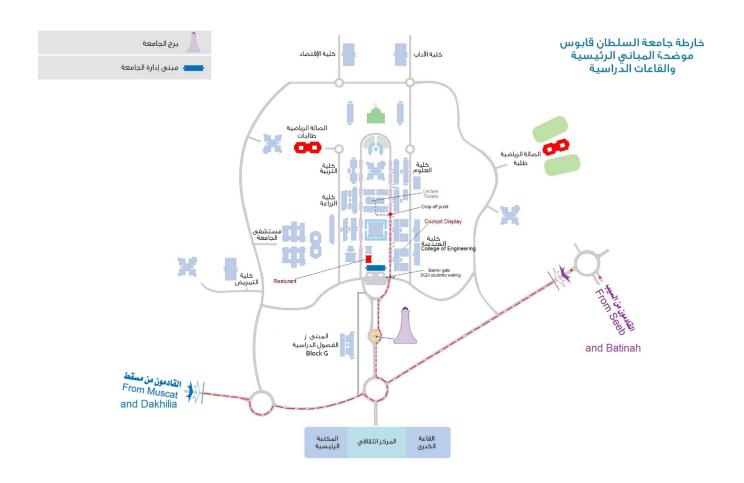




# Sultan Qaboos University COLLEGE OF ENGINEERING BULLETIN



The Academic Year 2022-2023



THE SULTAN QABOOS UNIVERSITY CAMPUS

College of Engineering Bulletin, Number 23, September 2022

Issued every year during the month of September.

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College of Engineering

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Information in this Bulletin is generally accurate as of Fall 2022. The College reserves the right to change courses, programs, and the academic calendar, or to make other changes deemed necessary or desirable, giving an advance notice of the changes when possible.

## College of Engineering Administration

|  | Room No. | Tel.No.  |
|--|----------|----------|
| Dr. Nabeel Al Rawahi, Dean   | 2004     | 24141300 |
| Dr. Hassan Al Lawati, Assistant Dean, Undergraduate Studies        | 2026     | 24142510 |
| Dr. Nasser Al Azri, Asst. Dean, Post Graduate Studies & Research   | 2029     | 24141333 |
| Dr. Mubarak Al Alawi, Assistant Dean, Training & Community Service | 2008     | 24142522 |
| Dr, Khalid Al Shamsi, HoD, Civil & Architectural Engineering       | 2045     | 24141332 |
| Dr. Ahmed Al Maashari, HoD, Electrical & Computer Engineering      | 2065     | 24141363 |
| Dr. Nasser Al Hinai, HoD, Mechanical & Industrial Engineering      | 2048     | 24141352 |
| Dr. Rashid Al Hajri, HoD, Petroleum & Chemical Engineering         | 1001     | 24141318 |
| Ibrahim Al-Saifi, Director of Administration                       | 2031     | 24141326 |
| Ahmed Mahfoodh Al Kharboushi, Asst Director of Administration      | 2007     | 24141305 |
| Shaima Majid Al-Zadjali, Coordination & Follow-Up &                |          |          |
| Archive Specialist (B), Dean's Office                              | 2005     | 24142511 |
| Noura Hamoud Al Abri, Clerk, Dean's Office                         | 2005     | 24142511 |
| Khalid Saif Al Shukaili, Coordination & Follow-Up &                |          |          |
| Archive Specialist, Dean's Office (B)                              | 2005     | 24121301 |
| Hamed Hamoud Al-Khanbashi, Clerk, DOA Office                       | 2030     | 24141382 |
| Iman Suleim Rashid Al Sumri, Coordination & Follow-Up &            |          |          |
| Archive Specialist (B), DOA Office                                 | 2018     | 24142663 |
| Sophie Tayco-Soldevilla, Coordinator, ADUS                         | 2027     | 24142592 |
| Saida Hamed Al Mashaikhi, Student Affairs Specialist, ADUS         | 2020     | 24142686 |
| Hanan Abdullah Al Shuaily, Coordinator, ADPGSR                     | 2020     | 24142686 |
| Abdullah Omar Al-Ojaily, Clerk, ADTCS                              | 2009     | 24141359 |
| Moadh A. Al-Zadjali, <i>Clerk, ADTCS</i>                           | 2018     | 24142667 |
| Wafa Hamad Al-Nabhani, Coordination & Follow-Up &                  |          |          |
| Archive Specialist (B), CAE  | 2046     | 24141331 |
| Said Khamis Al Abri, Clerk, CAE                                    | 2072B    | 24142573 |
| Noora Hilal Al Arafati, Coordination and Follow Up Specialist, ECE | 2066     | 24141330 |
| Hassan Al Mahrooqi, Coordinator, ECE                               | 2066     | 24141330 |
| Basma Sulaiman Al-Farsi, Coordination & Follow-Up &                |          |          |
| Archive Specialist (A), MIE  | 2050     | 24142655 |
| Iman Hamdoon Al Harthy, Clerk, MIE                                 | 2053     | 24142569 |
| Abdulhamid Abdullah, TJER Secretary                                | 2064     | 24141392 |
| Marycon Cordova, Coordinator, PCE                                  | 1002     | 24141354 |
| Issa Mattar Al-Saifi, Storekeeper                                  | 0063     | 24141307 |
| Mohammed Said Al Sabti, Textbook Storekeeper                       | 0017     | 24142562 |
| Mahmood Nassir Al-Tobi, Senior Engineer (B)                        | 1006     | 24142663 |
| Khalfan Salim Al-Abri, Engineer A                                  | 1006     | 24141351 |
| Muhammad Hussain Al-Mufarji, Computer Technician A                 | 1006     | 24141351 |
| Rahma Salim Al Baloushi, Computer Technician B                     | 1006     | 24141341 |
| Issa Salem Al-Fori, Clerk, DOA Office                              | 2016     | 24142584 |
| Ahmed Al Aghbari, Messenger  | 2016     | 24142584 |
| Ghareeb Khalfan Al-Mazrouey, Clerk                                 | 0016     | 24142562 |

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| Date Week Activity                   |    |   |  |  |
| 28 Aug 2022                          | 1  |   |  |  |
| 04 Sept 2022                         | 2  | Orientation and FP Testing  |  |  |
|                                      |    | Fall Semester (2022)  |  |  |
| 11-Sept-2022                         | 1  | First week of classes 09-09-2022 Add and Drop period ends End of incomplete grades period (Summer 2022) |  |  |
| 18-Sept-2022                         | 2  | First week for withdraw with a grade of (W)   |  |  |
| 25-Sept-2022                         | 3  | 2nd week for withdraw with a grade of (W)   |  |  |
| 02 Oct-2022                          | 4  | 3rd week for withdraw with a grade of (W) 08/10/2022 Prophets Birthday*                                 |  |  |
| 09-Oct-2022                          | 5  | 4th week for withdraw with a grade of (W)   |  |  |
| 16-Oct-2022                          | 6  | 5th week for withdraw with a grade of (W)   |  |  |
| 23-Oct-2022                          | 7  | 6th week for withdraw with a grade of (W)   |  |  |
| 30 Oct-2022                          | 8  | 7th week for withdraw with a grade of (W)   |  |  |
| 06 Nov 2022                          | 9  | 8th week for withdraw with a grade of (W) Start of Academic Advising for Probation Students             |  |  |
| 13-Nov-2022                          | 10 | 17-11-2022 Last day for withdraw with a grade of (W) *18-11-2022 National Day                           |  |  |
| 20-Nov-2022                          | 11 | *24-11-2022 End Postpone semester   |  |  |
| 27 Nov 2022                          | 12 |   |  |  |
| 04 Dec-2022                          | 13 | Publish Spring Master Timetable (SP2023)  |  |  |
| 11-Dec-2022                          | 14 | *Final Exams for electives courses *Online Registration for (Spring 2023) starts                        |  |  |
| 18-Dec-2022                          | 15 | *22/12/2022 *Last day of classes  |  |  |
| 25- Dec 2022                         | 16 | First week of Examinations  |  |  |
| 01 Jan2023                           | 17 | Second week of Examinations   |  |  |
| 08-Jan-2023                          | 18 | Start of accepting SQU internal transfer  Transfer to SQU period starts  End of Fall Break 1            |  |  |
| 15 Jan-2023                          | 19 | End of Fall Break 2   |  |  |

 $<sup>*</sup>Approximate\ Dates$ 

#### GENERAL INFORMATION

## **HISTORY**

The College of Engineering started its academic programs in 1986 when Sultan Qaboos University accepted its first batch of students. It serves to provide an engineering education to the Omani youth that will enable them to participate in the development of Oman. In 1991, its first batch of sixty engineers graduated. By the end of 2020, more than 6776 young Omani engineers have graduated from its halls.

The College of Engineering offers programs which lead to the Bachelor of Engineering degree in: Civil Engineering, Architectural Engineering, Mechanical Engineering, Industrial Engineering, Petroleum & Natural Gas Engineering, Chemical & Process Engineering, Electrical & Computer Engineering (Communications & Signal Processing), Electrical & Computer Engineering (Power & Systems Energy), Electrical & Computer Engineering (Computer Systems & Networks), Electrical & Computer Engineering (Electronic Instrumentation and Control) and Mechatronics Engineering. The College offers also Masters Degree Programs in Civil Engineering (Water Resources), Civil Engineering, Mechanical Engineering, Industrial Engineering, Electrical and Computer Engineering and Petroleum and Natural Gas Engineering. The college also offers Agriculture Engineering as a joint program with College of Agriculture and Marine Science.

The College has steadily increased its new student admission. The number of students admitted in the first batch in 1986 was 86 students, while about 467 students were admitted in 2020 with 20% females. The student population in the College is now near 3619 students in undergraduate programs and around 350 in Postgraduate programs.

## VISION AND MISSION

#### **VISION**

To continue its leading role in engineering education, innovative research and community service in the region and beyond.

#### **MISSION**

To excel in engineering education, research and innovation, and community service by promoting the principles of engineering analysis, design and creative thinking, and participating in the exchange of knowledge with national and international communities.

#### **Objectives:**

- To prepare highly qualified engineers who are capable of assuming professional careers and pursuing graduate studies.
- To conduct scientific research to expand knowledge in the scientific and engineering fields, and to find engineering solutions to problems faced by society.
- To provide continuing education and to disseminate engineering knowledge through conferences, short courses, workshops, consultation and seminars.
- To promote regional and international cooperation with reputable universities throughout the world.

## **STRUCTURE**

## **DEANSHIP**

The College operates within the Charter of the University. At present, the College structure comprises of the Office of the Dean, the College Board and four Departments.

The *Dean* heads the College and is responsible for managing the Academic, Administrative and Financial Affairs of the College. He is assisted by three Assistant Deans, a Director of Administration and coordinators.

The Assistant Dean for Undergraduate Studies (ADUS) provides information regarding academic regulations and curricula. He coordinates and follows up the academic affairs of students, such as preparation of degree programs, timetabling, advising and registration. This is done in coordination with the Deanship of Admissions and Registration, other Colleges, the Centre of Preparatory Studies, Deanship of Students Affairs and among the College Departments. The ADUS office prepares and maintains student records, prepares lists of student examination results for each semester for the College Board.

The Assistant Dean for Postgraduate Studies and Research (ADPGSR) manages the research activities of the College by coordinating with the Office of Post-Graduate Studies and Research, other Colleges, Centers and non-University organizations. The Office allocates College research funds to research projects and prepares the annual research report. The Office supervises and coordinates the administration of graduate programs in the College. The Assistant Dean for Postgraduate Studies and Research also liaise with the University administration on the organization of conferences, seminars, workshops and exhibitions. In addition, the office also follows up the progress of Demonstrators and Assistant Lecturers on scholarships and study leave.

The Assistant Dean for Training and Community Service (ADTCS) exposes the students to the actual engineering practice via industrial training where this training is compulsory for every student graduating from the College. Through industrial training students are able to correlate what they have learnt at the University with what is being practiced in industry. The trainees are usually involved in a range of activities during training. These activities include design, analysis, manufacturing, testing, regulatory affairs, etc.

ADTCS keeps its Alumni records to continuously cooperate with them and keep them aware of the educational, research and social activities within the College. Moreover, the ADTCS office keeps a close tie and continuous interaction with the Industry.

The *Director of Administration* liaises with the University Administration on administrative, personnel and financial affairs related to the College. The director is responsible for recruitment, public relation, transportation, and maintenance of the College facilities. The director is responsible for the College staff records and files.

#### Pre-specialization Academic Advising Unit (PAAU) -

#### (وحدة الإرشاد الأكاديمي قبل التخصص - Location of PAAU (Ground Floor Room 0033 -

"Pre-specialization Academic Advising Unit" [PAAU] at the College of Engineering is the first unit of its kind at SQU. PAUU was established in Fall 2014. The rationale behind the creation or the main purpose of establishing the unit is to address the need of proper on-time advice to those students whose major is not specified or allocated yet. This transition period for students might take 1-2 years after admission at SQU. Also, its task is to coordinate with the Foundation Program office and Admission and Registration office of SQU for smooth registration of those students. The College of Engineering has developed its functions and allocated a temporary place at the college till the new building is construted. It has been operational since Fall-2014 for all the students who have not specialized yet. Two faculty members from each department, with experience in curriculum and advisement, are assigned to the unit.

Four members (one from each department) will be available for giving advice for three weeks including the period of add and drop in each semester. After this period advisors can be contacted in their office during office hours.

#### Current members:

| Seq | Staff Name               | Department |
|-----|--------------------------|------------|
| 1   | Dr. Suleiman Al Obaidani | MIE        |
| 2   | Dr. Khalid Alzebdeh      | MIE        |
| 3   | Dr. Kazi Abu Sohel       | CAE        |
| 4   | Dr. Islam Sallam         | CAE        |
| 5   | Dr. Ahmed Chiheb Ammari  | ECE        |
| 6   | Dr. Rami Alhmouz         | ECE        |
| 7   | Dr. Gholamreza Vakili    | PCE        |
| 8   | Dr. Adel Al Ajmi         | PCE        |

#### **DEPARTMENTS**

At present, the College has four departments:

- 1. Department of Civil and Architectural Engineering.
- 2. Department of Electrical and Computer Engineering.
- 3. Department of Mechanical and Industrial Engineering;
- 4. Department of Petroleum and Chemical Engineering.

Each department has a Head of Department (HoD) who is also part of the academic staff. Other staff members include a secretary and academic and technical staff. Each department has a board that consists of HoD as a chair, all members of the academic staff and a senior member of the technical staff. The Departmental Board normally meets once a month.

## COMMITTEES

Students are represented in the following two committees:

1. Departmental Staff/Student Liaison Committee:

Composition:

Head of Department (Chair), two major students, preferably one senior male and one senior female where applicable per cohort, selected by the students. Those students should be in a good standing and not under any current disciplinary action. At least one faculty member selected by the Department Board should be a member of the Committee.

Functions:

- i. The main purpose of the committee is to provide a forum for students to express their views on academic issues in their department, related to their programs and courses, and the teaching and learning environment.
- ii. Issues are addressed through discussion, and where appropriate follow-up with the appropriate individuals and departments.
- iii. Issues of an individual student nature or a specific student grade are not addressed in this committee.
- iv. The committee meets at least once per semester. Meetings are minuted.
- 2. College Staff/Student Liaison Committee:

Composition:

Dean (Chair), Assistant Dean for Undergraduate Studies, two students preferably one male and one female per cohort, selected from members of the Department Committees, two students, one male and one female, selected from students not yet assigned to a major (pre-major). Two faculty members selected by the College Board.

Functions:

i. The main purpose of the committee is to provide a forum for students to express their views on matters affecting their learning experience. These may be related to their department, other departments or colleges. Typically these would include items or issues referred by the department committees.

- ii. Depending on the nature of the issues under discussion, the committee may invite staff from the college or other units of the University to hear their views.
- iii. The committee may refer items to the College Board for discussion and/or action.
- v. Issues of an individual student nature or a specific student grade fall outside this committee's remit.
- vi. The committee meets at least once a semester. Meetings are minuted and the minutes are submitted to the College Board.

The College of Engineering has also 18 other major committees which meet at least twice per semester. Chairs report on the activities of their committees to the College Board. Other standing or *adhoc* committees may be formed by the Dean or the College Board. The list of these committees is as follows:

College Executive Committee

College Space Allocation Committee

College Postgraduate Studies & Research Committee

College Information & Communication Techonology Committee

College Quality Assurance & Academic Accreditation Committee

College Industrial Training & Community Service Committee

College Risk Management Committee

College Publication & Web Committee

College Probation Advisory Committee

College of Engineering Society Advisors Committee

College Social Activity Committee

College Student-Staff Liaison Committee

College Strategic Planning & Development Committee

College Academic Promotions Committee

College Steering Committee for Mechatronics Engineering Program

College Agriculture-Engineering Program Committee

College Pre-Specialization Academic Advising Unit (PAAU)

College Technical Staff Training Committee

College Advising Committee

College Media Committee

College Renewable & Sustainable Energy Committee

College IR4 Committee

College Industrial Advisory Board

## UNDERGRADUATE PROGRAMS

#### ADMISSION

Admission to the College of Engineering is conducted through the Deanship of Admissions and Registration. The College places particular emphasis on quality education and admission criteria ensures the selection of the best students. Students must have passed the General High School Examination (Science Section) with a minimum grade of B in Mathematics and Physics and a minimum grade of C in Chemistry.

## University Entrance

One week before classes start in September, new students go through an orientation program that is organized by the Deanship of Students Affairs in coordination with all the Colleges, Centers and Deanship of Admissions and Registration. Students are welcome to the University and its campus to make their change to the new University environment more comfortable. Students Identification Cards are issued to them. Students get to know their accommodation and important University facilities such as cafeteria, clinic, library, computer center and recreational facilities. Students are also introduced to the different University Rules and Academic Advising, such as course registration procedures and academic rules. Students visit their Colleges and meet their academic advisors during the orientation week. They also take Placement Tests to determine their aptitude in the English Language, Mathematics and Computing skills (See section on GFP)

## Center for Preparatory Studies Foundation Program (CPSFP)- English

The Center for Preparatory Studies (CPS) at Sultan Qaboos University (SQU) offers Foundation Program (FP) courses, pre-requisite qualification for entrance to the degree programs in the university, is in conformity with the requirements of Oman Academic Standards. The program was introduced at SQU since 2010/2011 academic year. The FP has been designed to help adequately prepare admitted students undertake university level education by helping them achieve the prescribed learning outcomes in the four areas: English language, Mathematics, Information Technology and General Study Skills. The Center for Preparatory Studies at SQU consists of course work in three areas: English language, Mathematics and IT. All students should satisfy the FP requirements by either showing accepted alternative qualifications in these areas or achieving exit test standards. The exit test standards in these courses are measured in terms of prescribed student learning outcomes. Students can achieve the exit standards by passing the tests at the beginning of the program or taking the courses and passing them. The relevant learning outcome standards in General Study Skills will be integrated into the other three areas.

#### **Website Information**

website: https://www.squ.edu.om/cps

## Center for Preparatory Studies Foundation Program (CPSFP)- Arabic

# البرنامج التأسيسي

أصبح البرنامج التأسيسي بجامعة السلطان قابوس مدخلاً إلزامياً للدراسة بجميع كليات الجامعة إبتداءً من العام الدراسي 2011/2010. ولقد صمم البرنامج لإعداد الطلاب المقبولين بالجامعة للدراسة الجامعية من خلال تحقيق مخرجات التعلم المطلوبة وفقاً للمعايير الأكاديمية العمانية ، حيث يؤهل البرنامج الطالب في أربعة جوانب وهي اللغة الإنجليزية والرياضيات وتقنية المعلومات ومهارات التعلم. وسوف لن يسمح للطالب بدء الدراسة الجامعية قبل التسجيل في البرنامج التأسيسي.

## Admission into Major

Students select their major normally before their third semester of credit courses. Deadlines for submitting applications are announced by the Office of the Assistant Dean for Students Academic Affairs. The minimum requirements to specialization are:

- Student must complete at least 25 credit hours before specialization.
- The student should complete the following four courses:

MATH2107 Calculus I (4 credits)
PHYS2107 Physics I (4 credits)
CHEM1071 General Chemistry for Engineering (3 credits)
ENGR1501 Introduction to Engineering (1 credit)

 A student under probation cannot apply for specialization unless he/she has finished 40 credits hours.

Generally, admission into major is based on the student's preference. However, when there are more applications to a major than available spaces, selection is based on the best grades. Subject to space availability, a student can apply to change from an engineering major to another engineering major if the change will not cause much delay in his/her graduation and if his cumulative GPA allows him for this transfer.

Students wishing to change to another College need to contact the Admissions & Registration for details and Application Forms. (Please see forms on Pages 162-164).

## ACADEMIC RULES AND REGULATIONS

The Deanship of Admissions & Registration issues a booklet on Academic Regulations which contains all procedures, rules and regulations related to academic matters. For additional information, please refer to this booklet, or visit the *website at*:

https://www.squ.edu.om/Portals/26/PDF%20 files/Admission%20 files/under graduate%20 academic%20 R%2028-10-2018.pdf?ver=2020-06-23-100143-790

## Academic Advising & Registration

#### 3.2.1.1 Academic Advising

Following admission to the University, each student is assigned an academic advisor whose role is to:

- a) help the student discover his/her potential and capabilities
- b) approve the student's choice of courses each semester in accordance with the Degree Program and Academic Regulations
- c) assist the student in exploring alternative paths to the degree if for any reason the normal pace of the degree is disrupted
- d) advise the student on other matters affecting his/her studies.

The advisor must approve a student's proposed registration each semester and help develop a recovery plan for students on academic probation in consultation with the academic Assistant Dean. A student may be re-assigned to a new advisor upon selection/change of major.

#### **Advising Remarks**

Issues that an academic advisor should make sure that his/her advisees are aware of:

- Students should make sure that they have a copy of their degree plans and familiarize themselves with its details.
- Advisor's approval is required in most forms (i.e. Registration, Add & Drop, Posponement, etc.)
- Students should arrange to go and see their advisors whenever necessary and not only during registration.
- Attendance is mandatory, student should be familiar with the attendance policy of the University.
- A delay in taking pre-requisite courses will delay progress.
   Student should avoid dropping a pre-requisite course as much as possible.
- When the GPA is poor, it should be discussed with the advisor on reducing the course load as a high load will be a heavy burden and might lower the student's GPA even further.
- Students should watch deadlines and notices on the boards.
- Advisors expect students to do their best.
- Students are responsible for knowing the academic regulations and their degree plan and all its requirements.

No. 23

#### 3.2.1.2 Registration

Registration is the process by which a student selects courses according to the guidance of his/her advisor and formally enrolls in those courses.

Information regarding the schedule, location and deadlines of the registration period and timetables is given to students and advisors in advance of the scheduled registration period. On line registration is available at the Deanship of Admissions and Registration web or SIS web page (look for A&R announcement).

A student may be prevented from registering if:

- The section is full
- Admission procedures are not complete.
- There is a timetable conflict
- Specific academic pre-requisites are not met. (Note: students are responsible for ensuring that he/she has fulfilled the published pre-requisites. Failure to observe this may result in that course registration being withdrawn. The guidance of the advisor should be needed)
- Textbooks have not been returned as requested
- Conditions based on past performance or disciplinary status have not yet been met.

Students registering late may find that available courses are limited.

Students wishing to change their registrations may do so during the first week of scheduled classes with no effect on their transcript. Such changes of registration shall be made through the Add/Drop form.

A student wishing to add a course must have it approved by the advisor and course department. Permission may be granted provided there is room in the course and it is within the student's maximum course load.

No courses may be added after the Add/Drop period except in unusual individual circumstances approved by the HoD and the Dean of Admissions and Registration.

A student who wishes to drop (withdraw from) a course between the second week of classes and the end of the half-way point in the course (week 10) will be given a 'W' beside the appropriate course on his/her transcript. Students have only <u>four</u> chances to withdraw courses in their entire period of study.

A course dropped after the half-way point will be designated 'F' on the transcript.

During the summer semester, pre-registrations are considered to be official and may only be changed in special circumstances.

Students who wish to add or drop a course following initial registration should use the Add/Drop form to update their registration form. Add/Drop activity cannot take place before the start of the semester. Add/Drop is now available online through the web using SIS system.

Normally the duration of the processes for the summer semester shall be half that allowed for the regular semesters (8 weeks).

In regular semesters, a student shall normally register in 4-6 courses (15 credits) concurrently or a maximum of 6 courses (18 credits) concurrently. The normal load in a summer semester shall be 2 concurrent courses (maximum of 8 credits).

A student's course load status will be extended if the semester GPA on a full course load in the two preceding semesters was at least 3.00, or if the cumulative GPA is at least 3.00. Such a student may register in up to 21 credits.

Students on academic probation shall be required to reduce their load to a maximum of 12 credits during a regular semester and 6 credits during the summer semester (5 credits are recommended).

Unless it is the student's final semester, in regular semesters, students are not allowed to register less than 9 credits.

A student in position to graduate at the end of the summer may be exempted from the minimum course/credit level. Prob. 1, Prob. 2 and Prob. 3 students are not allowed to register for Summer Semester unless graduating.

## 3.2.2 Degree Plans

Requirements for completing a degree shall be stated for each year of entry (cohort) as the total number of credits needed with specific instructions regarding University, College, major and minor, program credits, electives and other specific requirements. The total number of credits required for a Bachelor of Engineering is 136 credits (only Architectural Engineering program requires 156 credits). Given normal scheduling patterns, the program can be completed within 13 semesters excluding the GFP. A time limit of four additional semesters may be allowed. The Degree plan and the changes made to it is binding on students in terms of graduation requirements.

Degree plans of all engineering programs can be downloaded from the College website through departments/programs.

Degree requirements are classified into three groups:

#### a) University Requirements and University Electives

All degree plans include 6 credit hours of the following University Requirements and 6 credit hours of University Electives:

- 2 credits in Arabic Language (ARAB 1060)
- 2 credits in Oman and Islamic Civilization (HIST1010) or Islamic Culture (ISLM1010)
- 2 credit in Omani: State & People (SOCY1005)
- A minimum of 6 credits in General University Elective courses.

General Electives are standard regular courses offered by any College in the University which the student may freely choose to take (subject to fulfilling pre-requisite requirements), but which do not form part of his or her College or Specialization requirements and electives. They may not be restricted to a subset of courses at the College level. The courses chosen must not duplicate others already taken. It is recommended to select humanity courses as university electives. The student can select University Electives from the following list:

#### b) College Requirements and Electives

A total of 32 credit hours are required for all students in the College and 3 credits hours as a College programming language Elective (ENGR2217 or COMP2002).

#### c) Departmental and Major Requirements & Electives

A total of 89 credit hours are required for the Departmental and Major requirements and electives for all programs except for Architectural Engineering (AREN):

- Departmental Requirements:
  All students in the same department must take these requirements.
- Major Requirements:
   All students in the same major must take these requirements.

(See section on Department/Major for the list of these courses.)

- Major Requirements:
- \* Only credits earned in courses which fall within the degree plan for the major shall be counted towards the total required for a degree.
- \* The degree requirements specified when a student is admitted to his/her degree program shall remain in effect until the degree is completed.
- \* Degree plan description for each department can be found in the section on departments in this document.

## First Two Semesters Degree Plan (Pre-Speciliazation Plan)

Every student should follow the following degree plan in the first two semesters after finishing the Foundation Program.

This two semester degree plan is common in all departments so regardless of which department the student will select and join, he/she can follow this degree plan:

|          | Course Code Course Title |                                   | Cr. | Pre-req./Co-req.*                                   | Cat. |
|----------|--------------------------|-----------------------------------|-----|---|------|
|          | CHEM1071                 | General Chemistry for Engineering | 3   | FPEL (0560 or 0600 or 0601 or 0604) and FPMT(0105)  | CR   |
|          | HIST1010                 | Oman & Islamic Civilization or    |     |   |      |
|          | ISLM1010                 | Islamic Culture                   | 2   |   | UR   |
| 7        | LANC2160                 | English for Engineering I         | 3   | FPEL (0560 or 0600 or 0601 or 0604)                 | CR   |
| Semester | ENGR1501                 | Introduction to Engineering       | 1   | FPEL (0560 or 0600 or 0601 or 0604)                 | CR   |
| S        | ENGR1600                 | Workshop I                        | 1   | FPEL (0560 or 0600 or 0601 or 0604)                 | CR   |
|          | MATH2107                 | Calculus I                        | 4   | FPEL (0560 or 0600 or 0603 or 0604) and FPMT (0105) | CR   |
|          | Total                    |                                   | 14  |   |      |

|       | <b>Course Code</b> | Course Title                                   | Cr | Pre-req./Co-req.*   | Cat. |
|-------|--------------------|--|----|---|------|
|       |                    | University Elective I                          | 2  |   | UE   |
|       | SOCY1005           | Omani: State & Peop.                           | 2  |   | UR   |
|       | ARAB1060           | Arabic   | 2  |   | UR   |
| r 2   | LANC2161           | LANC2161 English for Engineering II 3 LANC2160 |    | LANC2160  | CR   |
| ester | MATH2108           | Calculus II                                    | 3  | MATH 2107   | CR   |
| Seme  | PHYS2107           | Physics For Engineering I                      | 4  | FPEL (0560 or 0600 or 0601 or 0604) and FPMT(0105), MATH2107* | CR   |
|       |                    | Total  | 16 |   |      |

#### 3.2.3 Course Substitutions

In exceptional circumstances, the Assistant Dean for Undergraduate Studies in consultation with the Department Head, may allow a student to fulfil a program requirement with an equivalent course. Such a substitution must be approved in consultation with the Dean of Admissions and Registration.

No course from the University Requirements or College Requirements may be used to replace a departmental course.

## 3.2.4 Industrial Training Program

All engineering students are required to take an Industrial Training Program (ENGR4007). ENGR4007 is planned in the Summer after the students complete their fourth year. For a period of 6-8 weeks the students receive training from a private company or government ministries related to their specialization. The student, supervised by the training organization, has to submit at the end of the training period a report to his/her department. At present, it is a non-credit course and is graded "PASS" or "NOT PASS." The industrial training program is coordinated by the Assistant Dean for Industrial Training and Alumni.

## 3.2.5 Attendance Policy

It is the student's responsibility to be punctual and to attend all classes. Failure to attend classes for whatever reason is considered as part of the percentage missed. Course instructors should keep attendance records. Students bear full responsibility for checking their own attendance record.

An "absentee warning notice" will be issued if a student is absent for:

- more than 10% in courses with less than 75 total contact hours
- more than 5% in courses with 75 or more total contact hours

An "absentee withdrawal notice" will be issued and the student will be deemed to have withdrawn from the course with an 'FW' grade which will be calculated like an F in the average if a student is absent for:

- more than 20% in courses with less than 75 total contact hours
- more than 15% in courses with 75 to 150 total contact hours
- more than 10% of total contact hours for courses with more than 150 total contact hours.

Certain absences like participation in official University activities locally or abroad may be excused by the instructor. (See Academic Policy Booklet.)

#### 3.2.6 At-Risk

A student who completes the first regular semester of nine or more credits with a semester grade point average of between 1.00 and 1.99 will be given a course load status of 'At Risk' and although not on probation will be required to visit their advisor to be able to use online registration.

#### 3.2.7 Probation

A student shall be placed on probation and required to take remedial action when:

- The cumulative GPA (Grade point Average) falls below 2.00 (see Academic Policy Booklet on how to calculate GPA) or;
- The cumulative GPA is 2.00 or above but the current semester GPA falls below 1.00 or;
- The cumulative GPA is 2.00 or above but the semester GPA is below 2.00 for 2 consecutive semesters.

In such cases the student shall be required to reduce his/her course load to a maximum of 12 credits.

A student must repeat any failed course which is required in the degree plan. Where the degree plan identifies choices or substitutes, a student may replace a failed course with one of these. Any course which is repeated must be repeated in its entirety. A student may also repeat a course in which the earned grade is C or below provided it has been taken within 2 semesters.

In all cases of repeated courses, all grades earned shall appear on the transcript but the most recent grade only shall be used in the calculation of the Grade Point Average (even if it is lower than the original grade).

Passed courses may be repeated once, failed courses twice. Further attempts require special permission.

**Note:** Students on Probation are required to collect probation notice from the Admissions & Registration to be signed by their guardian so that their names will be included in the course registered.

## General remarks regarding probation from the Academic Regulations

#### The following system applies for the 2012 cohort onwards

1. The Probation course load status progression will be Prob01, Prob02, Prob03.

The following messages will appear on their transcripts:

First Probation: (Prob01)Warning Second Probation: (Prob02) Final Warning

Third Probation: (Prob03)Required to withdraw from the

University for Academic Reasons

2. Unless the semester GPA falls below 1.00, the first semester in credit should not count towards probation.

- 3. The probation status progressions are consecutive.
- 4. If a student goes back on probation after leaving it, he/she will return to the level in which he/she was last time. For example:

Normal > Prob01 > Prob02 > normal > Prob02 > Prob03.

- 5. A student under Prob03 could be re-admitted if all of the following conditions are satisfied:
  - a. A minimum semester GPA of 1.80
  - b. A minimum cumulative GPA 1.80
  - c. Achieve a minimal satisfactory credit accumulation during study at the university as laid out in the below table:

| Semester in Credit | Acceptable number of Credits earned |
|--------------------|-------------------------------------|
| 1                  | 0                                   |
| 2                  | 1                                   |
| 3                  | 13                                  |
| 4                  | 25                                  |
| 5                  | 37                                  |
| 6                  | 49                                  |
| 7                  | 61                                  |
| 8                  | 73                                  |
| 9                  | 85                                  |
| 10                 | 97                                  |
| 11                 | 109                                 |
| 12                 | 121                                 |
| 13                 | 133                                 |

In such cases the student shall be required to reduce his/her course load to 9-12 credits.

A student on Probation must return to Normal status within the following semester. A summer semester counts as one of the semesters if a student registers for a full load (6 credits or more) in that session. A student who completes two consecutive semesters on Probation shall be sent a warning notice reminding him/her of the final remaining semester within which to achieve a cumulative GPA of 2.00. A student who fails to fulfill this condition will be required to formally withdraw from the University. Students on Probation for a second semester must inform their parents or guardians and obtain a signed agreement in order to register.

## Withdrawn from University

Students will be considered to have withdrawn from the University if the percentage of courses with grades of "FW" and "F" is 50% or more in two consecutive semesters (applicable for Cohort 2011 onwards excluding those students still taking foundation program courses)

#### **Maximum duration**

Once having begun a program of study, students are expected to complete their degrees within a reasonable time frame. Irrespective of their course load status, students should achieve a minimal satisfactory credit accumulation during study at the University as laid out in the following table:

| Semester in credit | Acceptable number of Credits earned | <u>Unacceptable</u> number of credits resulting in Withdrawal |
|--------------------|-------------------------------------|---|
| 1                  | 0-12                                | _   |
| 2                  | 1-24                                | 0   |
| 3                  | 13-36                               | 12  |
| 4                  | 25-48                               | 24  |
| 5                  | 37-60                               | 36  |
| 6                  | 49-72                               | 48  |
| 7                  | 61-84                               | 60  |
| 8                  | 73-96                               | 72  |
| 9                  | 85-108                              | 84  |
| 10                 | 97-120                              | 96  |
| 11                 | 109-132                             | 108   |
| 12                 | 121-144                             | 120   |
| 13                 | 133-156                             | 132   |

#### الملاحظة الأكاديمية

#### يطبق نظام الملاحظة الأكاديمية التالى على دفعة 2011 وما بعدها:

يكون ترتيب الملاحظة الاكاديمية في سجل الطالب الدراسي كما يلي: ملاحظة أولى، ملاحظة ثانية، ملاحظة ثالثة. وستظهر العبارات التالية في كشف الدرجات

| ملاحظة أكاديمية أولى/إنذار   |    |
|--|----|
| ملاحظة أكاديمية ثانية/إنذار نهائي  |    |
| ملاحظة أكاديمية ثالثة/مطالب بالانسحاب من الجامعة لأسباب أكاديمية   |    |
| interior to the contract of th |    |
| الفصلي أقل من 1.0،   |    |
| أن يكون تعاقب الملاحظة الاكاديمية بشكل متتالي،   |    |
| be an experience of the control of t |    |
| له الحصول عليها، على سبيل المثال:  |    |
| $\sim$ دي > ملاحظة $<$ > عادي > ملاحظة $<$ > ملاحظة $<$ > ملاحظة $<$   | عا |
| يمكن أن يمنح الطالب الواقع تحت الملاحظة 3 فرصة لإعادة قيده في الجامعة إذا ما حقق ما يلي:   |    |
| $_{0}$ معدل فصلي $(1.8)$ كحد ادنى،   |    |
| 0 معدل تراكمي (1.8) كحد ادنى،  |    |
| <ul> <li>و انحاز الساعات المعتمدة الموضحة في الحدول ادناه على الأقل خلال فترة در استه في الحا</li> </ul>   |    |

| عدد الساعات المطلوب على الأقل إنجازها | رقم الفصل الدراسي |
|---------------------------------------|-------------------|
| 0                                     | 1                 |
| 1                                     | 2                 |
| 13                                    | 3                 |
| 25                                    | 4                 |
| 37                                    | 5                 |
| 49                                    | 6                 |
| 61                                    | 7                 |
| 73                                    | 8                 |
| 85                                    | 9                 |
| 97                                    | 10                |
| 109                                   | 11                |
| 101                                   | 10                |

في مثل هذه الحالات سوف يطلب من الطالب أن يخفض عبئه الدراسي إلى 12 ساعة معتمدة أو أقل.

يتوجب على الطالب الذي يقع في الملاحظة الأكاديمية أن يرفع معدل نقاط تقديره إلى الوضع الطبيعي خلال الفصل الدراسي التالي. ويعد الفصل الصيفي أحد الفصول الدراسية إذا ما كان الطالب قد سجل لعبء دراسي كامل ( 6 ساعات أو أكثر ) خلال ذلك الفصل. أما الطالب الذي يكمل فصلين متتاليين في الملاحظة الأكاديمية، سوف يرسل له مذكرة إنذار بأن عليه رفع معدله التراكمي إلى 2.00 خلال الفصل الدراسي التالي. وعليه فإن الطالب الذي لا يتمكن من تحقيق هذه المتطلبات سوف يطلب منه الانسحاب رسمياً من الجامعة. وعلى طلبة الفصل الثاني من الملاحظة الاكاديمية إحضار إقرار موقع من أولياء أمورهم حتى يسمح لهم بالتسجيل.

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#### المطالبة بالانسحاب من الجامعة بسبب الرسوب (F) أو الرسوب بسبب الغياب (FW)

تتضمن قواعد الإنسحاب غير الرسمي من الجامعة (النظام الاكاديمي، ب 8-3) العبارة الأتية:

اذا وصَّلتُ نسبةُ المقررات بتَّقديرُ راسُّب (F) وراسبُ بسبٰب الغيابُ (FW) 50% أو أكثر في فصلين دراسيين متتاليين فإن الطالب يطالب بالإنسحاب من الجامعة.

إنهاء الدراسة الجامعية في فترة مقبولة بغض النظر عن الوضع الدراسي للطالب فإنه يتوجب عليه إستكمال حد أدنى من الساعات التراكمية المعتمدة كما هو مبين في الجدول أدناه:

| عدد الساعات المعتمدة غير المقبولة والمؤدية إلى الانسحاب | عدد الساعات المعتمدة<br>المكتسبة المقبولة | الفصول الدراسية في<br>الساعات المعتمدة |
|---|---|--|
|   |   |  |
| -   | 0-12                                      | 1                                      |
| 0   | 1-24                                      | 2                                      |
| 12  | 13-36                                     | 3                                      |
| 24  | 25-48                                     | 4                                      |
| 36  | 37-60                                     | 5                                      |
| 48  | 49-72                                     | 6                                      |
| 60  | 61-84                                     | 7                                      |
| 72  | 73-96                                     | 8                                      |
| 84  | 85-108                                    | 9                                      |
| 96  | 97-120                                    | 10                                     |
| 108   | 109-132                                   | 11                                     |
| 120   | 121-144                                   | 12                                     |
| 132   | 133-156                                   | 13                                     |

#### 3.2.8 Final Examinations

For written final examinations, the following conditions apply:

- All examinations will be scheduled within the time period designated for examinations as approved in the University Calendar of Events. No examinations may be scheduled outside that period.
- A student who has more than two examinations in one day or more than three in two consecutive days may notify their Assistant Dean so that an alternative can be explored. In considering such cases the examination with the highest enrolment must take priority. However, the final exam is linked to registration. If the student accepts his registration, he should also accept his final exam schedule.
- Final exams are scheduled now by the SIS system at the time of registration. Student can see their final exams schedule after registration.

The following conditions apply to students writing final examinations:

- No student may enter the examination room after the expiration of 30 mins from the start of the examination, or leave during the first half hour of the examination.
   A student arriving more than 30 minutes after the start of the examination is considered absent.
- A student who hands in the paper is deemed to have left the examination
- A student arriving late but within the stated time limit has the same scheduled finish time as the other students.
- If a student is absent for what is considered a valid and unavoidable reason by the instructor/course co-ordinator, make-up examination will be devised by that instructor/course co-ordinator. The examination should replicate the one for which other students sat in all ways (duration, difficulty, components) except actual content.
- Unless an instructor specifically allows pencil, all examinations must be written in ink.
- No student may be re-examined for the purpose of changing a grade other than Failure with Supplemental Privilege (FSP).

If a student commits an act of academic misconduct, it may be documented and then one or more of the following penalties may be applied:

- Written warning.
- downgrading of an assignment or examination.
- An 'F' grade given to the assignment or examination.
- An 'F' grade given to the course.
- Suspension from the University for a specified period.
- Expulsion from the University.

## GRADUATION REQUIREMENTS AND AWARDS

## 3.3.1 Graduation Requirements

In order to qualify for graduation, students shall:

- Have completed the curriculum requirements of their degree plan with a minimum cumulative GPA of 2.0, and
- Have fulfilled any additional requirements specified by the degree plan.

Students must fill an online Graduation Intent Form in their final year and a degree verification is done for these students.

During the final year of students, they should fill up the Degree Audit Form with their advisors for degree/courses verification. The degree audit must be submitted to A&R through Assistant Dean for Undergraduate (ADUS) Office.

#### 3.3.2 *Awards*

The University shall recognize those students who achieve high academic standing in their programs on a semester basis by the publication of a University Excellent Students' and a Deans' List.

**The Excellent Students' List** records all students who, on the combined results of only the consecutive Fall and Spring semesters of one academic year and while carrying a normal load, achieve the following:

• Distinction : Cumulative GPA between 3.70 and 4.00 with

no grade below B, or

• Honours First Class : Cumulative GPA between 3.70 and 4.00 but

with grade (s) below B. or

• Honours Second Class: Cumulative GPA between 3.50 and 3.69 with

no grade below C.

Graduating students are not included on this list as they will be recognised at the graduating ceremony.

**Dean's List:** The names of all undergraduate students with high semester GPAs will be placed every semester on the Dean's List. The list will be posted in a prominent location. A congratulatory letter will also be sent to each student. Eligible students must have registered in not less than 12 hours in the semester with no incomplete grades.

Dean's Distinction List: Semester GPA≥3.70 with no grade below B

Dean's Honour List : Semester GPA between 3.50 and 3.70 with no grade below C. Should the student have an Incomplete (I(x)) course at the end of the term, he/she will not receive recognition as a member of the University Excellent Students or Dean's List until such time as the course is completed and the final term Grade Point Average is determined.

## 3.4 STUDENT INFORMATION SYSTEM

## 3.4.1 College of Engineering Web Site

The College of Engineering has a website that can be accessed through Intranet and Internet. Each department of the College of Engineering is contributing in developing and maintaining the website. Important information about each department such as degree plans, faculty, and facilities can be obtained by browsing the web site. Members of the College Web Committee are responsible for maintaining and updating the website. The College website can be accessed through the University Home Page <a href="www.squ.edu.om">www.squ.edu.om</a> or directly on <a href="www.squ.edu.om</a> or directly on <a href="www.squ.edu.om/engineering">www.squ.edu.om/engineering</a>.

All recent degree plans are available within each department web page. Follow the instructions shown at the end of this document to access the Degree Plans.

## 3.4.2 Admissions and Registration Website

The Admission and Registration website provides information on matters related to the admissions and registration for the students and members of the staff. Information on Admissions, Academic Regulations, University degree plans, Timetables, Section Counts, Statistics, student status, and related matters are presented on the web site. The Admissions and Registration web site can be accessed through the link on the University Home Page or through the address <a href="https://www.squ.edu.om/admissions">https://www.squ.edu.om/admissions</a>

Students are encouraged to browse these web sites on regular basis in order to update themselves with the academic regulations and matters concerning their academic affairs.

## 3.5 DEPARTMENTS/PROGRAMS

## 3.5.1 Department of Civil and Architectural Engineering

#### Introduction

The Department of Civil and Architectural Engineering is one of four departments in the College of Engineering at Sultan Qaboos University. The Department currently has 32 highly qualified academic staff and 13 technical and administrative staff. The specialization and expertise of the academic staff span two major specializations: Civil Engineering and Architectural Engineering. Civil Engineering includes Structural Engineering, Materials, Construction Management, Transportation Engineering, Environmental Engineering, Geotechnical Engineering, Water Resources and Geomatics Engineering. Architectural engineers are required to study a wide range of science, technical, artistic and humanity subjects to understand the socio-economic, cultural, aesthetic and technical aspects of a building.

#### Civil Engineering Academic Staff

| Name/Position/Email  | Ext. | Academic<br>Qualification | Specialization              |
|--|------|---------------------------|-----------------------------|
| <b>Dr. Khalid Al-Shamsi</b> Associate Professor, HoD alshamsi@squ.edu.om | 2670 | PhD (USA) 06              | Transportation Engineering  |
| Prof. Ali Al-Nuaimi<br>Professor<br>alnuaimi@squ.edu.om                  | 1332 | PhD (UK) 00               | Structural Engineering      |
| Prof. Ali Salim Al-Harthy Professor alharthy@squ.edu.om                  | 1365 | PhD (USA) 92              | Structural Engineering      |
| Prof. Khalifa Al-Jabri<br>Professor<br>aljabri@squ.edu.om                | 1335 | PhD (USA) 00              | Structural Engineering      |
| Dr. Abdul Wahid Hago<br>Associate Professor<br>ahago@squ.edu.om          | 1338 | PhD (UK) 82               | Structural Engineering      |
| Dr. Ahmed Sana Associate Professor sana@squ.edu.om                       | 2524 | PhD (Japan) 97            | Water Resources Engineering |
| Dr. Abdullah Al-Saidy<br>Associate Professor<br>alsaidy@squ.edu.om       | 1340 | PhD (UK) 01               | Structural Engineering      |
| Dr. Ashraf Elazouni<br>Associate Professor<br>elazouni@squ.edu.om        | 2505 | PhD (USA) 93              | Construction Management     |

| Conego of Engineering Bulletin  |      |                           | ·   |
|---|------|---------------------------|---|
| Name/Position/Email   | Ext. | Academic<br>Qualification | Specialization                                    |
| Dr. Ghazi Al-Rawas Associate Professor and Dean of Research ghazi@squ.edu.om        | 2522 | PhD (Canada) 10           | Remote Sensing and<br>Water Resources Engineering |
| <b>Dr. Hossam Hassan</b> Associate Professor hossam@squ.edu.om                      | 1336 | PhD (USA) 96              | Transportation Engineering                        |
| Dr. Mohammed Al-Aghbari<br>Associate Professor<br>aghbari1@squ.edu.om               | 1334 | PhD (UK) 99               | Geotechnical Engineering                          |
| Dr. Sherif E. El-Gamal Associate Professor sherif@squ.edu.om                        | 1345 | PhD (Canada) 05           | Structural Engineering                            |
| <b>Dr. Yahia Mohamedzein</b> Associate Professor yahiaz@squ.edu.om                  | 2577 | PhD (USA) 89              | Geotechnical Engineering                          |
| Dr. Issa Al-Harthy<br>Assistant Professor<br>aissa@squ.edu.om                       | 1339 | PhD (Japan) 00            | Environmental Engineering (Acoustics)             |
| <b>Dr. Mohamed Al-Mamun</b> Associate Professor aalmamun@squ.edu.om                 | 2598 | PhD (Singapore) 10        | Environmental Engineering                         |
| <b>Dr. Mohammed Al-Shahri</b> Assistant Professor shahri@squ.edu.om                 | 3754 | PhD (USA) 13              | Geomatics Engineering                             |
| Dr. Mohammed Seddik Meddah<br>Associate Professor<br>seddikm@squ.edu.om             | 2672 | PhD (Canada) 07           | Civil Engineering, Materials                      |
| Dr. Syed Muhammad Bilal Waris Ali<br>Assistant Professor<br>Email: waris@squ.edu.om | 2589 | PhD (Japan) 10            | Structural Engineering                            |
| Dr. Mubarak Al-Alawi<br>Assistant Professor<br>alawim@squ.edu.om                    | 2531 | PhD (Canada) 17           | Construction Engineering                          |
| <b>Dr. Kazi Abu Sohel</b> Assistant Professor kmasohel@squ.edu.om                   | 3752 | PhD (Singapore) 09        | Structural Engineering                            |
| <b>Dr. Talal Etri</b> Assistant Professor t.etri1@squ.edu.om                        | 2543 | PhD (Germany) 07          | Hydraulic and Coastal Engineering                 |
| Dr. Zeinab Yavari<br>Assistant Professor<br>z.yavari@squ.edu.om                     | 3752 | PhD (Iran) 16             | Environmental Engineering                         |

| Name/Position/Email   | Ext. | Academic<br>Qualification | Specialization   |
|---|------|---------------------------|--|
| Dr. Mohammed Kandil El-Diasty Associate Professor m.eldiasty@squ.edu.om | 3759 | PhD (Canada) 00           | Geomatics Engineering  |
| Dr. Mohammad Reza Mahmoud<br>Associate Professor<br>m.reza@squ.edu.om   | 2543 | PhD (Iran) 12             | Water Resources and Environmental<br>Systems Analysis and Planning |

# Architectural Engineering Academic Staff

| Name/Position/Email  | Ext. | Academic<br>Qualification | Specialization                       |
|--|------|---------------------------|--------------------------------------|
| <b>Dr. Saleh Al Saadi</b> Associate Professor and Coordinator AE Program salsaadi@squ.edu.om | 2697 | PhD (USA) 14              | Architectural Engineering            |
| <b>Dr. Naima Benkari</b> Assistant Professor nbenkari@squ.edu.om                             | 2671 | PhD (France) 04           | Architecture and Urbanism            |
| <b>Dr. Chaham Alalouch</b> Associate Professor c.alalouch@squ.edu.om                         | 2656 | PhD (UK) 09               | Architectural Engineering and Design |
| Dr. Mohamed Salah Eldin<br>Assistant Professor<br>msaleh@squ.edu.om                          | 2674 | PhD (Egypt) 11            | Building Construction                |
| Dr. Hayder Khan Assistant Professor khan@squ.edu.om  | 1342 | PhD (UK) 15               | Mechanical Engineering               |
| Dr. Islam Sallam Assistant Professor isallam@squ.edu.om                                      | 2678 | PhD (Australia) 08        | Architectural Engineering            |
| <b>Dr. Hanan Al-Khatri</b> Assistant Professor khatri@squ.edu.om                             | 3752 | PhD (UK) 19               | Architecture (Science)               |
| Dr. Aliya Al-Hashim<br>Assistant Professor<br>aliya@squ.edu.om                               | 3752 | PhD (USA) 20              | Architectural Engineering            |

#### Laboratory Facilities

- 1. Architectural Printing Laboratory
- 2. Building Construction Model-Making Laboratory
- 3. Construction Materials and Structures Laboratory
- 4. Geomatics Engineering Laboratory
- 5. Geotechnical Engineering Laboratory
- 6. Highway Materials Laboratory
- 7. Hydraulics and Hydrology Laboratory
- 8. Environmental Engineering Laboratory
- 9. Model Workshop
- 10. Building Energy Laboratory

The Department of Civil and Architectural Engineering offers Bachelor of Engineering in Civil Engineering and Bachelor of Engineering in Architectural Engineering. The student may select the degree in Civil Engineering or Architectural Engineering upon fulfilling the University and College requirements.

The Bachelor of Engineering in Civil Engineering is awarded upon fulfilment of not less than 136 credit hours of course work.

The Bachelor of Engineering in Architectural Engineering is awarded upon fulfilment of not less than 156 credit hours of course work.

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## 3.5.2 Department of Electrical and Computer Engineering

#### Introduction

The Department of Electrical and Computer Engineering aims to provide a comprehensive education to equip students for subsequent challenging and highly competitive positions in the Electrical and Computer Engineering related sectors. This is achieved through a well-tailored and progressive sequence of topics in which emphasis is placed on a sound understanding of basic principles, reasoning, and the application of problem-solving skills. Students should, therefore, have proven aptitude for applied science and engineering.

Electrical and Computer Engineering is taught principally in the three final years of the five-year program, following essential courses in the physical sciences (mathematics, physics, etc.) and engineering. The program has a degree plan covering a wide range of topics.

## Academic Staff

Most of the academic staff in the Department of Electrical and Computer Engineering hold PhD degrees covering a broad range of specializations and industrial experience. Equally, technical staff members are also highly qualified with many years of experience.

| Name/Position/Email                                      | Extension | Academic<br>Qualification  | Specialization  |
|--|-----------|--|---|
| Dr. Ahmed Al Maashri                                     | 1363/1330 | Ph. D.   | Computer Engineering  |
| HoD<br>amaashari@squ.edu.om                              |           | (Pennsylvania State University), 2012  |   |
| Prof. Abdullah Al Badi<br>Professor<br>albadi@squ.edu.om | 1324      | Ph. D. (UMIST,<br>UK), 1998  | Distributed generation, Power quality, Power system analysis, Power electronics and drives, and Renewable Energy.   |
| Prof. Abdulnasir Y. Hossen Professor abhossen@squ.edu.om | 1303      | Ph. D. (Ruhr-<br>University,<br>Germany), 1994   | Digital Signal Processing   |
| Prof. Hadj Bourdoucen Professor hadj@squ.edu.om          | 1325      | Ph. D. (Ecole<br>Centrale de Lyon,<br>France), 1987  | Electronic & Optical Communication  |
| Prof. Ibrahim Metwally Professor metwally@squ.edu.om     | 2532      | Ph. D. (Mansoura<br>University in<br>collaboration with<br>University of<br>Wales, Cardiff,<br>UK), 1994 | High Voltage Engineering, Measurements of Impulse Voltages and Currents, Flow Electrification, Line Insulators, Surge Arresters, Gas- Insulated Switchgear and Lines, and Fault Current Limiters. |

| Name/Position/Email   | Extension | Academic<br>Qualification  | Specialization  |
|---|-----------|--|---|
| Prof. Afaq Ahmad<br>Professor<br>afaq@squ.edu.om                        | 1327      | Ph. D. (Indian<br>Institute of<br>Technology (I.I.T),<br>Roorkee India),<br>1990 | Computer Engineering, FPGA, VLSI Testing, Mathematical Morphology, Information Theory: Security, Coding, Reliability and Fault Tolerant Computing Systems' Design |
| <b>Dr. Joseph Jervase</b> Associate Professor jervase@squ.edu.om        | 1323      | Ph. D. (University of Khartoum), 1985  | Microwave Antennas &<br>Propagation   |
| Dr. Arif Saeed Malik Associate Professor. asmalik@squ.edu.om            | 2566      | Ph. D. Imperial<br>College London,<br>1991                                       | Power System Economics,<br>Reliability & Planning   |
| Dr. Tariq Jamil Associate Professor tjamil@squ.edu.om                   | 2515      | Ph. D.(Florida<br>Institute of<br>Technology, USA),<br>1996                      | Computer Architecture, Parallel<br>Processing, Computer Arithmetic, Data<br>Encryption, Digital Systems   |
| Dr. Zia Nadir<br>Associate Professor & Asst.<br>HoD<br>nadir@squ.edu.om | 2536      | Ph. D. (University<br>of Science &<br>Technology Lille1<br>France), 1999         | Electronics-RF Communications-<br>Computational Electromagnetics  |
| <b>Dr. Lazhar Khriji</b> Associate Professor lazhar@squ.edu.om          | 1329      | Ph. D. (Tampere<br>University of<br>Technology,<br>Finland), 1999                | Digital Signal and Image Processing,<br>Machine Learning  |
| <b>Dr. Faysal Mnif</b> Associate Professor mnif@squ.edu.om              | 2534      | Ph. D. Polytechnic<br>Institute of<br>Montreal,<br>Canada, 1996                  | Control Systems & Robotics, & Industrial Electronics  |
| Dr. Hasan Yousef Associate professor hyousef@squ.edu.om                 | 2554      | Ph. D. (University<br>of Pittsburgh,<br>USA), 1989                               | Control Systems applications  |
| Dr. Muhammad Shafiq Associate professor mshafiq@squ.edu.om              | 2662      | Ph. D. (Chiba<br>University, Japan),<br>1997                                     | Control Systems Engineering   |
| <b>Dr. Mostefa Mesbah</b> Associate Professor m.mesbah@squ.edu.om       | 2542      | Ph. D. (University<br>of Colorado at<br>Boulder, USA),<br>1993                   | Control Systems and Signal Processing   |

| Name/Position/Email  | Extension | Academic<br>Qualification  | Specialization  |
|--|-----------|--|---|
| Dr. Amer Al Hinai<br>Associate Professor, DVC-PSR                          | 1356      | Ph. D. (West<br>Virginia   | Power System Operation & Control,<br>Renewable Energy Integration,  |
| hinai@squ.edu.om   |           | University), 2005  | Distributed Generation & Microgrid  |
| Dr. Mohamed Bait-Suweilam<br>Associate Professor<br>msuwailem@squ.edu.om   | 2571      | Ph.D (University of<br>Waterloo, Canada)<br>2011                         | Electromagnetics, Antennas, RF<br>Microwave Engineering   |
| Dr. Ahmed Chiheb Ammari<br>Associate Professor<br>chiheb@squ.edu.om        | 2661      | Ph. D. (National<br>Polytechnic<br>Institute, Grenoble,<br>France), 1996 | Embedded Real Time Systems,<br>Inductive wireless Data and Power<br>Transfer, Hybrid Electric Energy<br>Storage, System Level Optimizations |
| <b>Dr. Jawher Ghommam</b> Associate Professor jawher@squ.edu.om            | 3765      | (University of Orleans, France), 2008                                    | Guidance, Navigation and Cooperative Control of Multi-Autonomous Vehicle  |
| <b>Dr. Medhat Hussein Awadalla</b> Associate Professor medhatha@squ.edu.om | 1346      | Ph.D. (Cardiff<br>University, UK),<br>2005                               | Computer Engineering  |
| <b>Dr. Dawood Al-Abri</b> Associate Professor alabrid@squ.edu.om           | 2538      | Ph. D. (University of Florida, USA), 2008                                | Computer Networking, Social<br>Networks, Network Security   |
| <b>Dr. Nasser Tarhuni</b> Associate Professor tarhuni@squ.edu.om           | 2537      | Ph. D. (University<br>of Technology,<br>Finland), 2007                   | Wireless Radio Resource Management, Optical CDMA, DSP Applications to Power System  |
| Dr. Rami Al-Hmouz Associate Professor r.alhmouz@squ.edu.om                 | 2590      | PhD (University of<br>Technology,<br>Sydney, Australia),<br>2008         | Computer Engineering/Computational Intelligence   |
| Dr. Amir Abdulghani<br>Assistant Professor<br>amirm@squ.edu.om             | 3767      | Ph.D. (Imperial<br>College, London,<br>UK), 2011                         | Wireless Communication and Signal Processing  |
| <b>Dr. Ahmed Oenen</b> Associate Professor a.onen@squ.edu.om               | 3760      | PhD (Virginia<br>Tech, USA), 2014  | Transmission and Distribution Network and Smart Grids, Big Data in Power Systems, Renewables and Integrations, Power System Optimization    |
| Dr. Rashid Al-Abri<br>Assistant Professor<br>arashid@squ.edu.om            | 2519      | PhD (University of Waterloo, Canada), 2012                               | Power Electronics<br>Power System Quality   |
| Dr. Hassan Al Lawati Assistant Professor and ADUS hlawati@squ.edu.om       | 2518      | PhD (UK), 2014   | CP Antennas, Applied Electromagnetism and AMC surfaces  |

| Name/Position/Email   | Extension | Academic<br>Qualification   | Specialization  |
|---|-----------|---|---|
|   |           | Quamication   |   |
| Dr. Abdelsalam Elhaffar<br>Assistant Professor<br>a.elhaffar@squ.edu.om | 2533      | PhD (Helsinki<br>University of<br>Technology, Finland),<br>2008   | Power system protection, Distributed generation, smart grids, and fault location in power systems   |
| Dr. Razzaqul Ahshan<br>Assistant Professor<br>razzaqul@squ.edu.om       | 1314      | PhD (Memorial<br>University of<br>Newfoundland, St.<br>John's, Canada), 2013                                      | Renewable Energy Systems and their Integration, Microgrids, Modelling and Control of Renewable Energy Systems, Wind Energy, Bio-energy, Electrical Drives, Application of Signal Processing Techniques to Power Systems |
| Dr. Firdous Kausar<br>Assistant Professor<br>firdous@squ.edu.om         | 2535      | PhD (National<br>University of Science<br>And Technology,<br>Islamabad, Pakistan),<br>2009                        | Information Security, Key<br>Management in Wireless Sensor<br>Networks  |
| Dr. Hafiz Muhammad Asif<br>Assistant Professor<br>h.asif@squ.edu.om     | 2664      | PhD (Lancaster University, UK), 2012  | Communication Systems   |
| Dr. Ibrahim Al Naimi<br>Assistant Professor<br>i.alnaimi@squ.edu.om     | 1373      | PhD (De Montfort<br>University, Leicester,<br>UK), 2011   | Mechatronics Engineering  |
| Dr. Khaled Alawasa Associate Professor h.asif@squ.edu.om                | 1373      | PhD (University of Alberta , Canada), 2014  | Power Systems, Renewable Energy, Power electronics.   |
| Dr. Gulam Khan<br>Assistant Professor<br>G.khan@squ.edu.om              | 1328      | PhD (University of<br>Newcastle, Australia),<br>2019  | Automation and control of nonlinear Systems   |
| <b>Dr. Said Al-Abri</b> Assistant Professor ssabry@squ.edu.om           | On leave  | Ph.D. (Georgia Institute<br>of Technology, USA),<br>2019)<br>MSc (University of<br>Central Florida, USA),<br>2013 | Control Engineering   |
| Engr. Taha Mubarak Al-<br>Saadi<br>Lecturer<br>taha@squ.edu.om          | On leave  | MSc (University of Sheffield, UK), 2016   | Advanced Control and Automation   |
| Engr. Salem Al-Hinai<br>Lecturer<br>salems@squ.edu.om                   | 2578      | B. Eng, SQU, 2001   | Power Systems   |

# Technical Staff

| Name/Position/Email   | Extension | Academic<br>Qualification  | Specialization                            |
|---|-----------|--|---|
| Saleh Al-Yazidi Engineer salyazid@squ.edu.om                          | 1306      | BEng, (Electrical Engineering, Staffordshire University, UK), 2006 | Electrical Engineering                    |
| <b>Jaber Al-Bulushi</b><br>Senior Engineer<br><u>jabir@squ.edu.om</u> | 2548      | MSc (Computer<br>Engineering SQU,<br>Oman), 2003                   | Electronics & Communication Engineering   |
| Abbas Abdelrahman Teirab<br>Engineer<br>abbas@squ.edu.om              | 2563      | BEng, (SQU, Oman)  | Electronics & Communication Engineering   |
| Naeema Al Gaithi Engineer gaithi@squ.edu.om                           | 2565      | B.Sc. (Higher College<br>of Technology,<br>Oman), 2008             | Telecommunications                        |
| Rona George Allwyn Engineer rona@squ.edu.om                           | 2565      | B.Tech (Kerala<br>University, India)_,<br>2002                     | Electrical and Electronics Engineering    |
| Saleem Al-Rashdi<br>Chief Senior Engineer<br>alrashdi@squ.edu.om      | 2563      | B.Eng (Micro<br>Electronics and<br>Computer<br>Engineering), 2000  | Electrical & Electronics Engineering      |
| Sulaiman Al Sinani<br>Engineer<br>ssinani@squ.edu.om                  | 2516      | B.Eng. (SQU, Oman),<br>2002  | Electrical & Electronics Engineering      |
| Yousef Al Shuaili<br>Engineer<br>shaili@squ.edu.om                    | 2516      | B.Eng (SQU, Oman).<br>2001   | Electrical & Electronics Engineering      |
| Sulaiman Al-Kalbani Technician sulekal@squ.edu.om                     | 2564      | B.Tech (Sunderland<br>Polytechnic, UK),<br>1987.                   | Electrical Engineering                    |
| Iftaquaruddin Mohammed Senior Technician r iftaquar@squ.edu.om        | 2540      | M.Sc. (Manipal<br>University, India,<br>2013)                      | Embedded Systems and Software Development |

| Name/Position/Email          | Extension | Academic<br>Qualification | Specialization                     |
|------------------------------|-----------|---------------------------|------------------------------------|
| Nabil Hamza                  | 2551      | MSc (National             | Electronics and Telecommunications |
| Lab Supervisor               |           | Engineering School        |                                    |
| nabilh@squ.edu.om            |           | of Sfax, ENIS,            |                                    |
|                              |           | Tunisia), 2003            |                                    |
| Salwa Al Bahri               | 2565      | Diploma in Tele-          | Telecommunications                 |
| Technician                   |           | communications,           |                                    |
| salwa2@squ.edu.om            |           | (Higher College of        |                                    |
|                              |           | Technology, Oman),        |                                    |
|                              |           | 2006                      |                                    |
| Mr. Sami Al Jaafari          | 2564      | Diploma in Electrical     | Power Engineering                  |
| Technician                   |           | Power Engineering,        |                                    |
| <u>samij@squ.edu.om</u>      |           | (Ibra College of          |                                    |
|                              |           | Technology), 2010         |                                    |
| Mr. Said Al Hajri            | 2578      | BSc (Sultan Qaboos        | Computer Science                   |
| ECE IT Support               |           | University, Oman),        |                                    |
| alhajri_s <u>@squ.edu.om</u> |           | 2013                      |                                    |

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The Bachelor of Engineering in Electrical and Computer Engineering program covers broad education in basic sciences, mathematics, and courses in specialized areas of Electrical & Computer Engineering. The program includes four specializations; namely, Telecommunications and Wireless Systems (TWS), Embedded Computing and Networks (ECN), Power Systems and Energy (PSE) and Electronics Instrumentation and Control (EIC). Also, the department offers a program in Mechatronics jointly with the Department of Mechanical and Industrial Engineering.

#### **Specialization coordinators:**

Dr. Dawood Al Abri : Embedded Computing and Networks

Prof. Abdullah Al Badi : Power Systems and Energy

Prof. Hadj Bourdoucen : Telecommunications and Wireless Systems
Dr. Hassan Yousef : Electronic Instrumentation and Control
Dr. Faical Mnif : Mechatronics Program (jointly with MIE)

The ECE Department is equipped with highly sophisticated laboratories to train students in drones and machine vision, electrical and electronics circuits, electrical drives and machines, digital design, embedded systems, communications, computer networking, power systems, high voltage, and control systems.

See degree/study plans for full details of courses in the department.

#### 3.5.3 Mechatronics Engineering Program

#### Presentation

Mechatronics Engineering (MCE) is a new focus area in engineering that promises to become more important in the future. It is a synergistic integration of Mechanical Engineering Systems, Control Systems, and Computers. Typical mechatronics systems include sensors (e.g. position sensors, speed sensors, temperature sensors, etc.), mechanical and electrical actuators (e.g. electrical motors, hydraulic cylinders, and flow control valves), and computer controllers (e.g. custom-built computers, personal computers, and PLC's) into products and system useful to man and society. To combine all these elements optimally, engineers must have insight into each of these disciplines. In the future, Mechatronics Engineers will play a key role in the design, development, manufacture, and operation of a wide variety of products: from video players and automatic cameras to smart wells and intelligent systems, from automated well rigs to smart structures, etc. The Mechatronics Engineering program is a five (5) year Bachelor's Degree program, oriented toward future trends in industrial development within the Sultanate of Oman and the Gulf.

#### Academic staff

The Mechatronic Engineering Program is a joint program managed by two departments; namely, Electrical & Computer Engineering (ECE) and Mechanical & Industrial Engineering (MIE). The program includes basic courses from both ECE and MIE programs and major courses. Major courses include but are not limited to: Robotics, Mechatronics System Design, Control Systems Engineering, Real-time control and interfacing, Modeling and Simulation, Power Electronics and Drives, Electromechanical Systems and Actuators, etc. The MCE curriculum is crowned, typically within the last year, with a capstone design experience, where students need to undergo a Final year Project spanned over two semesters. These courses are offered complementarily by academic staff from both ECE and MIE departments. Consult degree/study plans for full details of courses in this program.

#### **Program Management**

The management of the program is assured by both ECE and MIE departments. The two departments take turns in managing the program, where each management cycle is 3 years in duration.

#### Laboratories

In addition to the different lab units from both ECE and MIE departments used in almost every course of the program, the College of Engineering has granted the program a specific lab used namely for program courses. The MCE lab is equipped with the last up-to-date equipment such as robots, drones, etc.

## CURRICULUM OF MCE PROGRAM (Cohort 2022)

## **MAJOR REQUIREMENTS (77 Credits)**

| Course Code | Course Title                           | Credit | Pre-Requisite / Co-req. *           |
|-------------|--|--------|-------------------------------------|
| ECCE2017    | Electric Circuit Analysis              | 4      | PHYS2107 or PHYS2101                |
| MCTE3110    | Electronics                            | 4      | ECCE2017                            |
| MCTE2129    | Engineering Mechanics                  | 3      | PHYS2107                            |
| MCTE4145    | Instrumentation & Measurement          | 3      | MCTE3110, MEIE3281                  |
| MCTE3230    | Properties and Strength of Materials   | 3      | MCTE2129                            |
| MEIE3281    | Probability & Statistics for Engineers | 3      | MATH2107                            |
| MCTE4102    | Machine Design                         | 3      | MCTE3230                            |
| MCTE4185    | Signals & Systems for Mechatronics     | 3      | ECCE2017                            |
| MCTE3210    | Electromechanical Systems & Actuators  | 3      | ECCE2017                            |
| ECCE3206    | Digital Logic Design                   | 3      |                                     |
| MCTE4210    | Power Electronics & Drives             | 3      | MCTE3110, MCTE3210                  |
| MEIE4141    | Fluids Mechanics                       | 3      | PHYS2108                            |
| ECCE4227    | Embedded Systems                       | 3      | (COMP2002 or ENGR2217),<br>ECCE3206 |
| ECCE5004    | Engineering Managements & Economics I  | 3      | STAT2103 or MEIE3281                |
| MCTE4150    | Modeling & Simulation                  | 3      | MATH4174                            |
| MEIE4183    | Numerical Methods for Engineers        | 3      | (COMP2002 or ENG2217),              |
| MEIE3122    | Machine Dynamics                       | 3      | MATH3171<br>MCTE2129                |
| MCTE5290    | Project I                              | 3      | MCTE3250, PR <sup>1</sup>           |
| MCTE4230    | Thermal Sciences                       | 3      | PHYS2108, MATH2109                  |
| MCTE3250    | Engineering System Design              | 3      |                                     |
| MCTE5210    | Real-time control and interfacing      | 3      | MCTE4450                            |
| MCTE4450    | Control Systems Engineering            | 3      | MCTE4150                            |
| MCTE4255    | Mechatronics System Design             | 3      | ECCE4227, MCTE3250                  |
| MCTE5291    | Project II                             | 3      | MCTE5290                            |
| MCTE5142    | Robotics                               | 3      | MEIE3122                            |

## MAJOR ELECTIVES (AE, 12 Cr)

| College of Engineering Bulletin |  |        | lo. 23 September 2022   |
|---------------------------------|--|--------|-------------------------|
| Course Code                     | Course Title                             | Credit | Pre-requisite           |
| MCTE5001                        | Coop-Training I                          | 0      | ENGR4007*               |
| MCTE5002                        | Coop-Training II                         | 6      | MCTE5001                |
| ECCE5433                        | Modern Control Systems                   | 3      | MCTE4450 or MCTE4250    |
| ECCE5453                        | Mobile Robot Control                     | 3      | ECCE3206                |
| ECCE4436                        | Industrial Control Systems               | 3      | MCTE4450 or MCTE4250    |
| ECCE5008                        | Project Management                       | 3      | ECCE 5004               |
| ECCE5223                        | Advanced Embedded Systems                | 3      | ECCE4227                |
| ECCE5445                        | Control System Design                    | 3      | MCTE4450 or MCTE4250    |
| ECCE5432                        | Programmable Logic Controllers           | 3      | ECCE3206                |
| ECCE4253                        | Object Oriented Programming              | 3      | COMP2002                |
| ECCE4255                        | Applied Program. & Algorithms for        | 3      | COMP2002                |
| ECCE5443                        | Optimization Techniques in Eng.          | 3      | MATH3171                |
| MEIE 5101                       | Engineering Vibration                    | 3      | MEIE3121 or MCTE2129    |
| MEIE5131                        | Legged locomotion of robots and animals  | 3      | MEIE3122                |
| MEIE 5127                       | Process Control                          | 3      | MEIE4122 or MEIE4171 or |
| MEIE 5122                       | Applied Multi-body Dynamics              | 3      | MEIE3121 or MCTE2129    |
| MEIE5146                        | Renewable Energy                         | 3      | MEIE3142 or MEIE3159 or |
| MEIE5180                        | Nanotechnology                           | 3      | MEIE4161 or MCTE3230    |
| MEIE5182                        | Fundamentals of Biomechanics             | 3      | (MEIE3102, MEIE3121)    |
| MEIE5288                        | Innovation and Entrepreneurship          | 3      | MEIE4285 or ECCE 5004   |
| MEIE5106                        | Pressure Vessel & Piping System Design   | 3      | MEIE4102                |
| MEIE5110                        | Applied Finite Element Methods           | 3      | MEIE3102 or CIVL3086 or |
| MEIE5162                        | Corrosion Engineering                    | 3      | MCTE3230                |
| ECCE5229                        | Embedded Real Time Systems               | 3      | ECCE4227                |
| ECCE5293                        | Embedded Vision Systems                  | 3      | ECCE4227                |
| ECCE4216                        | Applied Machine Learning                 | 3      | ENGR2217 or COMP2002    |
| ECCE5219                        | Intelligent Applications in Robotics and | 3      | ECCE4227                |
| ECCE5231                        | Industrial Networks and Operating        | 3      | ECCE4227                |
| MCTE5420                        | Pneumatic and Hydraulic Systems          | 3      | MCTE3210                |
| MCTE5103                        | Directed studies in robotics and control | 3      | MCTE4450                |

See degree/study plans for full details of courses in this program.

#### 5 DEPARTMENTS/PROGRAMS

## 3.5.4 Department of Mechanical and Industrial Engineering

#### Introduction

The Department of Mechanical and Industrial Engineering at Sultan Qaboos University (SQU) provides a high quality professional education to equip students for future challenging and highly competitive positions in public service and industry. This is achieved through a carefully planned set of courses in which emphasis is placed on developing sound understanding of basic principles, skills in the analysis of real life problems and problem solving techniques. Students should have a definite interest in learning how to apply sciences and mathematics to solve technical problems in engineering.

Mechanical and Industrial Engineering is taught in years 3-5 of the B. Eng. Degree Plan after foundation courses in English, Mathematics and Sciences. The Department offers Bachelor of Engineering, M.Sc. and Ph.D. in both Mechanical and Industrial Engineering. It also offers B.Eng. in Mechatronics Engineering in collaboration with Electrical and Computer Engineering Department. The undergraduate programs are ABET accredited.

#### Academic Staff

Mechanical and Industrial Engineering Academic Staff have qualifications and experience covering a wide range of engineering specializations as shown below. Demonstrators and Lecturers pursue M.Sc. and Ph.D. degrees in universities abroad. Technical staffs are well qualified with a wide range of experience.

| Name/Position/E-Mail   | Extension | Academic<br>Qualification | Specialization  |
|--|-----------|---------------------------|---|
| <b>Dr. Nasr Al-Hinai</b><br>Associate Professor, HoD<br><u>nhinai@squ.edu.om</u> | 1352      | PhD (Canada) 2011         | Production Planning,<br>Scheduling and Control.<br>Systems Modeling and<br>Simulation.  |
| <b>Dr. Farooq Al-Jahwari</b><br>Assistant Professor,<br>farooq@squ.edu.om        | 1350      | PhD (Canada) 2016         | Applied Mechanics &<br>Materials, Simulation &<br>Design, FEM   |
| Prof. Tasneem Pervez Professor tasneem@squ.edu.om                                | 1315      | PhD (USA) 1991            | Engineering Design & Analysis, Composite Materials, FEM, Solid Expandable Tubular and Swellable Elastomers                    |
| Prof. Sayyad Zahid Qamar<br>Professor<br>sayyad@squ.edu.om                       | 1349      | PhD (KSA) 2004            | Applied Materials and<br>Manufacturing, Applied<br>Mechanics and Design,<br>Engineering Reliability,<br>Engineering Education |
| <b>Dr. Khalid Alzebdeh</b><br>Associate Professor<br><u>alzebdeh@squ.edu.om</u>  | 2556      | PhD (USA) 1994            | Project Management and<br>Economics, Bio-<br>composites, Nano-  |

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|--|-----------|---------------------------|--|
| Name/Position/E-Mail   | Extension | Academic<br>Qualification | Specialization   |
|  |           |                           | composites, Engineering Mechanics.   |
| <b>Dr. Nabeel Z Al-Rawahi</b><br>Associate Professor, Dean<br><u>alrawahi@squ.edu.om</u> | 2569      | PhD (USA) 2002            | Multiphase Flow,<br>Computational Fluid<br>Mechanics, Renewable<br>energy  |
| <b>Dr. Amur Al-Yahmadi</b><br>Associate Professor,<br>amery@squ.edu.om                   | 1358      | PhD (USA) 2001            | Dynamics and Control of<br>Mechanical Systems,<br>Legged Locomotion,<br>Navigation of Mobile<br>Robots   |
| <b>Dr. Abdullah Al-Shabibi</b><br>Associate Professor<br><u>ashabibi@squ.edu.om</u>      | 2058      | PhD (USA) 2001            | Applied Mechanics  |
| <b>Dr. Nasser A. Al-Azri</b><br>Associate Professor, ADPGSR<br><u>Nalazri@squ.edu.om</u> | 1355      | PhD (USA) 2008            | Engineering mathematics<br>and optimization, process<br>optimization and<br>thermodynamics   |
| <b>Dr. Riadh Zaier</b><br>Associate Professor<br><u>zaier@squ.edu.om</u>                 | 2547      | PhD (Japan)1999           | Discrete-Time Tracking<br>Control Systems,<br>Robotics, Mechatronics<br>Systems design   |
| <b>Hon. Dr. Mahmood A. Al-Kindi</b><br>Associate Professor<br><u>kindim@squ.edu.om</u>   | 1312      | PhD (USA) 2010            | Industrial Engineering   |
| <b>Dr. Majid H. Al-Maharbi</b><br>AssociateProfessor, (Asst HoD)<br>majidm@squ.edu.om    | 2541      | PhD (USA) 2009            | Materials Science and<br>Engineering, Metallurgy   |
| <b>Dr. Hakan Gultekin</b><br>Associate Professor<br>hgultekin@squ.edu.om                 | 3757      | PhD (Turkey) 2010         | Operation research,<br>Production Planning,<br>Scheduling  |
| <b>Dr. Hassan Ouakad</b><br>Associate Professor<br><u>houakad@squ.edu.om</u>             | 1310      | PhD (USA) 2010            | Computational Mechanics. Vibration/Dynamic (linear and nonlinear)/Control. MEMS and NEMS. Smart Micro/Nano Systems. Vibration Based Energy Harvesters. |
| <b>Dr. Afzal Husain</b><br>Associate Professor<br>afzal19@squ.edu.om                     | 1322      | PhD (South Korea) 201     | Fluid Dynamics, CFD  |
| <b>Dr. Sujan Piya</b><br>Associate Professor<br><u>sujan@squ.edu.om</u>                  | 2502      | PhD (Japan) 2010          | Production planning & control; Process Optimization; Logistics & supply chain management   |
| Dr. Khurshid Alam  | 3757      | PhD (UK) 2009             | Bio-Mechanics, Design  |

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|---|-----------|--|--|
| Name/Position/E-Mail  | Extension | Academic<br>Qualification                        | Specialization   |
| Associate Professor<br>kalam@squ.edu.om   |           |  |  |
| <b>Dr. Niyazi Bakır</b><br>Associate Professor<br><u>n.bakir@squ.edu.om</u>           | 2568      | PhD (USA) 2004                                   | Reliability Engineering,<br>Decision and Risk<br>Analysis, Homeland<br>Security  |
| <b>Dr. Issam Bait Bahadur</b> Assistant Professor bahdoor@squ.edu.om                  | 1353      | PhD (Canada) 2013                                | MEMS, NEMS, Bio-<br>Medical systems,<br>Automation & control.  |
| <b>Dr. Emad Summad</b> Assistant Professor esummad@squ.edu.om                         | 3751      | PhD (UK) 2001                                    | Innovation and<br>Entrepreneurship   |
| <b>Dr. Nasra Al-Maskari</b><br>Assistant Professor<br>maskaria@squ.edu.om             | 2500      | PhD (USA) 2016                                   | Mechanical Engineering Design  |
| <b>Dr. Abdullah Al Janabi</b><br>Assistant Professor<br>ab.aljanabi@squ.edu.om        | 3761      | PhD (Germany) 2011                               | Renewable Energy Technologies, Thermal Sciences, Heat Exchangers Fouling Mitigation techniques. Automobile Technology. |
| Dr. Musaab Abdalla Hassan Zarog<br>Assistant Professor<br>musaabh@squ.edu.om          | 2489      | PhD (UK) 2006                                    | Mechatronics Engineering,<br>MEMS, Control System  |
| <b>Dr. Morteza Mohammadzaheri</b><br>Assistant Professor<br><u>morteza@squ.edu.om</u> | 2675      | PhD (Australia) 2011                             |  |
| <b>Dr. Sulaiman Al-Obaidani</b> Assistant Professor <u>sobeidani@squ.edu.om</u>       | 1311      | PhD (Italy) 2009                                 | Membrane Technology,<br>Desalination, Membrane<br>Distillation, Water<br>treatment, Heat Transfer.                     |
| <b>Dr. Moosa Al-Kharusi</b><br>Assistant Professor<br>m.alkharusi1@squ.edu.om         | 2845      | PhD (SQU) 2017                                   | Applied Mechanics  |
| <b>Dr. Ftwi Hagos</b><br>Assistant Professor<br><u>f.hagos@squ.edu.om</u>             | 3756      | PhD (Malaysia) 2014                              | Thermofluids, Energy,<br>Combustion  |
| Mohammed Al-Lawati<br>Demonstrator<br>mlawati@squ.edu.om                              | -         | MSc. (University of<br>Waterloo) 2014            | Mechatronics Engineering,<br>Control systems and<br>robotics.  |
| <b>Dr. Omar Al Abri</b> Assistant Professor o.alabri@squ.edu.om                       | 1064      | PhD (Sultan Qaboos<br>University,<br>Oman, 2016) | Applied Mechanics,<br>Mechanics of Materials,<br>Finite Element Analysis,<br>Crystals Plasticity, CPFEM                |

#### Laboratory Facilities

- 1. Properties of Materials Laboratory
- 2. Thermodynamics Laboratory
- 3. Refrigeration and Air-Conditioning Laboratory
- 4. Solid Mechanics Laboratory
- 5. Fluid Mechanics Laboratory
- 6. Automatic Control Laboratory
- 7. Mechanical Systems Laboratory
- 8. Computer Integrated Manufacturing (CIM) Laboratory
- 9. Central Workshop
- 10. Ergonomics Laboratory
- 11. Systems Engineering Laboratory
- 12. Computer Laboratory
- 13. Vibration Lab

The Mechanical and Industrial department offers two undergraduate programs as follows:

- Bachelor of Engineering in Mechanical Engineering
- Bachelor of Engineering in Industrial Engineering

#### 1) Mechanical Engineering

#### 1) Mechanical Engineering

#### **DEPARTMENTAL REQUIREMENTS (DR, 24 Cr)**

| Code     | Title                                  | Credits | Pre-Requisite / Co-req. *                  |
|----------|--|---------|--|
| MEIE2182 | Workshop II                            | 0       | ENGR1600                                   |
| MEIE3107 | Engineering Drawings & Graphics        | 3       | FPEL (0560 or 0600 or 0601 or 0602 or 0603 |
|          |  |         | or 0604)                                   |
| MEIE3161 | Materials Science                      | 3       | CHEM1071                                   |
| MEIE3102 | Solid Mechanics                        | 3       | MEIE2102                                   |
| MEIE4262 | Manufacturing Processes                | 3       | MEIE3161                                   |
| MEIE3281 | Probability & Statistics for Engineers | 3       | MATH2107                                   |
| MEIE4285 | Engineering Economics                  | 3       | MATH2107                                   |
| MEIE5288 | Innovation and Entrepreneurship        | 3       | MEIE4285                                   |
| MEIE3275 | Mechatronics Systems                   | 3       | PHYS2108                                   |

#### MAJOR REQUIRMENTS (AR, 50 Cr)

| Code     | Title                          | Credits | Pre-requisite / Co-requisite* |
|----------|--------------------------------|---------|-------------------------------|
| MEIE2102 | Statics                        | 3       | PHYS2107                      |
| MEIE3121 | Dynamics                       | 3       | MEIE2102                      |
| MEIE3141 | Thermodynamics I               | 3       | PHYS2108*                     |
| MEIE3109 | Product Design                 | 3       | MEIE3107                      |
| MEIE3122 | Machine Dynamics               | 3       | MEIE3121                      |
| MEIE3142 | Thermodynamics II              | 3       | MEIE3141                      |
| MEIE4102 | Machine Design I               | 3       | MEIE3102, MEIE3107            |
| MEIE4190 | Seminar                        | 0       |                               |
| MEIE4141 | Fluid Mechanics                | 3       | PHYS2108                      |
| MEIE4126 | Instrumentation & Measurements | 3       | MEIE3275, MEIE3281            |

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|--------------|---------------------------------|---|----------------------------------|
| MEIE4183     | Numerical Methods for Engineers | 3 | (COMP2002 or ENGR2217), MATH3171 |
| MEIE4122     | Engineering Systems & Control   | 3 | MEIE3121, MATH4174               |
| MEIE4144     | Heat Transfer                   | 3 | MEIE4141, MEIE3141               |
| MEIE5149     | Capstone Design                 | 3 | MEIE3109, MEIE4102               |
| MEIE4161     | Engineering Materials           | 3 | MEIE4161                         |
| MEIE5145     | Design of Thermal Systems       | 3 | MEIE4144, MEIE3142, MEIE4183     |
| MEIE5193     | Project I                       | 2 | MEIE4102, MEIE4144               |
| MEIE5194     | Project II                      | 3 | MEIE5193                         |

## MAJOR ELECTIVES (AE, 15 Credits) \*\*

#### 15 credit hours:

- Scheme I or II: Five courses
- COOP Scheme: Cooperative Training courses (MEIE5001 and MEIE5002) and three elective courses

| Code     | Title  | Credits | Pre-requisite / Co-requisite *   |
|----------|--|---------|----------------------------------|
| MEIE5001 | Mechanical Program Cooperative Training I                  | 0       | ENGR4007*                        |
| MEIE5002 | Mechanical Program Cooperative Training II                 | 6       | MEIE5001                         |
| MEIE5013 | Refrigeration & Air Conditioning                           | 3       | MEIE4144, MEIE3142               |
| MEIE5128 | Theory & Practice of Rotor Dynamics                        | 3       | MEIE3122                         |
| MEIE5019 | Internal Combustion Engines & Control of Exhaust Emissions | 3       | MEIE3142                         |
| MEIE5101 | Engineering Vibration                                      | 3       | MEIE3121                         |
| MEIE5106 | Pressure Vessel & Piping System Design                     | 3       | MEIE4101 or MEIE4102             |
| MEIE5110 | Applied Finite Element Methods                             | 3       | MEIE3102                         |
| MEIE5121 | Modeling & Simulation of Engineering Systems               | 3       | MATH4174                         |
| MEIE5122 | Applied Multibody Dynamics                                 | 3       | MEIE3122                         |
| MEIE5124 | Condition Monitoring and Diagnosis                         | 3       | MEIE3122                         |
| MEIE5127 | Analysis and Design of Control Systems                     | 3       | MEIE4122 or MCTE4450             |
| MEIE5129 | System Models and Identification                           | 3       | MEIE3281                         |
| MEIE5130 | Mechatronics Systems and Applications                      | 3       | MEIE4126, (MEIE4101 or MEIE4102) |
| MEIE5131 | Legged Locomotion of Robots and Animals                    | 3       | MEIE3122                         |
| MEIE5132 | Smart Materials and Structures                             | 3       | MEIE4126 or MCTE4145             |
| MEIE5141 | Solar Energy Systems                                       | 3       | MEIE4144                         |
| MEIE5142 | Solar Thermal Processes                                    | 3       | MEIE4144                         |
| MEIE5146 | Renewable Energy   | 3       | MEIE3142 or MEIE3159 or MCTE4230 |
| MEIE5147 | Energy Conservation and Management                         | 3       | MEIE3141 or MEIE3159             |
| MEIE5148 | Desalination   | 3       | MEIE4144                         |
| MEIE5151 | Fundamentals of Turbomachinery                             | 3       | MEIE3142, MEIE4141               |
| MEIE5152 | Fundamental of Thermal Energy Storage                      | 3       | MEIE3142                         |
| MEIE5162 | Corrosion Engineering                                      | 3       | MEIE4161                         |
| MEIE5165 | Introduction to Fracture Mechanics                         | 3       | MEIE3161, (MEIE3102 or MCTE3230) |
| MEIE5166 | Introduction to Nanotechnology Engineering                 | 3       | MEIE4161                         |
| MEIE5167 | Mechanics of Composite Materials                           | 3       | MEIE3161, (MEIE3102 or MCTE3230) |
| MEIE5182 | Fundamentals of Biomechanics                               | 3       | MEIE3102, MEIE3121               |
| MEIE5190 | Special Topics   | 3       |                                  |
| MEIE5264 | CAD/CAM  | 3       | MEIE3102, MEIE3107               |

- \*\* 1) One 4000 or 5000 level course can be taken from another engineering program with the approval of the academic advisor.
  - 2) Students can register for elective courses starting from semester eight (8).

#### 2) Industrial Engineering

### **DEPARTMENTAL REQUIREMENTS (DR, 15 Credits)**

| Code     | Title                                  | Credits | Pre-requisite / Co-requisite*                       |
|----------|--|---------|---|
| MEIE3107 | Engineering Drawings and Graphics      | 3       | FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604) |
| MEIE3281 | Probability & Statistics for Engineers | 3       | MATH2107  |
| MEIE4285 | Engineering Economics                  | 3       | MATH2107  |
| MEIE5288 | Innovation and Entrepreneurship        | 3       | MEIE4285  |
| MEIE3275 | Mechatronics Systems                   | 3       | PHYS2108  |

### **MAJOR REQUIREMENTS (AR, 56 Credits)**

| Code     | Title   | Credits | Pre-requisite / Co-requisite*                    |
|----------|---|---------|--|
| MEIE3203 | Introductory Applied Mechanics                  | 3       | PHYS2107   |
| MEIE3279 | Theory of Modeling and Optimization             | 3       | (COMP2002 or ENGR2216 or ENGR2217) and MATH3171* |
| MEIE3284 | Industrial Information System                   | 3       | PHYS2108*  |
| MEIE3292 | Work System Analysis and Design                 | 3       | MEIE3281   |
| MEIE4201 | Ergonomics and Safety                           | 3       | MEIE3292   |
| MEIE4219 | Optimal Experimental Design                     | 3       | MEIE3281 or PNGE4101 or                          |
| MEIE4229 | Integer and Stochastic Optimization in Practice | 3       | MEIE 3279 or MEIE 3271                           |
| MEIE4233 | Production Planning and Inventory Management    | 3       | MEIE3281, MEIE3279*                              |
| MEIE4244 | Quality Engineering and Management              | 3       | MEIE3281, MEIE4219*                              |
| MEIE4255 | Facilities Design and Planning                  | 3       | MEIE4233   |
| MEIE4263 | Materials and Manufacturing Technology          | 3       | CHEM1071   |
| MEIE4272 | Simulation Models                               | 3       | MEIE4250 or MEIE4229                             |
| MEIE4286 | Engineering Management                          | 3       |  |
| MEIE5225 | Smart Manufacturing                             | 3       | MEIE4263   |
| MEIE5244 | Supply Chain and Logistics Engineering          | 3       | MEIE4233   |
| MEIE5273 | Product Design and Manufacturing                | 3       | MEIE4262 or MEIE4263                             |
| MEIE5275 | Automated Industrial Systems                    | 3       | (MEIE3181+ MATH4174)or<br>MEIE3275               |
| MEIE5291 | Project I                                       | 2       | (MEIE4255 or MEIE4275 or MEIE4272), MEIE4285     |
| MEIE5292 | Project II                                      | 3       | MEIE5291   |
| MEIE5295 | Seminar   | 0       |  |

#### MAJOR ELECTIVES (AE, 18 Credits) \*\*

#### 18 credit hours:

- Scheme I or II: Six courses
- COOP Scheme: Cooperative Training courses (MEIE5001 and MEIE5002) and four elective courses

| Code      | Title                                     | Credits | Pre-requisite / Co-requisite * |
|-----------|---|---------|--------------------------------|
| MEIE5201  | Occupational Safety engineering           | 3       | MEIE4201                       |
| MEIE5210  | Cooperative Training I                    |         | ENGR4007*                      |
| MEIE5211  | Cooperative Training II                   |         | MEIE5210                       |
| MEIE5222  | Introduction to Healthcare Management     | 3       | MEIE4222 or MEIE4233           |
| MEIE5224  | Six Sigma Methodology                     | 3       | MEIE4224 or MEIE4221           |
| MEIE5251  | Agent-Based Modeling                      | 3       | MEIE4272                       |
| MEIE5263  | Design for Manufacturing                  | 3       | MEIE3107, MEIE4262             |
| MEIE5287  | Project Management                        | 3       | MEIE3279 or MEIE3271           |
| MEIE5271  | Decision Analysis Models and Applications | 3       | MEIE4265, MEIE4285             |
| MEIE5285  | Technology Transfer                       | 3       |                                |
| MEIE5290  | Data Mining                               | 3       |                                |
| MEIE5233  | Maintenance and Reliability Engineering   | 3       | MEIE4244 or MEIE4224           |
| MEIE5264  | CAD/CAM                                   | 3       |                                |
| MEIE5265  | Computer Integrated Manufacturing         | 3       | MEIE4262 or MEIE4263           |
| MEIE5280  | Sustainable Manufacturing Systems         | 3       |                                |
| MEIE5297  | Special Topics                            | 3       |                                |
| MEIE4141* | Fluid Mechanics                           | 3       | PHYS2108                       |
| MEIE4183* | Numerical Analysis                        | 3       | MATH3171, COMP2002             |

<sup>\*\* 1)</sup> One 4000 or 5000 level course can be taken from another engineering program with the approval of the academic advisor.

See degree/study plans for full details of list of courses for both programs offered in the department.

#### 3.5.5 DEPARTMENT OF PETROLEUM AND CHEMICAL ENGINEERING

#### Introduction

The undergraduate programs in the Petroleum & Chemical Engineering Department (PCED) in the College of Engineering at Sultan Qaboos University are carefully designed to meet the needs of the Sultanate of Oman in the growing fields of oil and gas industry as well as the chemical and process industries. The department's vision is to be considered among the top departments in the region which produces graduates receiving worldwide recognition and is able to attract top notch faculty. As such, the Department aims at providing a comprehensive state-of-the-art education for its students and thus equipping them with the needed skills for the competitive job market. This is achieved through a progressive sequence of subjects well-tailored to build a deep and sound understanding of the basic principles of engineering, emphasizing reasoning and engineering application in problem solving. The department offers two different Bachelor of Engineering Degrees (BEng) in Petroleum & Natural Gas Engineering (PNGE) and Chemical & Process Engineering (CHPE). Both PNGE and CHPE programs are accredited by the Accreditation Board of Engineering and Technology (ABET) which is an internationally recognized accreditation body. The Bachelor programs are solidly constructed, with an excellent technology based, to provide sound and internationally acclaimed undergraduate engineering education. They are designed in such a way to allow broad perspective, engendering social, cultural, ethical components, all combined to produce the engineers, who are expected to serve as a leading role model in the community.

Postgraduate programs at the Masters level (MSc) and PhD level are also offered in PNGE and CHPE. These degrees prepare students to pursue careers in the petroleum, chemical and process engineering in a variety of related fields.

#### **Academic Staff**

All academic staff hold doctoral (PhD) degrees covering a broad range of specializations. Likewise, the technical support staff are highly qualified with many years of experience.

| College of Engineering Bulletin  |           | INU.                      | 23 September 2022  |
|--|-----------|---------------------------|--|
| Name/Position/Email  | Extension | Academic<br>Qualification | Specialization   |
| <b>Dr. Rashid Al-Hajri</b> Associate Professor <u>rashid@squ.edu.om</u>    | 2557      | PhD (UK), 10              | Hydrogen production, CO2 capture and utilization, NG treatment, Catalytic reaction engineering, Chemical/Thermal enhanced oil recovery   |
| <b>Dr. Jamil Naser</b> Associate Professor, HoD naserj@squ.edu.om          | 1318      | PhD (US), 98              | CO2 Capture, Environmentally friendly solvents, Solar desalination   |
| Prof. Rashid Al-Maamari<br>Professor<br><u>rsh@squ.edu.om</u>              | 1361      | PhD (USA), 00             | Enhanced oil recovery, Treatment and utilization of oilfield produced water  |
| Prof. Farouk S. Mjalli<br>Professor<br>farouqsm@squ.edu.om                 | 2558      | PhD (UK), 03              | Green Engineering  |
| Prof. Gholamreza Vakili-Nejad<br>Professor<br>yakili@squ.edu.om            | 2587      | PhD (Iran), 99            | Thermodynamics and<br>Thermophysical Properties of<br>Fluids   |
| Dr. Adel Al-Ajmi<br>Associate Professor<br>ajmi@squ.edu.om                 | 2559      | PhD (Sweden), 06          | Petroleum Rock Mechanics   |
| Dr. Alaa Al-Muhtaseb<br>Associate Professor<br>muhtaseb@squ.edu.om         | 1321      | PhD (UK), 04              | Biofuels, Bioenergy,<br>Sustainable energy, Biomass<br>Utilisation, Catalysis,<br>Wastewater Treatment   |
| <b>Dr. Khashayar Nasrifar</b> Associate Professor Nasrifar@squ.edu.om      | 2560      | PhD (Iran), 01            | Fluid Phase Equilibria and Gas<br>Hydrate Engineering  |
| Dr. Ashish M Gujarathi<br>Associate Professor<br>ashishg@squ.edu.om        | 1320      | PhD (India), 10           | Process modelling and<br>Optimisation, Artificial<br>intelligence, Machine learning  |
| <b>Dr. Belal Abu Tarboush</b> Assistant Professor belal@squ.edu.om         | 1317      | PhD (Canada), 14          | Material synthesis and applications and Membrane separation.   |
| <b>Dr. Ghulam Murshid</b> Associate Professor murshid@squ.edu.om           | 2546      | PhD (Malaysia) 12         | Synthesis of Green Solvents for CO2 capture and Utilization.   |
| <b>Dr. Hamoud Al-Hadrami</b> Associate Professor <u>hadrami@squ.edu.om</u> | 2527      | PhD (USA), 00             | Drilling Engineering, Wellbore stability, Formation damage, Geological modelling   |
| <b>Dr. Mohammed Al-Abri</b> Associate Professor alabri@squ.edu.om          | 1364      | PhD (UK), 07              | Desalination & Desali |

| Dr. Muhammad Abdul Qyyum<br>Assistant Professor<br>m.qyyum@squ.edu.om  | 2517 | PhD (South<br>Korea), 20 | Process Design, Simulation,<br>and Analysis (i.e., TEA, LCA);<br>Green Hydrogen Economy,<br>Decarbonization; LNG value<br>chain; Integrated Energy<br>Systems  |
|--|------|--------------------------|--|
| <b>Dr. Tarek Ganat</b> Associate Professor t.ganat@squ.edu.om          | 1319 | PhD (Malysia), 16        | Petroleum Engineering, Enhanced oil recovery, Treatment of oilfield produced water, Production engineering (design and optimization), Reservoir engineering studies, Formation damage, and Nanotechnology. |
| Dr. Alireza Hasan Kazemi<br>Assistant Professor<br>a.kazemi@squ.edu.om | 2560 | PhD (UK), 12             | Petroleum Engineering,<br>Reservoir modelling and<br>Simulation, Numerical<br>modelling  |

To obtain a Bachelor Degree in Petroleum and Natural Gas Engineering or Chemical and Process Engineering at the Department of Petroleum and Chemical Engineering, a student must successfully complete 136 credit hours that include university requirements, university electives, college requirements, college electives, major requirements, department requirements and major electives.

The Department requirements and major requirements needed for the fulfillment of the PNGE and CHPE programs are listed below:

#### LIST OF DEPARTMENT REQUIRED COURSES:

Engineering Thermodynamics, Fluid Flow, Heat Transfer, Numerical Methods, Statistics for Engineers, Electrical Engineering Fundamentals, Engineering Economy, Professional Practice and Management for PCE.

#### LIST OF PETROLEUM & NATURAL GAS ENGINEERING REQUIRED COURSES

Basic Mechanics, Mechanics of Materials, Chemistry for Petroleum Engineering, Introduction to Petroleum and Natural Gas Engineering, Introduction to Geology I, Rock and Fluid Properties, Petroleum Geology for Engineers, Drilling Technology, Drilling Technology Lab, General Geophysics, Reservoir Engineering, Health, Safety and Environment (HSE), Formation Evaluation, Well Testing, Reservoir Simulation, Production Engineering, Project I, Secondary and Enhanced Oil Recovery, Field Processing of Natural Gas and Project II. In addition, the students select 2 technical electives from the list of major electives provided in the degree plan.

#### LIST OF CHEMICAL & PROCESS ENGINEERING REQUIRED COURSES

General Chemistry II, Organic Chemistry for Engineering, Materials Engineering, Principles of Chemical Processes, Introduction to Chemical and Instrumental Analysis, Chemical Engineering Thermodynamics, Computer Aided Design, Unit Operations I & II, Chemical Engineering Lab I, II and III, Process Heat Transfer, Chemical Reaction Engineering, Chemical Process Control, Chemical Process Safety, Project I & II, Plant and Process Design. In addition, the students select 3 technical electives from the list of major electives provided in the degree plan.

The Petroleum and Natural Gas engineering graduates are qualified to serve in the petroleum engineering facets of drilling, well logging, reservoir, production and gas processing. The Chemical and Process engineer graduates on the other hand can serve in a diverse range of chemical and petrochemical industries.

The job market for an SQU Petroleum and Natural Gas Engineering, and Chemical and Process Engineering graduate is vast. A graduate can work in the public or private sector. Prospective employers in Oman include: Ministries, Municipalities, PDO, Oman LNG, Petroleum Refineries, Oil companies (Schlumberger, Halliburton, British Petroleum, Shell, etc...), Chemical, Petrochemical, Food Companies, Desalination Plants, Power Generation Plants, and many Consulting companies. Several students each year also pursue graduate degrees from the reputed universities across the globe.

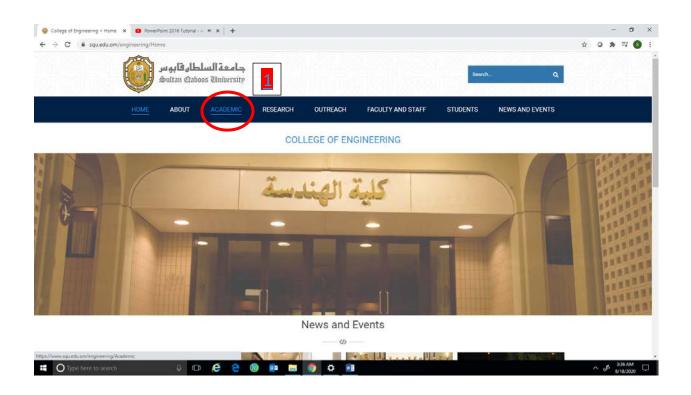
For full details of courses offered in the department, see the enclosed degree plans in the Appendix.

For information about the department, faculty members and course descriptions visit the department website at: <a href="https://www.squ.edu.om/engineering/About/Departments/Petroleum-and-Chemical-Engineering">https://www.squ.edu.om/engineering/About/Departments/Petroleum-and-Chemical-Engineering</a>

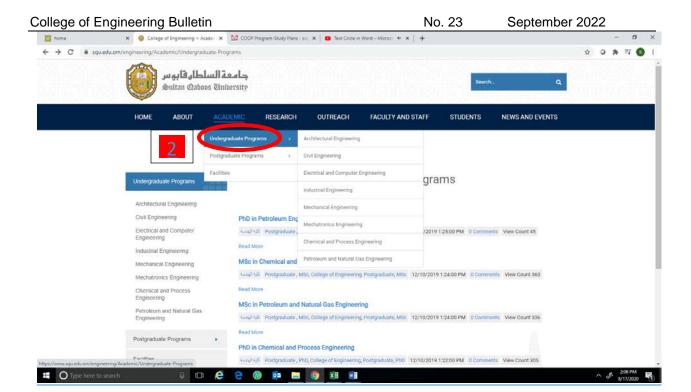
## **APPENDIX**

## **DEGREE AND STUDY PLANS**

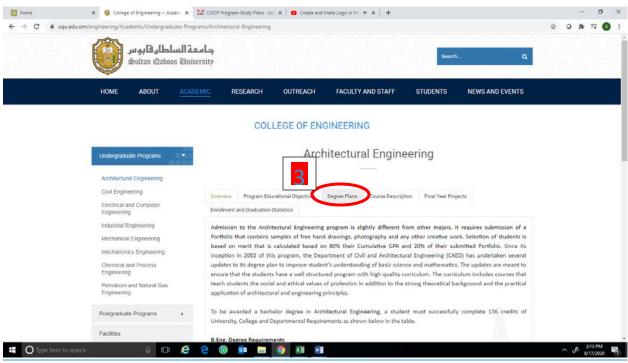
To access the Degree plan, please follow the steps:



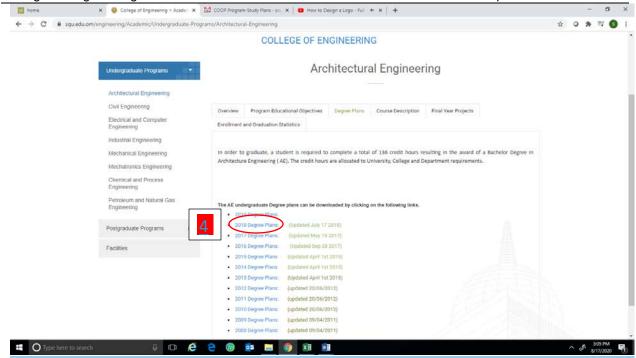
1. Open College of Engineering Webpage: <a href="www.squ.edu.om/engineering">www.squ.edu.om/engineering</a>. Then click on ACADEMIC



#### 2. Choose UNDERGRADUATE. Choose your program



3 Choose DEGREE PLAN



4. Choose the preferred YEAR of Degree Plan

<sup>\*</sup>or email us at adus.engr@squ.edu.om to provide you with the degree plans.

No. 23

## 3.7 APPLICATION FORMS FOR:

## 1. SPECIALIZATION OR ADMISSION TO ENGINEERING PROGRAMS AND CHANGE OF PROGRAM

The selection for specialization will be based on the cumulative GPA after every semester.

ADUS normally calls for specialization application every end of the semester. An electronic form (a unique hyperlink) will be sent to the students to register online. This form can be used to apply for NEW or CHANGE of specialization

More details about the specialization requirements and guidelines can be found in the following link: https://www.squ.edu.om/engineering/Students/Specialization-Requirements.

#### 2. GRADE APPEAL



#### Sultan Qaboos University College of Engineering Grade Appeal Form



#### A. Grade Appeal Information and Procedure:

#### General Information of SQU Academic Regulations for Grade Appeal:

- 1- Students have the right to appeal against course grade within 30 days from the official announcement of the results.
- 2- Student shall discuss his/her grade first with the Instructor concerned. If the Instructor rejects to review the grade, the student shall have the right to appeal using this form, following the procedure shown below.
- 3- Students should understand that the appealed grade might change to a lower or a higher grade or remain unchanged.

#### Grade Appeal Procedure:

- 1- Student to fill out Sections B, C, and D of this form. Please print out both pages and sign the form.
- 2- Student to submit the signed form to the Assistant Dean for Undergraduate Studies (ADUS), Room # 2020.
- 3- ADUS shall forward the appeal form to the concerned Head of Department (HoD).
- 4- The Head of the Department shall form an Ad-hoc Committee to consider the appeal.
- 5- The Instructor of the course shall be one of the members of the committee.
- 6- The Instructor shall make the relevant material available to the Ad-hoc committee.
- 7- The committee shall report its recommendations to the Head of the Department in writing using this form.
- 8- Based on the report of the Ad-hoc committee, the Head of the Department shall make a decision on the appeal.
- 9- The decision of the Head of the Department shall be forwarded to the Dean through ADUS for approval.
- 10- Head of the Department shall inform the student about the final decision of the appeal.
- 11- Student can appeal to the Vice Chancellor (VC) against the College's decision.

| Student Name:                    |               | ID/Cohort:   |  |
|----------------------------------|---------------|--------------|--|
| Cumulative GPA:                  | Semester GPA: | Load Status: |  |
| C. Course Information: (stud     | ent to fill)  |              |  |
| Semester/year:                   |               |              |  |
| Course Title:                    |               |              |  |
| Course Code:                     | Section:      |              |  |
| Marks before Final Exam:         | Current Gr    | ade Letter:  |  |
| Instructor:                      |               |              |  |
|                                  |               |              |  |
|                                  |               |              |  |
| Student Signature:               |               | Date:        |  |
| ✓For ADUS Office use only: (St.) |               |              |  |
| Student Signature:<br><b>✓</b>   |               |              |  |

| S          | Names:   |                          |                              | Signature: () | for the given decision |
|------------|--|--------------------------|------------------------------|---------------|------------------------|
| 1.         |  |                          |                              |               |                        |
| 2.         |  |                          |                              |               |                        |
| ۷.         |  |                          |                              |               |                        |
| 3.         |  |                          |                              |               |                        |
| F.         | Committee Decision: (Ad  | l-Hoc Committee to fill) |                              |               |                        |
|            |  |                          |                              |               |                        |
|            |  |                          |                              |               |                        |
| _          |  |                          |                              |               |                        |
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|            |  |                          |                              |               |                        |
| -          |  |                          |                              |               |                        |
|            |  |                          |                              |               |                        |
|            |  |                          |                              |               |                        |
|            |  |                          |                              |               |                        |
|            |  |                          |                              |               |                        |
| - C        | Student Final Crade Aft  | or Committee Deci        | sion: (UoD to SII)           |               |                        |
|            | Student Final Grade Afte   |                          |                              |               |                        |
| The        | e final appealed grade is:   | er Committee Decis       | sion: (HoD to fill) Raised □ | Un            | changed                |
| The        |  |                          |                              | Un            | changed                |
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## 3.8 قواعد عامة لاعتماد أعذار غياب الطلبة

المعطيات: مع أن النظام الأكاديمي للدراسات الجامعية الأولى بجامعة السلطان قابوس (الطبعة الرابعة، 2015) (ب6، ج3-2، ج10-5) والنظام الأكاديمي للدراسات العليا (الطبعة الأولى، 2008: 3.2.9) يتضمن كل منهما قواعد الالتزام بحضور المحاضرات والامتحانات، إلا أن الهدف من هذه القواعد الإضافية هو أن تحقق التكامل مع تلك الموجودة حالياً في النظام الأكاديمي للدراسات الجامعية الأولى والدراسات العليا من أجل أن توفر مجموعة متكاملة وموحدة من القواعد ليتسنى لأعضاء هيئة التدريس والطلبة في جميع الكليات العمل مها.

# (للإضافة إلى "ب6. الالتزام بالحضور" في كتاب النظام الأكاديمي للدراسات الجامعية و"3.2.9 الحضور" في كتاب النظام الأكاديمي للدراسات العليا)

• يمنح العذر للغياب لجميع الطلبة نظرا لما يلي:

أ. الغياب بسبب المرض على أن يكون موثقا ومعتمدا من الجهات الصحية حسب الأنظمة المتبعة

ب. وفاة أحد الأقارب من الدرجة الأولى (الوالدين أو الأخ أو الأخت أو الزوج أو الزوجة أو الأبناء)، على أن يتم تقديم ما يثبت ذلك رسميا.

ج. الغياب للمشاركة بالأنشطة اللاصفية، على أن تكون معتمدة وموافق عليها من الجهات المختصة بالجامعة.

د. الغياب بسبب أي ظروف خاصة أخرى كأداء فريضة الحج، إجازة الوضع، أو مرافقة مريض من الأقارب من الدرجة الأولى للعلاج...الخ، على أن تكون مدعمة بالوثائق اللازمة كأختام الجوازات أو أية وثائق رسمية ذات علاقة.

- يجب مراعاة الأطر العامة التالية في اعتماد أعذار غياب الطلبة:
- 1. الطالب مسؤول مسؤولية تامة عن دراسة المحتوى الدراسي الذي فاته خلال فترة الغياب.
- 2. الطالب هو المسؤول عن تقديم الوثائق الرسمية المطلوبة خلال المدد المقررة لاعتماد العذر قبل النظر في اتخاذ القرار بشأن اعتماد عذر الغياب.
- 3. يجب تسليم النسخة الأصلية من أعذار الغياب إلى مدرسي المقررات. إذا تكون لدى مدرس المقرر شكوك حول صحة أو مصداقية الوثائق المقدمة، فيجب أن ترسل الوثائق إلى مساعد العميد للدراسات الجامعية الأولى/مدير مركز الدراسات التحضيرية للتثبت من مصداقية الوثائق.
- 4. يتم احتساب الغياب بدون عذر ضمن النسب المقررة في منح الطالب إنذارا بالغياب أو الحصول على تقدير (رسوب بسبب الغياب) المنصوص عليها في النظام الأكاديمي للدراسات الجامعية الأولى والنظام الأكاديمي للدراسات العليا، ويجب أن توثق جميع حالات الغياب بعذر وبدون عذر من قبل المدرس في سجل الغياب.

5. إذا صادف وجود امتحان فصلي أو امتحان قصير أو موعد لتسليم نشاط أو واجب أو عرض مرئي خلال فترة العذر المعتمد فإنه يحق لمدرس المقرر أو مجلس القسم أو لجنة الامتحانات بالكلية (حسب ما يقتضيه الوضع) إيجاد بدائل تقييم الطالب من بين الخيارات التالية:

## أ. الامتحانات وما شابهها:

- a. الجلوس لامتحان تعويضي في المحتوى على أن يكون الامتحان التعويضي بنفس صيغ الامتحان الفائت أو،
  - b. تعويض الامتحان باعتماد نتيجة عنصر مشابه من نفس الفئة في التقييم العام.
- ب. للمكونات الأخرى للمقررات، يمنح الطالب تمديدا في فترات التسليم، مع مراعاة عدم تجاوز الفترة المحددة لتسليم التقديرات.
- 6. إذا تعدّت مدة المرض أو الترقيد في المستشفى 20 يوما (عمل وغير عمل) متواصلة أو متقطعة في فصلي الخريف والربيع أو في جزء من البرنامج السريري لكلية الطب، أو 10 أيام في فصل الصيف، فإنه يجب إرشاد الطالب نحو تأجيل ذلك الفصل لأسباب صحية للطلبة في غير البرنامج السريري لكلية الطب، أما طلبة البرنامج السريري فإن التأجيل يعتبر ملزما وليس اختياريا.
- 7. تقديم أية وثائق غير حقيقية أو مزورة يعتبر مخالفة للسلوك الأكاديمي وسيتم التعامل معه وفق الأنظمة المعمول بها في الجامعة.

## أ. الغياب بسبب المرض:

- 1. ثقبل الإجازات المرضية الصادرة من المستشفى الجامعي أو المستشفيات الحكومية الأخرى أو المراكز والمجمعات الصحية والمستشفيات الخاصة فإنها تقبل فقط في حال اعتمادها من الجهات المختصة المحددة من قبل وزارة الصحة.
- 2. الوثائق التي تنص على أنه تم معاينة الطالب من قبل الطبيب أو أنه قام بزيارة المركز الصحي أو المستشفى فقط، لا يُعتد بها كإجازات أو أعذار مرضية مقبولة.
- 3. لكي يتم النظر في اعتماد الإجازة المرضية، يجب تسليم النسخة الأصلية الصادرة من المستشفى الحكومي أو المركز الصحي الحكومي إلى مدرسي المقررات خلال يومي تدريس (محاضرتين/لقاءين) للمقرر من تاريخ نهاية فترة الإجازة المرضية. إذا تكون لدى مدرس المقرر شكوك حول صحة أو مصداقية الوثائق المقدمة، فيجب أن ترسل الوثائق إلى مساعد العميد للدراسات الجامعية الأولى/مدير مركز الدراسات التحضيرية للتثبت من مصداقية الوثائق.
- 4. في حالات الترقيد في المستشفى لمدة تقل عن اسبو عين، يجب تسليم العذر الطبي إلى مدرسي المقررات خلال لقاءين أو اجتماعين للمقرر من تاريخ الخروج من المستشفى. إذا تكون لدى مدرس المقرر

شكوك حول صحة أو مصداقية الوثائق المقدمة، فيجب أن ترسل الوثائق إلى مساعد العميد للدر اسات الجامعية الأولى/مدير مركز الدر اسات التحضيرية للتثبت من مصداقية الوثائق.

- 5. في حالات الترقيد في المستشفى لمدة اسبو عين أو أكثر، يجب تسليم العذر الطبي إلى مدرسي المقررات خلال اسبو عين من بدء الترقيد في المستشفى. إذا تكون لدى مدرس المقرر شكوك حول صحة أو مصداقية الوثائق المقدمة، فيجب أن ترسل الوثائق إلى مساعد العميد للدراسات الجامعية الأولى/مدير مركز الدراسات التحضيرية للتثبت من مصداقية الوثائق.
- 6. بالنسبة للمواعيد الطبية الصادرة من العيادات التخصصية في المستشفيات الحكومية أو الخاصة، يتوجب على الطالب إعلام مدرسي المقررات بها مسبقا قبل الغياب وذلك بتقديم وثيقة الموعد الرسمية، كما يجب على الطالب تقديم ما يثبت حضوره الموعد في التاريخ المحدد.
- 7. في حالة تكرار الغياب من قبل الطالب (أكثر من مرتين في الفصل الدراسي) بسبب أعذار صحية فيتوجب على الطالب تقديم تقرير طبي إلى مدرسي المقررات عن حالته الصحية يوضح أسباب تكرار الغياب وإلا فإن الغياب المتكرر لن يعتبر غيابا بعذر مقبول. إذا تكون لدى مدرس المقرر شكوك حول صحة أو مصداقية الوثائق المقدمة، فيجب أن ترسل الوثائق إلى مساعد العميد للدراسات الجامعية الأولى/مدير مركز الدراسات التحضيرية للتثبت من مصداقية الوثائق.

ب. الغياب بسبب وفاة أحد الأقارب من الدرجة الأولى:

يقبل عذر الغياب بسبب وفاة الأقارب من الدرجة الأولى (الوالدين أو الأخ أو الأخت أو الزوج أو الزوجة أو الأبناء) شريطة إحضار وثيقة رسمية خلال مدة لا تزيد عن أربعة أيام عمل من تاريخ الوفاة تسلم لمدرسي المقررات. إذا تكون لدى مدرس المقرر شكوك حول صحة أو مصداقية الوثائق المقدمة، فيجب أن ترسل الوثائق إلى مساعد العميد للدراسات الجامعية الأولى/مدير مركز الدراسات التحضيرية للتثبت من مصداقية الوثائق.

## ج. الغياب للمشاركة بالأنشطة اللاصفية:

- 1. يمكن اعتماد الأعذار الخاصة للمشاركة في الأنشطة اللاصفية إذا تم تقديم طلب المشاركة مسبقاً.
- 2. يتطلب اعتماد الأعذار الخاصة للمشاركة في الأنشطة اللاصفية موافقة عميد شؤون الطلبة و عميد الكلية المقيد فيها الطالب.
- قبل أعذار الغياب بسبب الأنشطة اللاصفية التي يشارك فيها الطالب بترشيح من الجامعة شريطة إعلام الطالب مسبقاً لمساعد العميد للدراسات الجامعية الأولى/مدير مركز الدراسات التحضيرية للحصول Last Updated on July 6, 2022

على الموافقة من خلال رسالة رسمية تحدد نوع المشاركة ومدتها من قبل الجهة المرشحة للطالب داخل الجامعة، وفي حالة اعتمادها يقوم مساعد العميد للدراسات الجامعية الأولى/مدير مركز الدراسات التحضيرية بإعلام رؤساء الأقسام ومدرسي المقررات الخاصة بالطالب،

- 4. في حالة كون الجهة المرشحة للطالب من خارج الجامعة، على الطالب إحضار ما يثبت موافقة عمادة شؤون الطلبة على المشاركة وتسليم ذلك لمساعد العميد للدراسات الجامعية الأولى/مدير مركز الدراسات التحضيرية مسبقاً قبل الغياب، وفي حالة اعتمادها يقوم مساعد العميد/مدير مركز الدراسات التحضيرية بإعلام رؤساء الأقسام ومدرسي المقررات الخاصة بالطالب.
- 5. يحق لمساعد العميد للدر اسات الجامعية الأولى/مدير مركز الدر اسات التحضيرية بالتشاور مع المشرف الأكاديمي للطالب و / أو مدرسي المقررات الخاصة بالطالب عدم الموافقة على ترشيح الطالب لأي نشاط لاصفي داخل أو خارج السلطنة في حالة تدني مستوى الأداء الأكاديمي للطالب أو في حالة عدم موافقة الكلية على طبيعة المشاركة.

# د. الغياب بسبب ظروف استثنائية أخرى كالحج والوضع ومرافقة مريض من الأقارب من الدرجة الأولى للعلاج إلخ.

الظروف القاهرة والحالات الاستثنائية (مثل: أداء فريضة الحج، مرافقة مريض للعلاج...الخ) التي تتسبب بغياب الطالب يتم التعامل معها كل على حدة حسب الحالة والظروف المصاحبة لها، ويترك قرار اعتماد العذر لتقدير مساعد العميد للدراسات الجامعية الأولى/مدير مركز الدراسات التحضيرية بالتشاور مع مدرسي المقررات. وعلى أن يتم الأخذ بالمعايير التالية لإجازتي الحج والوضع:

الحج: يمكن للطالب التقدم بطلب إجازة الحج في مدة لا تقل عن شهر قبل موعد السفر إلى الحج، ويمكنه الحصول على إجازة الحج لمرة واحدة فقط خلال فترة دراسته في الجامعة. يجب أن لا تتجاوز إجازة الحج 10 أيام عمل، وعلى الطلبة الممنوحين إجازة للحج إبلاغ مدرسي مقرراتهم بالإجازة الممنوحة، كما عليهم تقديم الوثائق التي تثبت أدائهم لفريضة الحج حسب الأنظمة المتبعة في مدة لا تزيد عن أسبوع من تاريخ متابعة الدراسة. لا تقبل أعذار الغياب لأداء فريضة الحج أثناء الامتحانات النهائية.

الوضع: يمكن منح الطالبات التي يحين موعد وضعهن للمواليد إجازة لمدة أسبوعين من تاريخ الوضع، مع نصحهن بتأجيل الفصل الدراسي إن أمكن. وإذا كان موعد الوضع يوافق نهاية الفصل الدراسي وتؤثر في الامتحانات النهائية، فإن الطالبة تمنح تقدير غير مكتمل في جميع المقررات لذلك الفصل على أن يتم تعديلها حسب الأنظمة المتبعة، وعلى الطالبة تقديم الوثائق الثبوتية للولادة في مدة لا تتجاوز أسبوعين من تاريخ الولادة.

# ه. غياب الطالب في الامتحانات النهائية (انظر النظام الأكاديمي للدراسات الجامعية الأولى والنظام الأكاديمي للدراسات العليا):

1. يتوجب على الطلبة حضور الامتحانات النهائية في أوقاتها المخصصة كما هو وارد في جدول الامتحانات النهائية. إن الغياب عن الامتحان النهائي لأسباب صحية أو عائلية لا يسمح به في الأوضاع العادية، ولا يقبل تقديم تقرير طبي لتبرير الغياب إلا إذا كان هناك إثبات بالإقامة في المستشفى أو إثبات لحالة مرضية شديدة يتم إعلام مساعد العميد للدراسات الجامعية الأولى/مدير مركز الدراسات التحضيرية عنها خلال يومي عمل من تاريخ دخول المستشفى.

- College of Engineering BulletinNo. 23September 20222. يمكن قبول وفاة أحد الأقارب من الدرجة الأولى كالوالدين أو الأخوة أو الأخوات أو الزوج أو الزوجة أو الأبناء كعذر مبرر للغياب عن الامتحانات النهائية، وفي هذه الحالة يتوجب تقديم وثيقة إثبات رسمية إلى مساعد العميد للدراسات الجامعية الأولى/مدير مركز الدراسات التحضيرية والتي تثبت أن الوفاة قد وقعت خلال مدة لا تزيد عن أربعة أيام من بداية الامتحان النهائي.
- يتخذ مدرس المقرر المعنى القرار بشأن حالات الغياب المذكورة أعلاه و يتضمن ذلك منح الطالب تقدير غير مكتمل أو رسوب مع الامتيازات التكميلية حسب ما هو منصوص عليه في النظام الأكاديمي للدراسات الجامعية الأولى والنظام الأكاديمي للدراسات العليا وذلك من خلال لجنة الامتحانات في القسم أو الكلية أو المركز المعنى.

## 3.8 A General Guidelines for Approving Student Absence

Rationale: Although student attendance requirements are covered in the Sultan Qaboos University Undergraduate Academic Regulations (Fourth Edition, 2015: B6, C3-3, C10-5) and the Postgraduate Academic Regulations (First Edition, 2008: 3.2.9) the proposed additional guidelines are intended to complement the existing ones in the Regulations to provide clear unified rules and guidelines to be followed by instructors and students in all colleges.

#### To be added to:

Section"B6. Attendance Policy" of Undergraduate Academic Regulations Section "3.2.9. Attendance" of the Postgraduate Academic Regulations

Excuse of absence is granted to all students due to:

- A: Illness as certified by a valid medical certificate.
- B: Bereavement of a first-degree relative (namely: parent, brother, sister, spouse or child) as certified by documented official evidence.
- C: Involvement in extra-curricular activities, documented and approved by the University authorities.
- D: Any other special circumstance such as Haj, birth, accompanying a first-degree relative for medical treatment etc. as certified by stamped passport copies or other official documents.

The following general guidelines shall be observed in approving student absence:

- 1. The student is responsible for self-study of any missed course(s) content during their absence.
- 2. It is the student's responsibility to submit any required official document(s) within the specified time before a decision on being granted an excuse for absence is made.
- 3. The original official documents of the excuse for absence should be submitted to the course instructor(s). In the event of the instructor doubts the validity of the provided document, it should be forwarded to the Assistant Dean for Undergraduate Studies/Director of the Center for Preparatory Studies for verification.
- 4. The instructor shall record all absences but excused absences will not be counted towards the percentage for issuing the absentee warning or absentee withdrawal notice (FW) (refer to Undergraduate and Postgraduate Academic Regulations).
- 5. If an assessment component such as a test or a quiz or an assignment submission or a presentation coincides with an *excused student absence* period, then the instructor or the departmental Board or College Examination Committee (as applicable) has the right to identify one of the following means to compensate for the missed components.
  - a. For examination type components this includes:
    - i. Taking a make-up examination in the component provided that the makeup examination must be of the same format, or
    - ii. Compensate the value of an equivalent component in overall assessment, or
  - b. For other components give an extension to the deadline for submission or delivery of it, but not beyond the grade submission period.

- 6. If the period of absence due to illness and/or hospitalization exceeds 20 working and non-working days (continuous or intermittent) in the fall or spring semester or one block in the MD program of College of Medicine and Health Sciences, or 10 working and non-working days in the summer semester, the student should be advised to postpone the semester for health reasons. Postponement must be compulsory for MD program in these situations.
- 7. The presentation of forged certificates is considered Academic Misconduct and will be dealt with according to University Bylaws.

#### A: Absence due to illness

- 1. Sick leaves issued by SQU Hospital and any governmental hospital or health center are accepted, while those issued by private hospitals or clinics are *only accepted after ratification by governmental entity affiliated to the Ministry of Health*.
- 2. A document that simply states that a medical doctor had seen a student or has attended a clinic is not considered valid for granting an excuse for absence.
- 3. For absence due to illness to be excused, the original, official sick leave document must be presented to the course instructor(s) within two class meeting/contact days from the end of the leave period. In the event of the instructor doubts the validity of the provided document, it should be forwarded to the Assistant Dean for Undergraduate Studies/Director of the Center for Preparatory Studies for verification.
- 4. In case of hospitalization for a period of less than two weeks, the sick leave document must be presented to the course instructor(s) within two class meeting/contact days from the date of discharge from the hospital. In the event of the instructor doubts the validity of the provided document, it should be forwarded to the Assistant Dean for Undergraduate Studies/Director of the Center for Preparatory Studies for verification.
- 5. In case of hospitalization for a period of two weeks or more, the sick leave document must be presented to the course instructor(s) within two weeks from the date of admission to the hospital. In the event of the instructor doubts the validity of the provided document, it should be forwarded to the Assistant Dean for Undergraduate Studies/Director of the Center for Preparatory Studies for verification.
- 6. For medical appointments issued by government or private health care facilities, the student must inform the course instructor(s) in advance by presenting the official appointment slip. The student must also provide a proof of attendance of the appointment date.
- 7. In case of repeated absence (more than two per semester) for compelling health reasons, the student must submit a medical report to the course instructor(s). In the event of the instructor doubts the validity of the provided document, it should be forwarded to the Assistant Dean for Undergraduate Studies/Director of the Center for Preparatory Studies for verification. Failing to do so will result in considering such frequent absences as unexcused.

#### B: Absence due to bereavement of first – degree relative

Absence due to bereavement of first – degree relative is excused when an official document to that effect is submitted to the course instructor(s) within 4 working days from the bereavement. In the event of the instructor doubts the validity of the provided document, it should be forwarded to the Assistant Dean for Undergraduate Studies/Director of the Center for Preparatory Studies for verification.

#### C: Absence for extra-curricular activities

- 1. Absence for extra-curricular activities will only be considered as excused if it is requested *in advance* of the proposed absence.
- 2. Approval for extra-curricular activities requires the approval of *both* the Dean of Student Affairs and the Dean of the student's college.
- 3. For a student who is nominated by a unit *within the university* to participate requires that the student:
  - a. obtains an official letter from the nominating unit specifying the type of activity and its duration.
  - b. submits it in advance to the Assistant Dean for Undergraduate Studies/Director of the Center for Preparatory Studies for processing.
  - c. If the participation of the student is approved (see 2 above), the Assistant Dean for Undergraduate Studies/Director of the Center for Preparatory Studies shall notify the relevant course instructors and HODs.
- 2. For a nomination that comes from *units outside the university*, the student is required to present an official document stating the approval of the Deanship of Students Affairs to participate in such activity to the Assistant Deans for Undergraduate Studies/Director of the Center for Preparatory Studies *prior to his / her absence*.
  - a. If the participation of the student is approved, the Assistant Dean/Director of the Center for Preparatory Studies shall notify the relevant course instructors and HODs.
- 3. The Assistant Dean for Undergraduate Studies/Director of the Center for Preparatory Studies, in consultation with the student's academic advisor and/or course instructors, has the right not to approve the student's nomination to participate in any activity inside or outside the Sultanate due to poor academic record or any other reason at the discretion of the college.

# D: Absence due to any other special circumstance such as Haj, birth, accompanying a first-relative degree patient for medical treatment etc.

These are to be treated on a case-by-case basis and left to the discretion of the Assistant Dean for Undergraduate Studies/Director of the Center for Preparatory Studies in consultation with the course instructor to process an excuse of absence.

#### For Haj and Birth the following should be observed:

**Haj**: A student shall apply for a Haj leave at least a month in advance, and can be awarded the approval once only during the period of study in the University. The Haj leave shall not exceed 10 working days. Students granted Haj leave must inform their instructors with the period of the leave. Pilgrimage-students should provide the official documents of their attendance to rite of Haj within one week of resuming classes. No approval for absence during the final examinations for the Haj shall be granted.

**Birth**: Female students due for delivery can be awarded a leave of 2 weeks from classes, and should be advised to postpone the semester in which they are due to deliver. If the delivery is at the end of the semester and affects the final exams, a student shall be granted an incomplete grade, and regular academic regulations for incomplete grades are to be applied. The student should provide the birth documents within two weeks after delivery.

# Absence in final examinations (Refer to Undergraduate and Postgraduate Academic Regulations)

- 4. Students are required to attend scheduled final examinations and absenteeism for health or family matters is not normally excused. Presentation of a sick note cannot be accepted as a reason for absenteeism for an examination unless there was hospitalization or evidence of extreme illness. Such evidence is to be submitted to the Assistant Dean for Undergraduate Studies/Director of the Center for Preparatory Studies within two working days from admission to hospital.
- 5. Bereavement of a first-degree relative are accepted as a reason for absenteeism subject to submission of verified official documents to the Assistant Dean for Undergraduate Studies/Director of the Center for Preparatory Studies and provided that the bereavement took place not more than 4 working days before the examination.
- 6. Decisions in cases of approved absenteeism are made by the instructor responsible for the course, including the awarding of grades of "Incomplete" or "Failed Supplementary Privilege", as defined in the Undergraduate Academic Regulations of the University, through the relevant Departmental, College or Centre examination committee.