
ARAB 101	Academic Writing in Arabic	3
EECE XXX	Major Elective	3
EECE XXX	Major Elective	3
EECE 360	Control Systems	3
EECE XXXL	Major Elective Laboratory	1
Spring Semester		**15 Credits**
Code	**Course Title**	**Credit Hours**
EECE 402	Final Year Project II	3
EECE 461	Instrumentation	3
EECE XXX	Major Elective	3
EECE XXX	Major Elective	3
XXX	General Elective	3

6.10. Course Description

Refer to Bachelor of Science in Computer and Communication Engineering **Section 5.10**.

7. Diploma in Electrical and Computer Engineering

7.1. Program Overview

Refer to **Sections 5.1 and 6.1**.

7.2. Program Objectives

The objectives of the program are:
1) To prepare graduates for successful careers in engineering by gaining skills and knowledge that qualify them for professional practice in electrical and computer engineering.
2) To provide graduates with fundamental knowledge, appropriate mathematical principles and computing tools for analysis and design in the fields of electrical and computer engineering.
3) To sustain atmosphere in which graduates can conduct professional projects, including internships with industry, which help in securing employment in the industrial sector.
4) To provide graduates with an educational foundation that fosters creativity, teamwork, leadership, and communication skills, and prepares them for life-long learning.

7.3. Program Learning Outcomes

Each student graduating with a diploma in Electrical and Computer Engineering will have an ability to:

1) Apply essential mathematical and engineering techniques for analysis of practical and hypothetical electrical and computer engineering systems.
2) Relate basic principles of information technology to electrical and computer engineering applications.
3) Develop solutions to practical engineering problems through analysis of data and ideas.
4) Identify the essential design principles appropriate to electrical and computer systems' equipment and components.
5) Develop systems or components by integrating ideas from various resources.
6) Recognize the professional and ethical responsibilities of engineers.
7) Generate high quality technical reports.

7.4. Admission Requirements

Admission requirements for a Diploma in Electrical and Computer Engineering Program are as specified in **College Section 6.a**.

7.5. Graduation Requirements

To graduate with a Diploma in Electrical and Computer Engineering, students must satisfactorily complete 75 credits taken over two academic years, with an overall minimum average of 65 percent. The University, College, and Program requirements are as given in the following table:

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
18	24	33	-	75

7.6. University Requirements

The University requirements for Diploma in Electrical and Computer Engineering program consist of six (6) courses comprising of 18 credit hours as shown below:

Code	University Requirement Courses	Credit Hours
ENGL 101	Basic Academic English	3
ENGL 102E	English for Engineering and Sciences I	3
ENGL 203E	English for Engineering and Sciences II	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3
MATH 199	Calculus I	3
SOCS 102	Omani Society	3

7.7. College Requirements

The College requirements consist of nine (9) courses comprising of 24 credit hours as given below:

Code	College Requirement Courses	Credit Hours
EECE 130	Computers and Programming I	3
ENGR 100	Introduction of Engineering	3
ENGR 105	Engineering Graphics	2
ENGR 110	Engineering Workshop	1
MATH 200	Calculus II	3

MATH 205	Calculus III	3
MATH 250E	Probability and Statistics	3
MATH 210	Differential Equations	3
PHYS 170	Fundamentals of Physics I	3

7.8. Program Requirements

I) Core Requirements

The program core requirements consist of 16 courses and laboratories encompassing 33 credit hours.

II) Elective Requirements

There are no elective requirements for this program.

7.9. Plan of Study: Diploma in Electrical and Computer Engineering

Year I		
Fall Semester		**15 Credits**
Code	**Course Title**	**Credit Hours**
SOCS 102	Omani Society	3
ENGL 101	Basic Academic English I	3
MATH 199	Calculus I	3
PHYS 170	Fundamentals of Physics I	3
PHYS 170L	Introductory Physics Laboratory I	1
ENGR 105	Engineering Graphics	2
Spring Semester		**17 Credits**
Code	**Course Title**	**Credit Hours**
EECE 130	Computers and Programming I	3
EECE 130L	Computers and Programming Laboratory	1
EECE 210	Electric Circuits I	3
ENGL 102E	English for Engineering and Sciences I	3
ENGR 100	Introduction to Engineering	3
MATH 200	Calculus II	3
ENGR 110	Engineering Workshop	1
Summer Semester		**6 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 203E	English for Engineering and Sciences II	3
MATH 205	Calculus III	3
Year II		
Fall Semester		**17 Credits**
Code	**Course Title**	**Credit Hours**
EECE 211	Electric Circuits II	3
EECE 210L	Electric Circuits Laboratory I	1
EECE 220	Digital Systems Design	3
EECE 230	Computers and Programming II	3
EECE 222	Discrete Mathematics for Engineers	3
PHYS 210	Fundamentals of Physics II	3
EECE 211L	Electric Circuits Laboratory II	1

Spring Semester		17 Credits
Code	Course Title	Credit Hours
EECE 212	Basic Electronics	3
EECE 212L	Basic Electronics Laboratory	1
EECE 220L	Digital Systems Laboratory	1
EECE 221	Microprocessor Systems	3
MATH 210	Differential Equations	3
MATH 250E	Probability and Statistics	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3
Summer Semester		3 Credits
Code	Course Title	Credit Hours
EECE 299	Practical training for Diploma Students	0
MATH 277	Linear Algebra I	3

7.10. Course Description

Refer to Bachelor of Science in Computer and Communication Engineering **Section 5.10.**

Department of Mechanical and Mechatronics Engineering

1. Personnel

Chairperson:	Dr. Furqan Ahmad
Associate Professor:	Dr. Furqan Ahmad
	Dr. Paul Chukwuleke Okonkwo
Assistant Professor:	Dr. Monzer Daoud
Lecturer:	Dr. Farooq Ahmed
Laboratory Technician:	Mr. Tofayel Ahmed
	Mr. Fadhil AL Housni

2. Vision

To be the regional leader in providing high quality education in Mechanical Engineering and to serve the industry through research, innovation and state-of-the-art technology.

3. Mission

The mission of the MME is to educate students from the science stream background in the fundamental skills, knowledge, and practice in mechanical and Mechatronics engineering that would enable them to provide quality engineering services in manufacturing industries, contribute to the state-of-the-art knowledge and practice in their field and to assume leadership roles in the development of their community.

4. Programs Offered

The department offers following Diploma and Bachelor programs:

a) Diploma Program

1) Diploma in Mechanical Engineering

b) Bachelor Program

1) Bachelor of Science in Mechanical Engineering

5. Bachelor of Science in Mechanical Engineering

5.1. Program Overview

The curriculum for the program in Mechanical Engineering is designed to comply with local education framework and benchmarked with international institutions. It consists of 138 credit hours of course work. Lab hands-on experience and emphasis on practical aspects are important elements that are integrated throughout the curriculum. The first year is common with other engineering majors to allow students to change to other engineering majors during the second year of their study if they wish to do so.

5.2. Program Objectives

The objectives of the program are to:

1) To impart a sound understanding of the fundamental principles and concepts of Mechanical Engineering.
2) To develop mathematical, scientific and computational skills in formulating and solving Mechanical Engineering problems.
3) To cultivate the skills pertinent to the engineering design process, conduct experiments and analyze and interpret data.
4) To engage students in solving real-world problems require multi-disciplinary approaches while addressing relevant social, environmental, economical and aesthetic concerns.
5) To develop effective teamwork and communication skills.
6) To prepare students for leading roles in the profession and the community.

5.3. Program Learning Outcomes

Each student graduating from the Mechanical Engineering program will have:

1) An ability to apply knowledge of mathematics, science, and engineering.
2) An ability to identify, formulate and solve engineering problems.
3) An ability to conduct experiments, as well as to analyze and interpret data.
4) An ability to design a system, component, or process to meet desired needs.
5) An ability to use the techniques, skills, and modern tools necessary for engineering practice.
6) An ability to appreciate the impact of engineering solutions in both local and global contexts.
7) An ability to perform in a team environment.
8) An ability to communicate effectively.
9) An understanding of professional and ethical responsibilities.
10) A demonstration of knowledge of contemporary issues in the field.
11) An ability to engage in life-long learning.
12) An ability to engage in undergraduate research.

5.4. Admission Requirements

Admission requirements for a Bachelor of Science in Mechanical Engineering Program are as specified in **College Section 6.a**.

5.5. Graduation Requirements

To graduate with a Bachelor of Science Degree in Mechanical Engineering, students must satisfactorily complete 138 credits taken over four academic years, with an overall minimum average of 65 percent, and a cumulative average of 70 percent in the major courses. The University, College, and Program requirements are as given in the following table.

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
27	36	61	14	138

5.6. University Requirements

The University requirements consist of nine courses comprising of 27 credit hours as specified in College **Section 8**.

5.7. College Requirements

The College requirements consist of 13 courses and labs comprising of 36 credit hours as given below:

Code	College Courses	Credit Hours
EECE 130	Computers and Programming I	3
ENGR 100	Introduction to Engineering	3
ENGR 105	Engineering Graphics	2
ENGR 110	Engineering Workshop	1
ENGR 300	Engineering Economy	3
MATH 200	Calculus II	3
MATH 205	Calculus III	3
MATH 210	Differential Equations	3
MATH 335	Mathematics for Science and Engineering	3
MATH 250E	Probability and Statistics	3
PHYS 170	Fundamentals of Physics I	3
XXX	Science Elective	3
XXX	General Elective	3

5.8. Program Requirements

I) Core Requirements

The program core requirements consist of 26 courses and labs encompassing 61 credit hours.

III) Elective Requirements

A student has to take a total of 4 courses encompassing 12 credit hours and 2 laboratory electives encompassing 2 credit hours from the following list:

Code	Elective Requirement Courses	Credit Hours
MECH 314	Fluid Power	3
MECH 410	PLC and Industrial Automation	3
MECH 412	Internal Combustion Engines	3
MECH 414	Gas Turbines	3
MECH 415	Steam Turbines	3
MECH 416	Fluids Engineering Application	3
MECH 417	Thermal Power Plant	3
MECH 430	Mechatronics and Intelligent Machines Engineering	3
MECH 444	Environmental Impacts of Energy Systems	3
MECH 450	Computer Applications in Mechanical Engineering	3
MECH 451	Finite Element Method	3
MECH 453	Robotics	3

MECH 454	Artificial Intelligence	3
MECH 455	Hydraulics	3
MECH 490	Renewable Energy	3
MECH 499	Special Topics in Mechanical Engineering	3
MECH 413L	HVAC and Refrigeration Laboratory	1
MECH 444L	Fuel Cell Laboratory	1
MECH 445L	Materials Analysis Laboratory	1

5.9. Plan of Study: Bachelor of Science in Mechanical Engineering

Year I		
Fall Semester		**15 Credits**
Code	**Course Title**	**Credit Hours**
SOCS 102	Omani Society	3
ENGL 101	Basic Academic English I	3
MATH 199	Calculus I	3
PHYS 170	Fundamentals of Physics I	3
ARAB 101	Academic Writing in Arabic	3
Spring Semester		**15 Credits**
Code	**Course Title**	**Credit Hours**
ENGR 105	Engineering Graphics	2
EECE 130	Computers and Programming I	3
ENGR 110	Engineering Workshop	1
ENGL 102E	English for Engineering and science I	3
ENGR 100	Introduction to Engineering	3
MATH 200	Calculus II	3
Summer Semester		**6 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 203E	English for Engineering and science II	3
MATH 205	Calculus III	3
Year II		
Fall Semester		**17 Credits**
Code	**Course Title**	**Credit Hours**
EECE 210	Electric Circuits I	3
EECE 210L	Electric Circuits Laboratory I	1
MECH 270	Properties of Materials	3
MECH 272	Mechanical Statics	3
MECH 271	Industrial Maintenance	3
MECH 278	Manufacturing Processes	3
MECH 270L	Solid Mechanics Laboratory	1
Spring Semester		**16 Credits**
Code	**Course Title**	**Credit Hours**
MECH 274	Mechanical Dynamics	3
MECH 274L	Mechanical Dynamics Laboratory	1
MECH 275	Thermodynamics	3

MECH 276	Strength of Materials	3
MECH 277	Fluid Mechanics	3
MECH 277L	Fluid Mechanics Laboratory	1
MECH 279	CAD/CAM and CNC Machines	2

Summer Semester		**6 Credits**
Code	**Course Title**	**Credit Hours**
MATH 250E	Probability and Statistics	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3

Year III		
Fall Semester		**14 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 204	Advanced English for Academic Purposes and Research	3
MATH 210	Differential Equations	3
MECH 315L	Thermal Laboratory	1
MECH 371	Heat Transfer	3
MECH 380	Dynamics of Machines	3
MECH XXXL	Major Laboratory Elective	1

Spring Semester		**18 Credits**
Code	**Course Title**	**Credit Hours**
ENGR 300	Engineering Economy	3
MATH 335	Mathematics for Science and Engineering	3
MECH 374	Instrumentation and Measurements	3
MECH 385	Mechanical Design	3
ENGL 305	Advanced English Language and Communication Skills	3
MECH XXX	Major Elective Course	3

Summer Semester		**0 Credits**
Code	**Course Title**	**Credit Hours**
MECH 400	Practical Training	0

Year IV		
Fall Semester		**16 Credits**
Code	**Course Title**	**Credit Hours**
MECH 372	Control Systems	3
MECH 401	Final Year Project I	0
MECH 413	Air Conditioning	3
MECH 442	Capstone Design	3
MECH XXX	Major Elective	3
XXX	Science Elective	3
MECH XXXL	Major Elective Laboratory	1

Spring Semester		**15 Credits**
Code	**Course Title**	**Credit Hours**
MECH 402	Final Year Project II	3
MECH 431	Mechanical Vibrations	3

MECH XXX	Major Elective	3
MECH XXX	Major Elective	3
XXX	General Elective	3

5.10. Course Description

MECH 270   Properties of Materials   (3 crs)
This course covers the different types of materials: metals, ceramics, polymers; type of bonds: Ionic, covalent and metallic bonds; unit cells and crystal structures, points, directions and planes within a unit cell; mechanical properties of materials: strength, toughness, ductility, resilience; failure: fatigue, creep. Thermal properties of materials: heat capacity, thermal expansion, thermal conductivity. Prerequisite: ENGR 100. Annually.

MECH 271   Industrial Maintenance   (3 crs)
This course equips students with a variety of technical skill areas such as mechanical installation, power transmission, bearings, shaft alignment, lubrication, fluid power, piping systems, fasteners, and safety at the workplace. Prerequisites: ENGR 100, ENGR 110.

MECH 272   Mechanical Statics   (3 crs)
This course covers the following topics: force vector, 2-D system of vectors, moment, couple, resultants, static equilibrium of 2-D forces and moments, centroid, truss, friction. Prerequisites: ENGR 100, PHYS 170, Co-requisite MATH 199.

MECH 274   Mechanical Dynamics   (3 crs)
This course covers the following topics: position, velocity and acceleration of a particle, equations of motion for constant acceleration, Newton's Laws, mechanical work, energy and power, impulse, impact, coefficient of restitution, conservation of momentum, and spring stiffness. Prerequisites MECH 272, MATH 200. Annually.

MECH 275   Thermodynamics   (3 crs)
This course covers the following topics: basic considerations of the three laws of thermodynamics, open and close systems, two phase systems, steam tables and charts, elementary statistical principles for the prediction of properties of pure substances and mixtures, system and control volume analysis of thermodynamic processes, irreversibility, Entropy, relations for ideal gas mixtures. Prerequisites: ENGR 100, MATH 200.

MECH 276   Strength of Materials   (3 crs)
This course covers the different types of stress and strain induced by different types of loading: axial loading, torsion, pure bending: shear force and bending moment diagrams; stress concentration; analysis and design of beams in bending; shearing stresses in beams and thin-walled members; deflection of beams. Prerequisite: MECH 272.

MECH 277   Fluid Mechanics   (3 crs)
This course covers the basic concepts of fluid mechanics: properties of fluids, pressure and fluid statics, hydrostatic forces, fluid kinematics, conservation of

mass, conservation of energy, fluids in rigid body translational and rotational motions, Bernoulli's equation, and momentum analysis of flow systems. Prerequisites: MECH 272, MATH 200.

MECH 278   Manufacturing Processes   (3 crs)
This course gives an insight to manufacturing of metallic materials, engineering and their processing; selections of engineering materials, dimensional and geometric tolerance; processes include metal casting, bulk and sheet metal forming, metal joining, fundamentals of machining, metal cutting theories and practices; hands-on experience in metal cutting. Pre-requisite: ENGR 100, ENGR 110, ENGR 105.

MECH 279   CAD/CAM and CNC Machines   (2 crs)
This covers the principles, techniques, and applications of computer numerically controlled (CNC) machine tools. G and M code programming of industrial machines, tooling systems, introduction to Computer Aided Drafting and Manufacturing (CAD/CAM) systems, introduction to the principle of Flexible Manufacturing Systems (FMS), and hands-on training on CNC machine. Prerequisite: MECH 278.

MECH 280   Machine Drawing   (3 crs)
The course covers the study of machine design, drawing and drafting to familiarize about the detail and assembly of machine components; dimension, limits, fits and tolerance; sectional views; Introduction to CAD/CAE; construct and realize the detail and assembly of machine components by 2D and 3D modeling using CAD software i.e. Solid Works. Prerequisite: ENGR 110, ENGR 105.

MECH 299   Practical Training   (0 cr)
Eight weeks of supervised project/internship aimed at providing practical experience for Mechanical Engineering diploma students. Prerequisite: Permission of the Instructor.

MECH 371   Heat Transfer   (3 crs)
This course covers the mechanism and basic equations for conduction, convection and radiation, steady-state one dimensional conduction heat transfer, Cartesian and cylindrical coordinates, resistance concept for plane wall & radial systems, contact resistance, multi-layer plane walls and radial systems, extended surfaces, forced convection dimensional analysis, natural convection, internal flows in tubes, heat exchangers, LMTD and e-NTU methods of design. Prerequisites: MECH 275, MECH 277.

MECH 372   Control Systems   (3 crs)
This course covers the basic concepts of control theory: plant, controller, process, open-loop, feed-back control; Laplace transform; mathematical modeling of dynamic systems; state-space; Linearization; transient and steady-state responses; stability; frequency-response analysis: bode diagram, Nyquist plots; lab may include software application (e.g. MATLAB or LabVIEW) and/or hardware equipment (inverted pendulum, level, pressure, temperature, motor speed control, etc.). Prerequisite: MATH 210.

MECH 374   Instrumentation & Measurements   (3 crs)
This course covers the whole spectrum of measurement and instrumentation concepts: sensor classification, calibration and characteristics; measurement chain

and interfacing concepts; data acquisition, manipulation, transmission, and recording; measurement of various physical variables; computer application (e.g. LabVIEW); and practical team project. Prerequisites: EECE 210 and MATH 205.

MECH 380   Dynamics of Machines   (3 crs)
This course covers the following topics: kinematics fundamentals, Grashof condition, graphical linkage syntheses, position analysis, computer-aided mechanism design, velocity analysis using graphical and analytical methods, acceleration analysis using analytical and graphical methods, cam, gear, gear force analysis, balancing of rotating machines. Pre-requisite: MECH 274.

MECH 385   Mechanical Design   (3 crs)
This course covers a review of stress, strain, and deflection; combined loading; Mohr's circles, principal stresses and maximum shear stress; static failure theories; fatigue failure theories; surface failure; design of different mechanical components: shafts, keys, couplings; columns; bearings and lubrication; introduction to finite element analysis (FEA). Prerequisite: MECH 276.

MECH 400   Practical Training   (0 cr)
Supervised project/internship aimed at providing practical experience for Mechanical Engineering bachelor students. Prerequisite: Permission of the Instructor.

MECH 401   Final Year Project I   (0 cr)
A supervised project, normally in groups of three students, aimed at providing practical experience in some aspects of mechanical engineering. Students are expected to complete a literature survey, project specification, critical analysis, and to acquire the necessary material needed for their intended product.

MECH 402   Final Year Project II   (3 crs)
A course in which the students integrate their acquired knowledge and skills to deliver the product researched and planned in MECH 401. Prerequisite: MECH 401.

MECH 413   Air Conditioning   (3 crs)
This course covers the following: review of basic concepts and fundamentals of thermodynamics, psychrometry, human comfort, heat transfer in residential building, heating load calculations, cooling load calculations, required air quantities for cooling or heating. Prerequisite: MECH 275.

MECH 431   Mechanical Vibrations   (3 crs)
This course covers the response of discrete single, two- and multi-degree of freedom systems to vibration, free and forced vibration, response of damped and undamped systems to vibration, damping cases: underdamped, critically damped and overdamped systems, Lagrange's equation, base excitation, rotating imbalance, vibration Isolation, and introduction to human responses to vibration. Prerequisite: MECH 274, MATH 210.

MECH 314   Fluid Power   (3 crs)
This course covers the following topics: fundamental concept of fluid power transmission, properties of conventional fluid, control valves, positive and non-positive displacement pumps, compressors, motors, cylinders, electro-hydraulic and pneumatic valves, graphical symbols, circuit and systems, compressible fluid properties, and applications of fluid power. Prerequisite: MECH 277.

MECH 410   PLC and Industrial Automation   (3 crs)

This course covers PLC operation, PLC memory, ladder logic; structured logic, flowchart-based, and state-based design, instruction list and structured text programming, Interface of sensors, actuators, and I/O devices, selecting PLC, projects. Prerequisite: MECH 374.

MECH 412   Internal Combustion Engines   (3 crs)

This course covers the fundamental principles underlying the theory and analysis of reciprocating internal combustion engines, fuels, carburetion, combustion, exhaust emissions, detonation, fuel injection, and factors affecting performance. Prerequisite: MECH 275.

MECH 414   Gas Turbines   (3 crs)

This course covers the thermodynamic and aerodynamic theory that forms the basis of gas turbine design: shaft power cycles; gas turbine cycles; turbofan and turbojet engines; design and analysis of centrifugal and axial flow compressors and turbines. Prerequisites: MECH 275, MECH 277.

MECH 415   Steam Turbines   (3 crs)

This course covers the following topics: impulse and reaction steam turbines, steam turbine cycles, flow of steam in nozzles, design aspects of turbines, stage losses and efficiency, velocity diagrams; impulse and reaction blading velocities; nucleation, condensation and two-phase phenomena in flowing steam. Prerequisites: MECH 275, MECH 277.

MECH 416   Fluids Engineering Application   (3 crs)

This course covers the following topics: potential flow and boundary layer analysis; lift and drag; flow separation; viscous internal channel flow and lubrication theory; compressible flow in nozzles and ducts; normal shock waves and channel flow with friction or heat transfer; fluid machinery including pumps and hydraulic turbines. Prerequisite: MECH 277.

MECH 417   Thermal Power Plant   (3 crs)

This course covers the fundamental principles, theory, design and operation of thermal power plants. It also covers available technologies behind the existing thermal power plants and the up-to-date technologies available for future plants. Topics covered include thermodynamic power cycles, energy conversion, boilers and furnaces, energy economy and analysis and sustainable power generation. Prerequisites: MECH 275, MECH 277.

MECH 430   Mechatronics and Intelligent Machines Engineering   (3 crs)

This course covers the following topics: electromechanical systems and mechatronics; data; numbering systems, microcontroller, assembly language programming, A/D and D/A conversion; parallel I/O, programmable timer operation, interfacing sensors and actuators, applications; design project and implementation of a mechatronics system. Prerequisite: MECH 374.

MECH 442   Capstone Design   (3 crs)

In this course, students will work in teams and learn problem solving techniques of professional level from team designing process. Main topic to identify the problem or define problem, create different idea and after analyzing the

environmental, economically and ethical aspects select the final plan, create engineering drawing, create CAD model and do CAE analysis using commercial software (SolidWorks), create prototype or manufacture the part, test and analyze, prepare report and presentation. Pre-requisite: MECH 385.

MECH 444   Environmental Impacts of Energy Systems   (3 crs)
This course talks about world energy resources and classifications. It covers sources and effects of air pollution, air quality modeling, Gaussian dispersion models, motor vehicles emissions and noise pollution, mitigation strategies, environmental impacts of electricity generation, pollution control systems, electromagnetic radiations. Prerequisite: ENGR 100.

MECH 450   Computer Applications in Mechanical Engineering   (3 crs)
This course teaches students how to use computer software to solve problems from various topics of mechanical engineering; topics may include but not restricted to stress analysis, vibration, heat transfer, and fluid flow. Computer applications may include but not restricted to the use of finite element method software, MATLAB and CFD. Prerequisite: EECE 130, MECH 277, MECH 371, MECH 431.

MECH 451   Finite Element Method   (3 crs)
This course covers the following topics: matrix notation, stiffness (displacement) method, boundary conditions, linear stress analysis, strain rate, deformation analysis, bar elements, 2D and 3D truss, beam, frame and structural elements, and modeling and simulation using commercial finite element software. Pre-requisite: MATH 210, MECH 279, MECH 385.

MECH 453   Robotics   (3 crs)
This course covers the following topics: introduction to robotics, coordinate systems, robot arms, end effectors, sensors, application of sensors in robots, programming of robots, safety considerations. Prerequisite: MECH 374.

MECH 454   Artificial Intelligence   (3 crs)
This course covers the following topics: introduction to artificial intelligence (AI), knowledge perception, predicate logic, machine learning, decision tree learning, two and multiple layers' artificial neural networks (ANN), logic programming, genetic algorithms, genetic programming. Prerequisite: EECE 130, MATH 335

MECH 455   Hydraulics   (3 crs)
This course covers the fundamental and operating principles of hydraulics and pumps/turbines: applied principles and practical features of hydraulics and pumps/turbines, internal flow in conduits, turbomachinery, classifications of pumps, Classifications of hydraulic turbines. Prerequisite MECH 277.

MECH 490   Renewable Energy   (3 crs)
This course covers the whole spectrum of renewable energy: wind, solar, tidal, biomass, etc. The course also covers hybrid systems as well as nuclear energy and its role in the 21st century (and beyond) and how it fits in with other forms of "renewable energy". Prerequisite: MECH 275.

MECH 499   Special Topics in Mechanical Engineering   (3 crs)
This independent course will cover a particular topic, varying from semester to

semester, in which there is a particular student or staff interest. Prerequisite: Permission of the Instructor and approval of the Department.

MECH 270L   Solid Mechanics Laboratory   (1 cr)
This laboratory covers different experiments related to properties of materials; experiments include Hooke's law, tensile test, bending test, creep test, hardness test, impact test, torsion test, and fatigue test. Pre or Co-requisite: MECH 270.

MECH 274L   Mechanical Dynamics Laboratory   (1 cr)
This laboratory covers the following experiments: falling objects, projectile motion, acceleration and force, Newton's third law, tension, conservation of momentum, conservation of energy: free fall, pendulum, spring, roller coaster; oscillation; rotational inertia. Prerequisite: MECH 274.

MECH 277L   Fluid Mechanics Laboratory   (1 cr)
This laboratory covers different experiments that may include measurement of flow rate, Bernoulli's theorem, center of pressure, floatation characteristics, centrifugal pumps, cavitation in centrifugal pumps, characteristics of two pumps in series, pipe friction losses, friction in bends and fittings, momentum of flow, Pelton turbine, hydraulic Ram Pump, free and forced vortices. Pre or Co-requisite: MECH 277.

MECH 315L   Thermal Laboratory   (1 cr)
This laboratory is meant to complement the thermodynamics and heat transfer courses. Experiments include linear heat conduction, radial heat conduction, combined convection and radiation, extended surface heat transfer, heat exchangers, saturation pressure, expansion processes of a perfect gas, steam power plant cycle. Co-requisite: MECH 371.

MECH 413L   HVAC and Refrigeration Laboratory   (1 cr)
This laboratory covers the following experiments: different air conditioning processes, sensible heating, sensible cooling, humidification, heating and humidification, cooling and dehumidification. It also covers experiments on the refrigeration cycle, cooling towers and small and ducted split systems. Prerequisite: MECH 413.

MECH 444L   Fuel Cell Laboratory   (1 cr)
This laboratory covers the following experiments: the basic functions of the fuel cell system, the characteristic curve of a fuel cell, parameters influencing the characteristic curve, determination of the hydrogen current curve, efficiency of the fuel cell stack, set-up of a fuel cell power supply, efficiency of a fuel cell power supply, characteristic curves of the solar panel, solar power-fuel cell hybrid, parallel and series switching of fuel cells, and examples of fuel cell applications. Prerequisite: ENGR 100.

MECH 445L   Material Analysis Laboratory   (1 cr)
This course gives insight to materials engineering, testing and analysis; gain experience on the relationship between processing, microstructure and performance of the materials; examination of surface and subsurface characterization of ferrous and non-ferrous metallic specimens; students will be made to understand the significance of the nondestructive testing methods, procedure and application. Pre-requisite: MECH 270, MECH 278.

6. Diploma in Mechanical Engineering

6.1. Program Overview

Refer to Bachelor in Mechanical Engineering **Section 5.1.**

6.2. Program Objectives

Refer to Bachelor in Mechanical Engineering **Section 5.2.**

6.3. Program Learning Outcomes

Refer to Bachelor in Mechanical Engineering **Section 5.3.**

6.4. Admission Requirements

Admission requirements for a Diploma in Mechanical Engineering Program are as specified in College **Section 6.a**.

6.5. Graduation Requirements

To graduate with a Diploma in Mechanical Engineering, students must satisfactorily complete 75 credits taken over two academic years, with an overall minimum average of 65 percent. The University, College, and Program requirements are as given in the following table.

University Requirements	College Requirements	Major Requirements		Total Credit Hours
		Core	Elective	
18	21	36	-	75

6.6. University Requirements

The University requirements for Diploma in Mechanical Engineering program consist of six courses comprising of 18 credit hours as shown below.

Code	University Courses	Credit Hours
ENGL 101	Basic Academic English	3
ENGL 102E	English for Engineering and Sciences I	3
ENGL 203E	English for Engineering and Sciences II	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3
MATH 199	Calculus I	3
SOCS 102	Omani Society	3

6.7. College Requirements

The College requirements consist of 8 courses comprising of 21 credit hours as given below:

Code	College Courses	Credit Hours
EECE 130	Computers and Programing I	3
ENGR 100	Introduction to Engineering	3
ENGR 105	Engineering Graphics	2
ENGR 110	Engineering Workshop	1

MATH 200	Calculus II	3
MATH 205	Calculus III	3
MATH 250E	Probability and Statistics	3
PHYS 170	Fundamentals of Physics I	3

6.8. Program Requirements

I)   Core Requirements

The program core requirements consist of 16 courses encompassing 36 credit hours.

II)   Elective Requirements

There are no elective requirements for this program.

6.9. Plan of Study: Diploma in Mechanical Engineering

Year I		
Fall Semester		**17 Credits**
Code	**Course Title**	**Credit Hours**
ENGR 100	Introduction to Engineering	3
ENGL 101	Basic Academic English I	3
MATH 199	Calculus I	3
PHYS 170	Fundamentals of Physics I	3
ENGR 105	Engineering Graphics	2
SOCS 102	Omani Society	3
Spring Semester		**16 Credits**
Code	**Course Title**	**Credit Hours**
MECH 270	Properties of Materials	3
EECE 130	Computers and Programming I	3
ENGR 110	Engineering Workshop	1
ENGL 102E	English for Engineering and science I	3
MATH 200	Calculus II	3
ENTR 200	Entrepreneurship: Innovation and Creativity	3
Summer Semester		**6 Credits**
Code	**Course Title**	**Credit Hours**
ENGL 203E	English for Engineering and science II	3
MATH 205	Calculus III	3
Year II		
Fall Semester		**17 Credits**
Code	**Course Title**	**Credit Hours**
EECE 210	Electric Circuits I	3
EECE 210L	Electric Circuits Laboratory I	1
MATH 250E	Probability and Statistics	3
MECH 272	Mechanical Statics	3
MECH 271	Industrial Maintenance	3
MECH 278	Manufacturing Processes	3
MECH 270L	Solid Mechanics Laboratory	1

Spring Semester		19 Credits
Code	Course Title	Credit Hours
MECH 274	Mechanical Dynamics	3
MECH 274L	Mechanical Dynamics Laboratory	1
MECH 275	Thermodynamics	3
MECH 276	Strength of Materials	3
MECH 277	Fluid Mechanics	3
MECH 277L	Fluid Mechanics Laboratory	1
MECH 279	CAD/CAM and CNC Machines	2
MECH 280	Machine Drawing	3
Summer Semester		0 Credits
Code	Course Title	0 Credit Hours
MECH 299	Practical Training	0

6.10. Course Description

Refer to Bachelor in Mechanical Engineering **Section 5.10.**

كلية الحقوق

جدول المحتوى

كلية الحقوق

1. أعضاء الهيئة التدريسية والإدارية:

العميد : د. أحمد محمد أحمد الزين

منسق العميد : وليد الشحري

رئيس قسم القانون العام : أ. د. محمد عبدالله الشوابكة

أ.د. زكريا عبد الوهاب، د. مسلم العوائد، د.سالم الكثيري، د.أحمد حسنية، د. سعيد بن مسعود نعوم الكثيري ، د. صابرين جابر ، أ. محمد المعشني

رئيس قسم القانون الخاص : د. عبد الكريم ظلام

د.المدني صالح الشريف ، د.خالد طه ، د. جابر الشحري، د. محمد بن سيف، د. سعاد الزروالي، د. شامي يس ، د. حازم أبوالحمد حمدي.

منسق: علي جعبوب

2. هيكل الكلية:

يترأس كلية الحقوق عميد يشرف على القسمين التاليين :

1- قسم القانون العام

2- قسم القانون الخاص

3. الرؤية:

تسعى كليه الحقوق لتحقيق مكانة مرموقة بين مؤسسات التعليم العالي في مجال القانون.

4. الرسالة:

تتطلع كلية الحقوق إلى تأمين تعليم قانوني وفقا لمعايير الجودة التي تخضع لها كليات القانون المرموقة في العالم وتبادل الخبرات مع جميع الهيئات القانونية لتكوين جيل من الحقوقيين مؤهل لخدمة المصلحة العليا للمجتمع العماني.

5. البرامج التي تقدمها الكلية:

تطرح كلية الحقوق برنامجين يعتمدان اللغة العربية في التدريس:

أ- **برنامج البكالوريوس في الحقوق**

ب- **برنامج الماجستير في الحقوق**

- تخصص القانون العام

– تخصص القانون الخاص

6. شروط القبول

أ. **بالبكلوريوس**

- النجاح في شهادة الدبلوم العام المعتمد في سلطنة عمان أو ما يعادلها
- النجاح في مقررات البرنامج التأسيسي للحقوق من جامعة ظفار أو مؤسسة أخرى معترف بها من وزارة التعليم العالي
- النجاح في الاختبار والمقابلة التي تجريها الكلية

ب. **بالماجستير**

للاطلاع على متطلبات القبول الخاصة ببرامج الماجستير ، راجع دليل الدراسات العليا.

7. شروط التخرج

أ- بالبكلوريوس

للحصول على درجة البكلوريوس في القانون؛ على الطالب أن يدرس (ينهي) بنجاح (130) ساعة تدريسية معتمدة من المواد الموضحة في الخطة الدراسية للبرنامج (موضحة بالجدول المرفق)، وذلك بمعدل تراكمي عام لا يقل عن 65% ومعدل تخصصي لا يقل عن 70% في المواد التخصصية.

الساعات المعتمدة	المتطلبات		متطلبات الجامعة
	متطلبات التخصص		
	الاختيارية	الاجبارية	
130	14	101	15

ب- بالماجستير

على الطالب إجتياز جميع المقررات المطلوبة بواقع 33 ساعة معتمدة بالحد الأدنى لدرجة النجاح في كل مقرر والحد الأدنى للمعدل الأكاديمي المطلوب بالإضافة لمتطلبات الرسالة للتخرج وفق الخطة الدراسية لبرنامج الماجستير في الحقوق. للمزيد من المعلومات عن برامج الماجستير ، راجع دليل الدراسات العليا.

8. بكالوريوس الحقوق

8.1. رسالة البرنامج:

تأمين تعليم قانوني متميز وفقا لمعايير الجودة التي تخضع لها كليات القانون المرموقة في العالم وتبادل الخبرات جميع الهيئات القانونية لتكوين جيل من الحقوقيين مؤهل لخدمة المصلحة العليا للمجتمع العماني.

8.2. أهداف البرنامج :

يهدف البرنامج إلى تحقيق الأهداف التالية:

- إعداد الطالب وتأهيله لنيل التخصص الأكاديمي في علوم القانون المختلفة
- إكساب الطالب مهارات إعداد البحوث والمذكرات القانونية
- تكوين الملكة القانونية لدى طالب التخصص
- تزويد الطالب بمهارات تمكنه من القدرة على التعليم المستمر
- تدريب الطالب على الجانب المهني والتطبيقي
- إلمام الطالب بتكنلوجيا المعلومات لتعزيز قدراته المهنية
- تدريب الطالب على المصطلحات القانونية باللغة الانكليزية لتساعده على إكتساب المعرفة ولمواكبة التطورات في الأنظمة القانونية
- غرس القيم المثلى وأخلاقيات المهنة التي ينبغي أن يتحلى بها رجل القانون
- تلبية إحتياجات سوق العمل في القطاعين العام والخاص للمتخصصين في القانون

8.3. المخرجات التعليمية للبرنامج:

من المتوقع بعد نهاية البرنامج بنجاح أن يكون الطالب قادراً على ما يلي:

1. يتعرف الطالب على أهم القواعد القانونية
2. يستطيع الطالب أن يكتب ويفسر النصوص القانونية بشكل سليم
3. يكتب البحوث والمذكرات القانونية مراعيا القواعد العلمية الصحيحة

4. يقارن بين النصوص التشريعية والآراء الفقهية والاحكام القضائية كل حسب إختصاصه
5. يكيف الوقائع والتصرفات القانونية وبما يتلاءم مع تشريعات المجتمع العماني.
6. يطور القواعد القانونية للتوافق مع التطورات الحديثة من خلال اجراء البحوث العلمية
7. يستخدم تقنية المعلومات في عمله للوصول الى كفاية في الفهم والتصور
8. يعمل بروح الفريق مع زملائه ورؤسائه بشكل مستمر
9. يتحلى بأخلاقيات المهنة وعادات وتقاليد المجتمع العماني

8.4. شروط القبول:

شروط القبول في برنامج بكالوريوس الحقوق محددة في قسم الكلية 6.

8.5. شروط التخرج:

شروط التخرج لبرنامج بكالوريوس الحقوق محددة في قسم الكلية 7.

8.6. متطلبات الجامعة:

رمز المقرر	اسم المقرر
ARAB 101	الكتابة الأكاديمية باللغة العربية – 3 ساعات معتمدة
ENGL 101	اللغة الإنجليزية الأكاديمية الأساسية – المستوى الأول – 3 ساعات معتمدة
CMPS 100A	مدخل لتقنيات الحاسوب – للآداب – 3 ساعات معتمدة
SOCS 102	المجتمع العماني – 3 ساعات معتمدة
ENTR 200	ريادة الأعمال – 3 ساعات معتمدة

8.7. متطلبات الكلية:

لاتوجد متطلبات كلية لبرنامج بكالوريس الحقوق.

8.8. متطلبات البرنامج:

المقررات الإجبارية

1. ECON 100 مبادئ علم الاقتصاد 3- ساعات معتمدة
2. LAWS 100 المدخل للقانون -3 ساعات معتمدة
3. LAWS 101 نظرية الدولة ونظم الحكم 3- ساعات معتمدة
4. LAWS 103 مصادر الالتزام 3- ساعات معتمدة
5. LAWS 105 مبادئ القانون التجاري -3 ساعات معتمدة
6. LAWS 107 المنظمات الدولية والإقليمية 3- ساعات معتمدة
7. LAWS 202 أحكام الالتزام 3- ساعات معتمدة
8. LAWS 204 النظام الأساسي لسلطنة عمان 3- ساعات معتمدة
9. LAWS 206 قانون الجزاء (القسم العام) -3 ساعات معتمدة
10. LAWS 208 قانون الشركات التجارية – 3 ساعات معتمدة
11. LAWS 210 القانون الدولي العام – 3 ساعات معتمدة
12. LAWS 215 قانون الإثبات – 3 ساعات معتمدة
13. LAWS 225 القانون الإداري – 3 ساعات معتمدة
14. LAWS 235 قانون الإجراءات المدنية والتجارية – 3 ساعات معتمدة
15. LAWS 241 قانون الأحوال الشخصية (1) – 3 ساعات معتمدة

16. LAWS 302 قانون الجزاء (القسم الخاص) - 3 ساعات معتمدة
17. LAWS 308 القضاء الإداري - 3 ساعات معتمدة
18. LAWS 312 قانون العمل والتأمينات الاجتماعية -3 ساعات معتمدة
19. LAWS 320 قانون الأحوال الشخصية (2) - 3 ساعات معتمدة
20. LAWS 341 العقود المسماة (البيع والإيجار) - 3 ساعات معتمدة
21. LAWS 345 التنفيذ الجبري - 3 ساعات معتمدة
22. LAWS 375 المالية العامة والتشريعات الضريبية - 3 ساعات معتمدة
23. LAWS 410 الحقوق العينية - 3 ساعات معتمدة
24. LAWS 412 قانون الإجراءات الجزائية (1) - 3 ساعات معتمدة
25. LAWS 418 الأعمال المصرفية والعقود التجارية - 3 ساعات معتمدة
26. LAWS 430 القانون الدولي الخاص-1- 3 ساعات معتمدة
27. LAWS 434 القانون الدولي الخاص 2 - 3 ساعات معتمدة
28. LAWS 447 مناهج البحث القانوني - 3 ساعات معتمدة
29. LAWS 451 قانون الإجراءات الجزائية (2) - 3 ساعات معتمدة
30. LAWS 455 أصول الفقه -3 ساعات معتمدة
31. LAWS 475 حقوق الملكية الفكرية — 3 ساعات معتمدة
32. LAWS 490 تطبيقات عملية - 3 ساعات معتمدة
33. LAWS 491 التدريب العملي الخارجي- 3ساعات معتمدة

المقررات الإختيارية

1. CHIN 101 اللغة الصينية للمبتدئين- 3 ساعات معتمدة
2. EDUC 250 التربية في الإسلام- 3 ساعات معتمدة
3. FREN 101 اللغة الفرنسية للمبتدئين — 3 ساعات معتمدة
4. HIND 101 اللغة الهندية للمبتدئين — 3 ساعات معتمدة
5. ITAL 101 اللغة الإيطالية للمبتدئين — 3 ساعات معتمدة
6. LAW 326 قانون التحكيم — 3 ساعات معتمدة
7. LAW 330 القانون الجوي — 3 ساعات معتمدة
8. LAW 334 الإدارة العامة - 3 ساعات معتمدة
9. LAW 350 تاريخ القانون وفلسفته - 3 ساعات معتمدة
10. LAWS 352 مصطلحات قانونية باللغة الإنجليزية - 3 ساعات معتمدة
11. LAW 354 قوانين الاستثمار - 3 ساعات معتمدة
12. LAW 356 عقد المقاولة والوكالة - 3 ساعات معتمدة
13. LAW 436 عقد الكفالة - 3 ساعات معتمدة
14. LAW 438 عقد التأمين - 3 ساعات معتمدة
15. LAW 440 علم الإجرام والعقاب — 3 ساعات معتمدة
16. LAWS 465 التشريع الجنائي الإسلامي — 3 ساعات معتمدة
17. LAW 469 تاريخ التشريع الإسلامي — 3 ساعات معتمدة
18. LAW 473 قوانين حماية البيئة — 3 ساعات معتمدة
19. LAW 477 القانون الدولي للبحار— 3 ساعات معتمدة
20. LAW 481 التجارة الإلكترونية — 3 ساعات معتمدة
21. LAWS 485 التجارة الدولية — 3 ساعات معتمدة
22. NUTR 150 الغذاء والتغذية — 3 ساعات معتمدة
23. SOWO 205A العمل الاجتماعي مع ذوي الاحتياجات الخاصة — 3 ساعات معتمدة
24. SOWO 280A العمل الاجتماعي في المحاكم الشرعية — 3 ساعات معتمدة

8.9. خطة الدراسة: بكالوريوس في الحقوق

	Year I	
15 Credits	**Semester 1(Fall)**	
عدد الساعات	اسم المقرر	رمز المقرر
3	الكتابة الأكاديمية باللغة العربية	ARAB101
3	اللغة الإنجليزية الأكاديمية الأساسية- المستوى الأول	ENGL 101
3	مدخل لتقنيات الحاسوب- للآداب	CMPS 100 A
3	المجتمع العماني	SOCS 102
3	المدخل للقانون	LAW 100
15 Credits	**Semester 2(Spring)**	
عدد الساعات	اسم المقرر	رمز المقرر
3	نظرية الدولة ونظم الحكم	LAW 101
3	مصادر الالتزام	LAW 103
3	النظام الأساسي لسلطنة عمان	LAW 204
3	المنظمات الدولية والإقليمية	LAW 107
3	ريادة الأعمال	ENTR 200

	Year II	
18 Credits	**Semester 3 (Fall)**	
عدد الساعات	اسم المقرر	رمز المقرر
3	مبادئ القانون التجاري	LAW 105
3	أحكام الالتزام	LAW 202
3	قانون الجزاء (القسم العام)	LAW 206
3	القانون الإداري	LAW 225
3	القانون الدولي العام	LAW 210
3	مقرر اختياري	Code
18 Credits	**Semester 4 (Spring)**	
عدد الساعات	اسم المقرر	رمز المقرر
3	قانون الإثبات	LAW 215
3	القضاء الإداري	LAW 308
3	قانون الأحوال الشخصية (1)	LAW 241
3	قانون الشركات التجارية	LAW 208
3	مبادىء علم الإقتصاد	ECON 100
3	مقرر اختياري	Code

	Year III	
15 Credits	**Semester 5 (Fall)**	
عدد الساعات	اسم المقرر	رمز المقرر
3	قانون الجزاء (القسم الخاص)	LAW 302
3	قانون العمل والتأمينات الاجتماعية	LAW 312
3	قانون الأحوال الشخصية (2)	LAW 320
3	قانون الإجراءات المدنية والتجارية	LAW 235
3	**مقرر اختياري**	Code
15 Credits	**Semester 6 (Spring)**	
عدد الساعات	اسم المقرر	رمز المقرر
3	العقود المسماة (البيع والإيجار)	LAW 341
3	التنفيذ الجبري	LAW 345
3	المالية العامة والتشريعات الضريبية	LAW 375
3	القانون الدولي الخاص 1-	Law 430
3	**مقرر اختياري**	Code

Year IV		
18 Credits	Semester 7 (Fall)	
عدد الساعات	اسم المقرر	رمز المقرر
3	الحقوق العينية	LAW 410
3	قانون الإجراءات الجزائية (1)	LAW 412
3	الأعمال المصرفية والعقود التجارية	LAW 418
3	القانون الدولي الخاص 2	LAW 434
3	مناهج البحث القانوني	LAW 447
3	**مقرر اختياري**	Code
14 Credits	Semester 8 (Spring)	
عدد الساعات	اسم المقرر	رمز المقرر
3	أصول الفقه	LAW 455
3	تطبيقات عملية	LAW 490
3	قانون الإجراءات الجزائية (2)	LAW 451
3	الملكية الفكرية	LAW 475
3	**تدريب عملي خارجي**	LAW 491
Completion of Bachelor of Law: Total Credits: 130		

8.10. توصيف المقررات:

أولاً: المتطلبات الإجبارية:

ARAB 101   الكتابة الأكاديمية بالعربية   (3 ساعات معتمدة)
يركز هذا المساق على دراسة العناصر الأساسية في الكتابة الأكاديمية العربية ويشمل الجمل التامة والفقرات والمقالات والأبحاث الأكاديمية والتقارير المهنية والرسائل الرسمية. يتوجب على الطلبة إظهار قدرات متقدمة في إنتاج نصوص أكاديمية صحيحة.

ENGL 101   اللغة الإنجليزية الأكاديمية الأساسية- المستوى الأول   (3 ساعات معتمدة)
يقدم هذا المساق تطويرا لمهارات اللغة الأساسية. يدرب الطلبة على فهم بنية الفقرة مع التركيز على السلاسة والدقة وتماسك النص. كما يتدربون على فهم النص المقروء والتعبير الشفهي ومهارات الدراسة.

CMPS 100A   مدخل لتقنيات الحاسوب للآداب   (3 ساعات معتمدة)
مدخل إلى ثقافة الحاسوب التقني. يتوقع ان يرى الطالب من خلال هذا المساق كيف يؤثر الحاسوب على حياتنا وطريقة عملنا. ويجيد استخدام برامج الحاسوب التطبيقية كبرامج الجدولة وتطبيقات قواعد البيانات. تتضمن الموضوعات أيضاً استخدام لغات البرامج المساعده كلغة تهيئة صفحات الويب اتش تي إم إل، ولغة الجافا لشرح مفاهيم برمجة الويب البسيطة. يمكن لطلبة تخصصات الآداب التسجيل في هذا المساق.

SOCS 102   المجتمع العماني   (3 ساعات معتمدة)
هذا المساق هو نظرة عامة على تاريخ سلطنة عمان، القديم والمعاصر؛ فضلاً عن مراجعة الخصائص الحالية للمجتمع العماني، لاسيما البنية الإجتماعية، والطبقات الاجتماعية، واللغات، والعادات، وعملية التغيير الإجتماعي والتطور المجتمعي. قد يدرس هذا المساق باللغة العربية

ENTR 200   ريادة الأعمال   (3 ساعات معتمدة)
يمنح هدا المقرر التمهيدي للطلبة برنامج مفعّل بالكامل يمكّنهم من استكشاف ريادة الأعمال كموضوع دراسي وكميدان للعمل، حيث أصبحت واحدة من أكبر قوى التغيير المؤثرة في العالم. ويهدف هذا المقرر إلى منح الطالب الفهم الأساسي لميدان ريادة الأعمال هذا بالإضافة إلى منحه تدريبا عمليا. وتشمل المواضيع التي يغطيها هذا المقرر مفهوم ريادة الأعمال، ودراسة الجدوى، ونموذج العمل، وخطة العمل، وإدراك مفهوم الفرصة، ومختلف أشكال ملكية المؤسسة الاقتصادية الموجودة في سلطنة عمان، وأيضا مختلف التطبيقات العملية والزيارات الميدانية.

ثانياً: المتطلبات التخصصية الإجبارية:

ECON 100 مبادئ علم الاقتصاد   **(3 ساعات معتمدة)**

يحتوي المقرر على بيان النظم الاقتصادية المختلفة السائدة في العالم، ودور الدولة في النشاط الاقتصادي في ضوء كل نظام اقتصادي،والإنتاج من حيث الكميات الاقتصادية، ونظرية الإنتاج، وقوانين العرض والطلب. وكذلك دراسة الدخل القومي وعناصره المختلفة. وأخيراً دراسة النظام النقدي.

LAW 100 المدخل للقانون   **(3 ساعات معتمدة)**

يتضمن هذا المقرر دراسة نظرية القانون ، وتشمل تعريف القاعدة القانونية وخصائصها والتفرقة بينها وبين غيرها من القواعد الاجتماعية الأخرى ، وتدرجها، تفسيرها، وتطبيقها من حيث الزمان ومن حيث المكان وإلغاؤها. وكذا دراسة نظرية الحق وتشمل تعريف الحق وبيان أنواع الحقوق، وأركان الحق ومحله والحماية القانونية.

LAW 101 نظرية الدولة ونظم الحكم   **(3 ساعات معتمدة)**

يدرس الطالب نظرية الدولة من حيث تعريفها ونشأتها وخصائصها ووظيفتها، وأنواع الدول، كما يدرس الحكومة من حيث أشكال الحكومات ووسيلة إسناد السلطة المعاصرة في الحكم، كالنظام البرلماني والنظام الرئاسي ونظام حكومة الجمعية.

LAW 103 مصادر الالتزام   **(3 ساعات معتمدة)**

يتناول هذا المقرر دراسة مصادر الالتزام سواء في ذلك المصادر الإرادية والمصادر غير الإرادية للالتزام. وتشمل المصادر الإرادية العقد بأركانه وشروط صحته ونطاقه والمسؤولية المدنية عن الإخلال به، وكذا الإرادة المنفردة، بينما تشمل المصادر غير الإرادية الفعل الضار والفعل النافع والقانون.

LAW 105 مبادئ القانون التجاري   **(3 ساعات معتمدة)**

يتضمن المقرر تحديد مفهوم القانون التجاري، وتطوره، ومصادره، ومفهوم العمل التجاري، وتمييزه العمل المدني، وتحديد أنواع الأعمال التجارية، ومفهوم التاجر وشروط اكتساب صفة التاجر، وبيان الواجبات المفروضة على التاجر (مسك الدفاتر التجارية، التسجيل في السجل التجاري، الابتعاد عن المنافسة الغير مشروعة)، وتحديد مفهوم المتجر، والتصرف في المتجر بطريق البيع، أو الإيجار، أو الرهن.

LAW 107 المنظمات الدولية والإقليمية   **(3 ساعات معتمدة)**

يتضمن مقرر هذا المقرر دراسة النظرية العامة للمنظمات الدولية، من حيث تعريف المنظمة الدولية وعناصر قيامها، وكذلك أنواعها، ثم أحكام العضوية فيها وهيكلها الداخلي من حيث أجهزتها الرئيسية والفرعية، وبعد ذلك التعرض للشخصية القانونية للمنظمات الدولية وما يترتب عليها من نتائج، والعلاقات الخارجية للمنظمات الدولية، وتطبيق هذه القواعد على الأمم المتحدة كمنظمة عالمية، ثم الجامعة العربية، ومجلس التعاون لدول الخليج العربي كنموذج للمنظمة إقليمية.

LAW 202 أحكام الالتزام   **(3 ساعات معتمدة)**

ويتناول هذا المقرر أحكام الالتزام من حيث آثاره (التنفيذ العيني- التعويض) وحماية الضمان العام، وأوصاف الالتزام (الشرط والأجل – التضامن – عدم قابلية الالتزام للانقسام) ثم انتقاله (الحواله حق، دين ، عقد)، انقضاءه بالوفاء، أو ما يعادل الوفاء أو بدون وفاء.

LAW 204 النظام الأساسي لسلطنة عمان   **(3 ساعات معتمدة)**

يحتوي المقرر على دراسة المبادئ الدستورية العامة، ودراسة النظام الأساسي للسلطنة من حيث التعرف على النظام الأساسي، وفهمه وتحليله من خلال دراسة القواعد العامة، وخصائص هذا النظام، وتطور نظام الحكم في السلطنة حتى إعلان النظام الأساسي. والحقوق العامة للمواطنين وواجباتهم، واختصاصات رئيس الدولة، ومجلس عمان، ومجلس الوزراء ، ودور السلطة القضائية.

LAW 206 قانون الجزاء (القسم العام)   **(3 ساعات معتمدة)**

دراسة القواعد الخاصة بمبدأ المشروعية، وتحديد نطاق تطبيق القانون الجزائي من حيث الزمان والمكان، وتعريف الجريمة، والوقوف على أركانها، والظروف المختلفة التي قد تكتنفها مؤثرة في تكييفها أو عقوبتها، وأسباب إباحتها، وأحكام المسؤولية الجنائية لمرتكبها.العقوبة . والأحكام العامة للعقوبة، وأنواعها المختلفة، و تطبيق العقوبة، ووقف التنفيذ. وانقضاء العقوبة، والتدبير الاحترازي ومبدأ الشرعية، والشروط العامة للتدبير الاحترازي، وأنواع التدابير الاحترازية . وانقضاء التدبير الاضطراري.

LAW 208 قانون الشركات التجارية   **(3 ساعات معتمدة)**

يتضمن هذا المقرر التعريف بالشركة وشروط إنشائها من شروط موضوعية عامة وخاصة والشروط لشكلية ، وتقسيم الشركات ، (شركات أشخاص كالتضامن وشركات أموال كالمساهمة)، وأنواع الشركات

في قانون الشركات العماني. والشخصية المعنوية للشركة وآثارها، وأسباب انقضاء الشركات، (تصفية الشركات، تحول الشركات، اندماج الشركات)

LAW 210 القانون الدولي العام **(3 ساعات معتمدة)**

يتضمن مقرر هذه المقرر تعريف القانون الدولي العام وتمييزه عن غيره من فروع القانون الأخرى، وأساس القوة الإلزامية لقواعد هذا القانون وتحديد مصادره، ثم أشخاص القانون الدولي وهم الدول والمنظمات الدولية، حيث يتناول بشكل تفصيلي للدولة من حيث عناصر قيامها والاعتراف بها ، وكذلك أنواعها ، ثم دراسة إقليم الدولة بعناصره الثلاثة البري و البحري والجوي.

LAW 215 قانون الإثبات **(3 ساعات معتمدة)**

يحتوي هذا المقرر على دراسة المبادئ العامة في الإثبات ، ونعني بها محله، وعبء الإثبات ، وحياد القاضي، ومدى تعلق قواعده بالنظام العام، ثم بعد ذلك أدلة الإثبات وهي الكتابة وشهادة الشهود والإقرار والقرائن واليمين بنوعيها، والمعاينة والخبرة.

LAW 225 القانون الإداري **(3 ساعات معتمدة)**

التعريف بالقانون الإداري، ببيان مدلوله ونشأته وتطوره ومصادره، ونطاق تطبيقه، وتنظيم السلطة الإدارية مع شرح التنظيم القانوني للوظيفة العامة في عمان، والتعريف بالعمل الإداري، وتنظيم المرافق العامة والأموال العامة، وأساليب العمل الإداري، أي التصرفات الإدارية وهي تشمل القرارات الإدارية والعقود الإدارية والأعمال المادية.

LAW 235 قانون الإجراءات المدنية والتجارية **(3 ساعات معتمدة)**

يتناول هذا المقرر المبادئ التي يقوم عليها النظام القضائي العماني، ورجال القضاء من حيث تعيينهم وضماناتهم، كما يتناول نظرية الدعوى، وتوزيع الاختصاص على جهات القضاء في السلطنة على أساس تقسيم جهات القضاء إلى جهتين هما القضاء الإداري والقضاء العادي، والاختصاص النوعي والقيمي والمحلي، والأوراق القضائية وكيفية تحديدها وإعلانها، ورفع الدعوى وسيرها. كما يتناول الأحكام القضائية وأنواعها وكيفية إصدارها، وطرق الطعن المختلفة فيها.

LAW 241 قانون الأحوال الشخصية (1) **(3 ساعات معتمدة)**

يتناول المقرر المسائل المتعلقة بالزواج والفرقة بين الزوجين (الواردة في المادة 1 إلى 198 من قانون الأحوال الشخصية العماني) ، فيشمل الخطبة وأحكام الزواج وشروطه وأركانه، والمحرمات من النساء، وأحكام الطلاق، والخلع، والتطليق بحكم القضاء، والآثار المترتبة على الفرقة بين الزوجين، بالنسبة للمرأة وبالنسبة للأولاد.

LAW 302 قانون الجزاء (القسم الخاص) **(3 ساعات معتمدة)**

يدرس المقرر الجرائم الواقعة على حياة الإنسان وسلامته: جريمة القتل، الأسباب المشددة، الأسباب المخفضة، وجريمة الإجهاض، وجرائم الإيذاء. والجرائم الواقعة على العرض بأنواعها المختلفة، والجرائم المخلة بالحياء العام، والجرائم الواقعة على حرية الأشخاص، وانتهاك حرمة منزل، والإهانة، كما يتناول جرائم الأموال بأنواعها المختلفة (جرائم السرقات وظروفها المشددة، جرائم الاحتيال، جرائم الشيك بدون رصيد، جرائم إساءة الأمانة).

LAW 308 القضاء الإداري **(3 ساعات معتمدة)**

دراسة مبدأ المشروعية ومصادره، وضمانات مبدأ المشروعية، ومعرفة أنواع الرقابة القضائية على أعمال الإدارة. ودراسة دعوى الإلغاء، (مراجعة القرار الإداري) من حيث مفهومها وخصائصها، وشروط رفع دعوى مراجعة القرار الإداري أمام محكمة القضاء الإداري، والأعمال التي لا يجوز الطعن عليها بالإلغاء. ودراسة الأحكام المنظمة لمحكمة القضاء الإداري.

LAW 312 قانون العمل والتأمينات الاجتماعية **(3 ساعات معتمدة)**

يحتوي هذا المقرر على تعريف عقد العمل، ونطاق تطبيقه، وإبرامه وقيوده، وآثاره، التنظيم القانون لأوقات العمل. وتعريف التأمين الاجتماعي وخصائصه وتنظيمه الإداري، والاشتراكات، ونطاق تطبيق قانون التأمين الاجتماعي، وتحديد الفئات المستفيدة منه، وكذا أنواع التأمينات.

LAW 320 قانون الأحوال الشخصية (2) **(3 ساعات معتمدة)**

يدرس في هذا المقرر أحكام كل من الوصية والتركات (الميراث) والواردة في المادة من198 إلى 282من قانون الأحوال الشخصية العماني. فيشمل أركان الوصية وشروط كل ركن ومبطلاتها، وحدودها وقيودها،

والحقوق المتعلقة بالتركة، وأركان الإرث، وأصناف الورثة وحقوقهم، وذوو الأرحام وميراث الغائب والمفقود والحمل، والخنثى، والتخارج من التركة.

LAW 341 العقود المسماة (البيع والإيجار)   **(3 ساعات معتمدة)**

يتبادل هذا المقرر عرض لعقدي البيع والإيجار من حيث أركان انعقاد كل منهما (الرضاء – المحل – السبب)، وأنار كل من العقدين ويشتمل الالتزامات الناشئة عن العقدين. والتركيز على أحكام قانون الإيجار.

LAW 345 التنفيذ الجبري   **(3 ساعات معتمدة)**

يتناول هذا المقرر تعريف السندات التنفيذية وأنواعها المختلفة، وأشخاص التنفيذ المتمثلة في المنفذ والمنفذ ضده وقاضي التنفيذ، والمقومات اللازمة لبدء إجراءات التنفيذ، وأنواع الحجوز مع بيان إجراءات الحجز على المنقول وبيعه بالمزاد العلني، وإجراءات الحجز على العقار وبيعه بالمزاد العلني، وطرق الاعتراض على الحجز وكيفية توزيع حصيلة التنفيذ على الدائنين.

LAW 375 المالية العامة والتشريعات الضريبية   **(3 ساعات معتمدة)**

يحتوي هذا المقرر على تحديد ماهية المالية العامة ونشأتها، وعلاقتها بالعلوم الأخرى، ودراسة أنواع الإيرادات العامة في الدولة، ودرجة أهميتها، وبيان النفقات العامة في الدولة وأنواعها، والنظم الضريبية المختلفة مع التركيز على النظام الضريبي المطبق في سلطنة عمان.

LAW 410 الحقوق العينية   **(3 ساعات معتمدة)**

يحتوي هذا المقرر على دراسة حق الملكية في ذاته، والقيود الواردة عليه، ثم أنواع الملكية ولاسيما الملكية الشائعة، وأسباب كسب الملكية وهي الاستيلاء، الالتصاق، الشفعة، الحيازة، والحقوق المتفرعة عن حق الملكية، ثم تعريف التأمينات العينية وأهميتها، وعرض تفصيلي للرهن الرسمي والرهن الحيازي من حيث تعريفهما وانعقادهما وآثارهما، وحقوق الامتياز المختلفة.

LAW 412 قانون الإجراءات الجزائية (1)   **(3 ساعات معتمدة)**

يتناول المقرر الدعاوى التي تنشأ عن الجريمة ببيان الخصوم في الدعوى الجزائية والادعاء العام واخصاصاته، وقيود رفع الدعوى الجزائية، والأسباب المختلفة لسقوط الدعوى الجزائية. ودراسة الدعوى المدنية التابعة للدعاوى الجزائية. ودراسة التحقيق الأولى: إجراءات تحقق الأولى، الانتداب، ضمانات التحقيق الابتدائي، الحبس الاحتياطي، التفتيش، الاستجواب، ضبط المراسلات، قرار التصرف بالتحقيق بصوره المختلفة.

LAW 418 الأعمال المصرفية والعقود التجارية   **(3 ساعات معتمدة)**

يتضمن هذا المقرر دراسة وديعة النقود من حيث مفهومها وأنواعها وأحكام كل منها، وآثارها. ووديعة الأوراق المالية من حيث مفهومها وأحكامها وآثارها. وأحكام عقد إيجار الخزائن. والنقل المصرفي، والاعتماد البسيط، والاعتماد المستندي وأنواعه. وخطاب الضمان. والحساب الجاري، ثم دراسة الأحكام العامة للعقود التجارية، وبيان أحكام عقد البيع التجاري، وعقد النقل بنوعيه، والرهن التجاري، والوكالة التجارية، والوكالة بالعمولة، والسمسرة.

LAW 430 القانون الدولي الخاص   **(3 ساعات معتمدة)**

يتناول المقرر دراسة الجنسية في القانون العماني، والجنسية الأصلية، والجنسية المكتسبة (التجنيس، الزواج المختلط، الاسترجاع) وزوال الجنسية العمانية وكذلك النظرية العامة لتنازع القوانين (قواعد الإسناد، التكييف، الإحالة) واستبعاد القانون الأجنبي واجب التطبيق، الأحكام الوضعية في تنازع القوانين ، نظام الأحوال الشخصية، ونظام الأموال، والالتزامات. وتنازع الاختصاص القضائي الدولي (النظرية العامة وحرية الدولة في تحديد الاختصاص)، وضوابط الاختصاص القضائي، وتنفيذ الأحكام الأجنبية.

LAW 434 القانون الدولي الخاص   **(3 ساعات معتمدة)**

وكذلك النظرية العامة لتنازع القوانين (قواعد الإسناد، التكييف، الإحالة) واستبعاد القانون الأجنبي واجب التطبيق، الأحكام الوضعية في تنازع القوانين، نظام الأحوال الشخصية، ونظام الأموال، والالتزامات. وتنازع الاختصاص القضائي الدولي (النظرية العامة وحرية الدولة في تحديد الاختصاص)، وضوابط الاختصاص القضائي، وتنفيذ الأحكام الأجنبية.

LAW 447 مناهج البحث القانوني **(3 ساعات معتمدة)**

يتناول المقرر تعريف مناهج البحث وأهميتها، وبيان المناهج المختلفة (المنهج الاستقرائي والمنهج التحليلي والمنهج الوصفي والمنهج المقارن) ، وكيفية اختيار الموضوع، وقواعد إعداد الخطة وفقاً للنظام اللاتيني والنظام الأنجلوسكسوني ، وكيفية الرجوع إلى المراجع التي يجب أن يستعين بها الباحث، وإعداد قائمة المراجع، وقواعد تحرير البحث من الناحية اللغوية والمنهجية.

LAW 451 قانون الإجراءات الجزائية (2) **(3 ساعات معتمدة)**

يدرس المقرر اختصاص المحاكم (النوعي، المكاني، الشخصي)، وجرائم الجلسات، والقواعد الأساسية في عمل المحاكم، وطرق إثبات الدعوى الجزائية (الاعتراف، الشهادة، البينة الخطية، القرائن، البصمات) والحكم الجزائي من حيث شروط الحكم الجزائي، والأمر الجزائي، والطعن في الأحكام: المعارضة والاستئناف، والطعن أمام المحكمة العليا وإعادة النظر، وتنفيذ الأحكام الجزائية.

LAW 455 اصول الفقه **(3 ساعات معتمدة)**

يتضمن المقرر تعريف أصول الفقه وأهميته، وبيان الأدلة المتفق عليها، والأدلة المختلف فيها، فيتناول القرآن الكريم كمصدر أول، من حيث تعريفه ومقاصده، ودلالته على الأحكام. والسنة من حيث تعريفها وحجيتها وتقسيماتها، والإجماع من حيث تعريفه وأنواعه وحجيته، والقياس من ناحية تعريفه وحجيته وشروط الأدلة الأخرى، كالاستحسان، والمصالح المرسلة، والعرف. كما يتناول تعريف الحكم وتقسيماته، والألفاظ من حيث دلالتها على المعاني.

LAW 475 حقوق الملكية الفكرية **(3 ساعات معتمدة)**

يتضمن هذا المقرر دراسة الملكية الصناعية والتجارية، ويعالج فيها براءات الاختراع والرسوم والنماذج الصناعية، والعلامات التجارية، والمحل التجاري والعملاء والاسم والسمعة التجارية، والملكية الأدبية والفنية، وتشمل حقوق المؤلف من حيث طبيعة حقه وسلطاته الأدبية والمالية، ومدة حماية حق المؤلف، وكيفية الحماية وصورها، والحقوق المجاورة لحق المؤلف، وهي حقوق فناني الأداء، ومنتجي التسجيلات الصوتية، وحقوق هيئات الإذاعة.

LAW 490 تطبيقات عملية **(3 ساعات معتمدة)**

يتضمن هذا المقرر تدريب الطالب على كيفية إعداد وصياغة العقود المختلفة، وكتابة صحف الدعاوى بأنواعها المختلفة، وكيفية إبداء الدفوع أثناء الدعوى وكذا كيفية صياغة وتسبيب الأحكام. وكيفية إجراء التحقيق الجنائي والإداري، وكيفية إعداد المرافعة الشفوية والمذكرات القانونية، وتدريب الطالب على الدقة في تكييف الوقائع لتطبيق القواعد القانونية عليها.

LAW 491 التدريب العملي الخارجي **(3 ساعات معتمدة)**

يتضمن هذا المقرر إلحاق الطالب بالمؤسسات والجهات الحقوقية والعدلية في القطاعين العام و الخاص من خلال برامج تدريبية من أجل صقل مهاراته القانونية وربط الجانب النظري بالجانب العملي من خلال معرفة كيفية إعداد المذكرات الكتابية وأصول الترافع وإجراءات التقاضي وتسلسل الإجراءات ودراسة ملف القضية وتقديم المشورة وكيفية ممارسة حق الدفاع عن الموكل، بصورة تنعكس إيجابا على ترجمة ما تعلمه الطالب في السنوات الدراسية لتخصصه مع الواقع العملي بشكل ينعكس إيجابا على رفد المجتمع بعناصر فاعلة وخريجين أكفاء مؤهلين لشغل الوظائف ومزاولة المهام الحقوقية والعدلية. على ان لا تقل هذه المؤسسات أو الجهات التي ينجز فيها الطلبة تدريبهم عن (3) مؤسسات مختلفة ولا تقل ساعات التدريب الأسبوعي عن (20 ساعة) أسبوعيا ولمدة لا تقل عن 12 أسبوع.

ثالثاً: المتطلبات التخصصية الإختيارية:

LAW 326 قانون التحكيم **(3 ساعات معتمدة)**

يتضمن هذا المقرر التعريف بالتحكيم التجاري والإقليمي بشكل عام، وبيان طبيعته القانونية، والتمييز بين التحكيم وغيره من وسائل فض المنازعات. ثم شروط صحة اتفاق التحكيم والآثار المترتبة عليه، وكذلك هيئة التحكيم وإجراءات عملها، وصدور حكم التحكيم، وتحديد القانون الواجب التطبيق أمامها، وتنفيذ حكم المحكم.

LAW 330 القانون الجوي **(3 ساعات معتمدة)**

يتضمن هذا المقرر تعريف القانون الجوي، خصائصه ومصادره، وعقد النقل الجوي من حيث مفهومه وطبيعته إثباته، وأحكام الطائرة، وأنواع النقل الجوي، الداخلي والخارجي، وعقد النقل الجوي للأشخاص، ونقل البضائع، ومسؤولية الناقل الجوي في نقل الأشخاص وفي نقل البضائع ، وحالات دفع المسؤولية، وتحديد مسؤولية الناقل الجوي في قانون التجارة العماني، والاتفاقات المتعلقة بالإعفاء من المسؤولية أو التخفيف منها.

LAW 334 الإدارة العامة   **(3ساعات معتمدة)**

يتضمن هذا المقرر تمثيل الإدارة العامة من الناحية العضوية، وأهم سلطات الدولة وهي السلطة الإدارية من ناحية توفر الخدمات اللازمة لأفراد المجتمع، وإنجاز التنمية الشاملة في كافة المجالات في المجتمع، وتحقيق أهداف الدولة بصفة عامة، مما يوجب على رجل القانون أن يستوعب نشاط الإدارة من الناحية الفنية ودراسة القواعد العامة التي تحكم هذا النشاط من حيث مفهوم العملية الإدارية وعناصرها وأهدافها.

LAW 350 تاريخ القانون وفلسفته   **(3ساعات معتمدة)**

يتضمن هذا المقرر تاريخ نشأة القانون في المجتمعات القديمة وتطور القاعدة القانونية في نشأتها من عصر القوة إلى عصر القانون المكتوب، ودراسة بعض النظم القانونية في العصر الفرعوني، والروماني واليوناني، وفي بلاد مابين النهرين. وكذلك دراسة تاريخ القانون في سلطنة عمان.

LAW 352 مصطلحات قانونية باللغة الإنجليزية   **(3 ساعات معتمدة)**

يتضمن هذا المقرر بعض المصطلحات القانونية باللغة الإنجليزية، في فروع القانون المختلفة وعلى الخصوص في القانون التجاري والمدني والإداري والجنائي والدستوري وذلك من خلال دراسة بعض الموضوعات واستخراج المصطلحات القانونية منها، وتدريب الطالب على إدخالها في عبارات قانونية.

LAW 354 قوانين الاستثمار   **(3 ساعات معتمدة)**

يحتوي هذا المقرر على دراسة فرص الاستثمارات المتاحة في سلطنة عمان،وخاصة في قطاع استخراج المعادن والبترول، والزراعة والثروة السمكية، وقطاع الصناعة، والسياحة، مع بيان الحوافز للمستثمر كالإعفاءات الضريبية أو الأسعار المدعمة، وأخيراً ضمانات المحافظة على استمرارية فرص الاستثمار قائمة.

LAW 356 عقد المقاولة والوكالة   **(3 ساعات معتمدة)**

يتضمن هذا المقرر تعريف عقد المقاولة وخصائصه وتمييزه عما يشتبه به، ثم أركانه من تراضي ومحل وسبب، وأخيراً آثاره المتمثلة في الحقوق والالتزامات الناشئة عن عقد المقاولة مع دراسة مستفيضة لفكرة الضمان العشري. كما يحتوي هذا تعريف عقد الوكالة وخصائصه وتمييزه عن غيره ، وأركانه، وآثاره في العلاقة بين الوكيل والموكل.

LAW 436 عقد الكفالة   **(3 ساعات معتمدة)**

يحتوي هذا المقرر على دراسة عقد من أهم العقود المدنية في ضمان حق الدائن، ويحتوي دراسة عقد الكفالة على دراسة تعريف الكفالة وخصائصها وتمييزها عن غيرها، ثم بيان أركانها (تراضي ومحل وسبب) وأخيراً آثارها المتمثلة في الحقوق والالتزامات الناشئة عن عقد الكفالة، سواء في العلاقة بين الدائن والكفيل وماله من دفوع ضده، أو في العلاقة بين المدين والكفيل. وأخيراً انقضاء الكفالة بصفة أصلية أو بصفة تبعية.

LAW 438 عقد التأمين   **(3 ساعات معتمدة)**

يتضمن عقد التأمين دراسة تعريف العقد وخصائصه وتمييزه عن غيره، وبيان أركانه (الرضاء والمحل والسبب) ، وآثاره ، أي الحقوق والالتزامات الناشئة عنه سواء على عاتق المؤمن أو المؤمن له ، وجزاء الإخلال بها، مع التركيز على الجزاءات الخاصة بعقد التأمين. وأخيراً استعراض بعض أنواع التأمين وخاصة التأمين على المركبات.

LAW 440 علم الإجرام والعقاب   **(3ساعات معتمدة)**

يتضمن هذا المقرر دراسة أهم النظريات العلمية في تفسير الظاهرة الإجرامية، والسلوك الإجرامي والعوامل المؤدية إلى ارتكاب الجريمة. بالإضافة إلى ذلك فإن هذا المقرر يتناول دراسة العقوبة والتدابير الاحترازية، وأنواع المؤسسات العقابية ونظمها، وتصنيف المجرمين في هذه المؤسسات.

LAW 465 التشريع الجنائي الإسلامي   **(3 ساعات معتمدة)**

يتضمن هذا المقرر تعريف الجريمة والعقوبة في الفقه الإسلامي، وبيان أنواع الجريمة في الفقه الإسلامي، وتقسيم العقوبات إلى حدود وتعازير وقصاص، وبيان حالات وشروط تطبيق كل عقوبة من هذه العقوبات، وبيان علاقة العقوبة بتحقيق مقاصد الشريعة الإسلامية (حفظ الدين والنفس والعقل والنسل والمال).

LAW 469 تاريخ التشريع الإسلامي   **(3 ساعات معتمدة)**

يتضمن هذا المقرر تعريف الشريعة الإسلامية ، وبيان خصائصها، وعلاقتها بالشرائع السابقة، والتعريف بالفقه الإسلامي ، وبيان خصائصه، وبيان أدوار الفقه الإسلامي عبر العصور المختلفة من عصر النبوة، وعصر الخلفاء الراشدين، وعصر التابعين ، وعصر المدارس الفقهية مع التعريف بكل مدرسة من تلك المدارس، وأسباب اختلاف الفقهاء،مع بيان مصادر الأحكام الشرعية.

LAW 473 قوانين حماية البيئة   **(3 ساعات معتمدة)**

يتضمن هذا المقرر دراسة تحديد معنى البيئة والمقصود بالتلوث، والقواعد العامة للمحافظة على البيئة ومكافحة التلوث، والحماية القانونية للمجال البيئي: التربة، الماء، الهواء، المجال الأخضر. والمكافحة القانونية للتلوث مثل: مكافحة النفايات الصلبة، والتلوث الصوتي، والإشعاعي، الذري، ودور الضبط الإداري في حماية البيئة، والجزاءات القانونية بشأن تلويث البيئة.

LAW 477 القانون الدولي للبحار   **(3 ساعات معتمدة)**

تتضمن دراسة هذا المقرر تعريف القانون الدولي للبحار وتطوره وخصائصه ومصادره ونطاق تطبيقه، كما تتضمن دراسة المناطق البحرية داخل السيادة الإقليمية وهي المياه الداخلية والمياه الإقليمية، والمناطق التي للدولة الساحلية حقوق سيادية وهي المنطقة المتاخمة والمنطقة الإقتصادية الخالصة، والجرف القاري، ويتناول المقرر دراسة المناطقة خارج السيادة الإقليمية وهي أعالي البحار والمنـــــطقة (منطقة التراث الإنساني المشترك). كما يتضمن هذا المقرر دراسة المنازعات البحرية والبيئة البحرية.

LAW 481 التجارة الإلكترونية   **(3 ساعات معتمدة)**

يتضمن المقرر دراسة تقنيات التجارة الإلكترونية والتي من أهم مواضيعها: الأمان والخصوصية، والشؤون القانونية والإجتماعية، وإستخدام الويب كقاعدة بيانات.

LAW 485 التجارة الدولية   **(3 ساعات معتمدة)**

يتضمن هذا المساق الضوابط الحكومية والمؤسسات الدولية المشرفة على أعمال التجارة العالمية، كما يتناول المساق السلطات والصلاحيات للهيئات التنظيمية الأساسية في عدد من المبلدان، ويغطي كذلك الرسوم واللوائح الجمركية، والملكية الفكرية، وحقوق الطبع والنشر، والعلامات التجارية، وبراءات الإختراع، وقواعد الترخيص.