University Catalogue

Undergraduate Vocational Programmes

2024-2025
(Aug 2024)

Message from the Chancellor

Dear Students,

A warm welcome to all of you who have walked through the portals of Emirates Aviation University as a new student or a continuing one.

The year ahead promises to be an exciting one for you as a scholar, and as a part of the Emirates success story and the exciting developments in Dubai as well as the region.

The University has many new initiatives on the ‘whiteboard’, designed to make the courses more interesting and interactive. The icing on the cake of course is that the University is licensed and the programmes are accredited by the Ministry of Education in the UAE.

Both our students and our teams of academics deserve a huge pat on the back for being named the Middle East’s Best Aviation Training Academy by ITP Business Publishing.

Emirates and Dubai are symbols of supreme success against all odds and are fast becoming global icons. The extraordinary changes wrought by the travel industry in Dubai opens up a world of career opportunities for you, which is why the University has carefully designed its aviation programmes to equip you with the necessary academic underpinning and management skills.

We hope the success of Emirates and Dubai will rub off on our student community and I look forward to hearing of your many triumphs in the coming years.

All the very best.

H.H. Sheikh Ahmed Bin Saeed Al Maktoum
Chancellor
Emirates Aviation University

Message from the Vice-Chancellor

It is with great pleasure that I welcome you to Emirates Aviation University (EAU). The University has made significant progress over the past years and we are very proud of our mission of excellence and strong commitment to the success of our students. Our faculty and staff are well-qualified, experienced, and dedicated to help you achieve your academic goals. Your education at EAU is an investment that will provide a lifetime of value and enable you to fully develop your potential.

All vocational programmes offered by the University have been prepared to ensure your technological competence and enhance your generic skills that are highly demanded in today's job market. In addition, the University offers many extracurricular opportunities to promote your continued growth and development.

This Catalogue will provide you valuable information about your study programme, academic and financial regulations, student affairs, and various services offered by the University. I encourage you to read this Catalogue carefully and keep it available as a ready reference. If you have any questions, do not hesitate to contact your academic advisor for help and advice whenever you need it. I also urge you to provide us with your feedback about the vocational programmes and the University life so that we may continually improve the quality of education and services offered by the University.

I hope you will enjoy your time at the University and take full advantage of the opportunities offered by the University for your personal, intellectual, and professional growth. On our side, you will always find us ready to serve your needs in any way we can.

Professor Dr Ahmad Al Ali
Vice-Chancellor
Emirates Aviation University

Table of Contents

1. Academic Calendar 2024-2025

EAU Academic Calendar 2024 – 2025

Fall Semester 2024

September – December 2024

Day	Date	Event
Monday - Friday	July 1st - August 30th 2024	Registration Period (returning students)
Thursday & Friday	August 29th - 30rd, 2024	Induction for new students – 2 days
Monday	September 2nd, 2024	First day of classes
Monday - Friday	September 2nd - 6th, 2024	Add and drop period
Friday	September 6th, 2024	Deadline for accepting change of major
Friday	September 13th, 2024	Deadline for suspending registration Deadline for accepting credit transfer
Friday	November 8th, 2024	Deadline for withdrawing from a course (W)
Saturday-Monday	December 14th - 23rd, 2024	Examination Period
Tuesday - Sunday	December 24th, 2024 - January 12th, 2025	Winter break
Thursday	January 2nd, 2025	Announcement of final examination results
Monday - Tuesday	January 6th - 7th, 2025	Re-sit exams

Spring Semester 2025

January – May 2025

Day	Date	Event
Thursday - Friday	January 2nd - 10th, 2025	Registration Period (returning students)
Thursday & Friday	January 9th - 10th, 2025	Induction for new students – 2 days
Monday	January 13th, 2025	First day of classes
Monday - Friday	January 13th - 17th, 2025	Add and Drop Period
Friday	January 17th, 2025	Deadline for accepting change of major
Friday	January 31st, 2025	Deadline for suspending registration Deadline for accepting credit transfer
Monday - Friday	March 31st - April 4th, 2025	Mid-semester break
Monday	April 14th, 2025	Deadline for withdrawing from a course (W)
Saturday-Saturday	May 3rd - 10th, 2025	Examination Period
Monday	May 12th, 2025	Summer break
Friday	May 16th, 2025	Announcement of final examination results
Monday - Tuesday	May 19th - 20th, 2025	Re-sit exams

Summer Semester 2025

June – July 2025

Day	Date	Event
Friday - Friday	May 16th - 30th, 2025	Registration period (returning students)
Monday	June 2nd, 2025	First day of classes
Monday - Thursday	June 2nd - 5th, 2025	Add and drop period
Friday	June 13th, 2025	Deadline for withdrawing from a course (W)
Thursday - Friday	July 3rd - 4th, 2025	Final examinations (UG)
Friday	July 11th, 2025	Announcement of final examination results

2. University Profile

Emirates Aviation University (EAU) was established in 1991 by the Department of Civil Aviation, initially to provide aviation-related training to private students and corporate clients. The University has since expanded and diversified and now offers an extensive range of educational opportunities designed to provide students with the best aviation-related specialisations that service both the technical and management sides of the aviation industry. In September 2001, the University was merged with Emirates to form the "academic wing" of the Emirates Group.

The University offers the following undergraduate vocational programmes:

Programme Name
Faculty of Engineering
BEng in Aerospace Technology ➢ Advanced Diploma in Aerospace Technology ➢ Diploma in Aerospace Technology
BEng (Hons.) in Aerospace Technology (Top-up)
BEng in Avionics Technology ➢ Advanced Diploma in Avionics Technology ➢ Diploma in Avionics Technology
BEng (Hons.) in Avionics Technology (Top-up)
BEng in Mechanical Engineering ➢ Advanced Diploma in Mechanical Engineering ➢ Diploma in Mechanical Engineering
BEng (Hons.) in Applied Mechanical Engineering (Top-up)
BEng (Hons.) in Aircraft Maintenance
Higher Diploma in Aircraft Maintenance Engineering
Extended Diploma in Aeronautical Engineering
Faculty of Business Management
BSc (Hons.) in Air Transport Management
BSc (Hons.) in Air Transport Management (Top Up)
BA (Hons.) in Applied Business (Top Up)
BA (Hons.) in Business Administration
BSc (Hons.) in Global Logistics and Supply Chain Management
BA (Hons) in Business with Human Resource Management
BA (Hons) in Business with Accounting and Finance
BA (Hons) in Business with Marketing
Extended Diploma in Business
Extended Diploma in Aviation Operations
Higher National Diploma in Business Management
Higher National Diploma in International Travel and Tourism Management
Faculty of Mathematics and Data Science
BSc (Hons) in Computer Science with Artificial Intelligence
BSc (Hons) in Data Science

National and International Accreditations:

The Bachelor of Engineering programmes are internationally accredited by Royal Aeronautical Society which is valid until 2028.

The University has a wide range of experienced faculty members with strong academic backgrounds as well as relevant industry experience. This balance helps to provide the ideal blended learning environment for our diverse student population to achieve to the very best of their abilities.

3. Vision, Mission, & Core Values

3.1 Vision

To be the world's leading institute of higher education in aviation and related disciplines.

3.2 Mission

Provide exceptional education in aviation and related disciplines that fosters critical thinking, creativity, and lifelong learning, while encouraging faculty research and promoting community outreach to benefit the industry, society, and the public good.

3.3 Core Values

Excellence	Achieving highest levels of quality in all we do.
Leadership	Developing the visions and strategies for a desired future and aligning and energising our people to achieve our vision.
Innovation	Creating and implementing new ideas and methods.
Collaboration	Working cooperatively with the Emirates Group and other organisations.
Responsiveness	Providing appropriate programmes and services in a proactive, flexible and timely manner.

3.4 Goals

Goal A	**Programmes and Curricula:** Align programmes with industry needs and provide professional training in collaboration with industry.
Goal B	**Student Experience and Success:** Provide exceptional learning experience, fostering research, innovation, inclusiveness, and diversity.
Goal C	**Talent Recruitment and Retention:** Foster interactive work environment which offers, ergonomic workspaces, innovation, work-life balance, diversity, inclusion, and attractive compensation and benefits.
Goal D	**International Presence:** Expand global reach by increasing programme offerings, collaborations, visibility, and alumni network.
Goal E	**Institutional Sustainability:** Achieve sustainable growth, ensuring efficient and effective resource management.

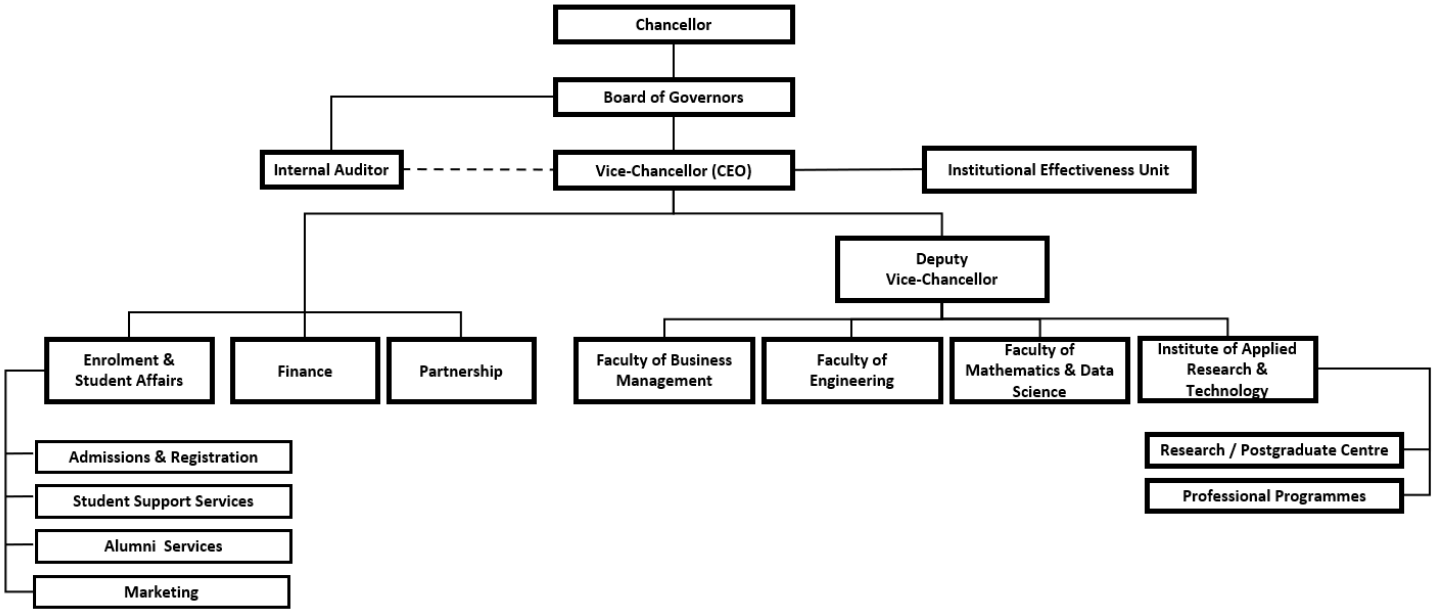
4. Licensure

Emirates Aviation University, located in Dubai, is officially licensed by the Ministry of Education of the United Arab Emirates to award degrees/qualifications in higher education. The current license is valid until 1st September 2026.

5. Organisational Chart

The EAU Organisational Chart is shown below followed by the University Administration.

EAU Organisational Chart:



5.1 List of EAU Board of Governors

The current composition of the EAU Board of Governors is as follows:

- His Highness Sheikh Ahmed Bin Saeed Al Maktoum - Chairman & Chief Executive, Emirates Airline & Group
- Professor Ahmad Al Ali – Vice Chancellor, Emirates Aviation University
- Steve Allen – CEO, dnata
- Michael Doersam - Chief Financial Officer, Emirates Group
- Ahmed Safa – Divisional Senior Vice President Engineering, Emirates Group
- Amira Al Falasi - SVP HR Group Training & Development, Emirates Group
- Oliver Grohmann- Executive Vice President, Human Resources, Emirates Group
- Rick Ward – Senior Vice President Legal, Emirates Group
- Dr Amer Sharif – Chief Executive Officer, Dubai Healthcare City Authority, Education Sector (DHCE)
- Dr David Pilsbury - Vice President, University Partnerships, Oxford International

5.2 EAU Contact Information & Location

Emirates Aviation University is located in Dubai International Academic City, Dubai, UAE. The contact number of the EAU call centre is +971 (4) 605 01 00.

6. Resources & Physical Setting

In January 2015, Emirates Aviation University relocated to its new campus in Dubai International Academic City (DIAC). The new campus was built with a population capacity of five thousand (5000) and provides enhanced facilities to improve student services.

7. Admissions

The undergraduate vocational programmes offered by Emirates Aviation University emphasise quality education and aim at producing competent and qualified graduates who can contribute to the increased demand of the widely expanding aviation industry. Applicants to the undergraduate vocational programmes are considered on the basis of their qualifications regardless of race, colour, gender, religion, disabilities, age or national origin.

The language of instruction is English and a good command of the language, both oral and written, is essential for students' success in the undergraduate academic programmes at EAU.

The EAU Admission and Registration Department is responsible for responding to admission inquiries and processing applications.

7.1 Admission Criteria

Students will be admitted to the EAU undergraduate vocational programmes according to the following criteria:

1. Admission will be granted for a specific semester. Failing to join the University in that semester will nullify the applicant's rights for admission and a new application must be submitted.
2. Candidates for admission to the first year of an EAU vocational bachelor programme will normally be expected to hold a UAE General Secondary School Certificate, or its equivalent, with 80% minimum average grade in the final year of the secondary education. Candidates for admission to an engineering programme must have also completed their secondary education in a science stream and have studied mathematics and physics in the final year of their secondary education.
3. Candidates for admission to the final year (Level 3) of an EAU vocational bachelor programme will normally be expected to hold an EAU Higher National Diploma (Advanced Diploma) covering 18 courses, or its equivalent as detailed in the relevant programme specification.
4. In addition to the above (2) and (3), candidates will be required to pass the EAU English Proficiency Test. Candidates who have achieved IELTS 6.0, or equivalent, or have completed

two successful years of academic study in English at EAU will be exempted from the need to demonstrate further English proficiency.

5. Conditionally admitted students may not take more than 12 credits hours per semester of appropriate General Education coursework.

7.1.1 Equivalent Secondary School Certificates

EAU will refer to the MOE Decree No. 322/year 2017 in relation to admitting students who have completed their secondary education in the UAE, based on the MOE System of Education or that of Abu Dhabi Education Council.

EAU recognises certificates awarded by ministries of education, private secondary schools that are recognised by their host country, international and national boards. In this regard, EAU will refer to the MOE Decrees No. 200/year 2004 and No. 133/year 2005, or any such relevant decree that supersedes or post-date these. All credentials submitted in support of an application must be officially certified.

7.1.2 English Language Proficiency Requirement

To complete the requirements for admission, the applicant must show evidence of competency in the English language as measured in terms of TOEFL or IELTS or EmSAT Achieve – English score and as given in the following table. The University will accept TOEFL, IELTS, and EmSAT Achieve - English test results with a validity of 24 months from the date of test taking.

English Proficiency Test	Minimum Required Score
TOEFL (Paper-based)	500
TOEFL (CBT)	173
TOEFL (iBT)	61
IELTS	5.0
EmSAT Achieve - English	1100

7.1.3 English Foundation Programme

Students who satisfy all the admission requirements of a programme but fail to obtain the minimum required score in TOEFL, IELTS, EmSAT Achieve – English, as specified in the above table, may be offered a place in an intensive English language foundation programme (FPIE) at the University to improve their English language skills. In such cases, students will be placed in either Level 1 or Level 2 depending on placement testing results. Level 1 students are expected to complete one semester of intensive English and progress to a second semester at Level 2. Only at the end of Level 2 will students appear for an IELTS examination. Those who will achieve the required minimum score of 5.0 or more will be admitted to the respective programme. In the unlikely event of not obtaining the required minimum score in IELTS, the student will discontinue study at EAU.

7.2 Transfer Admission Policy

Students transferring from other institutions of higher education can be admitted subject to the following conditions:

- They are transferring from a recognised and accredited institution of higher education and have successfully completed one or more semesters in that institution.
- They meet the secondary school requirements for admission at EAU.
- They meet the English language proficiency requirements of EAU.
- They submit official transcripts of their secondary school and college/university records along with syllabi and description of courses they wish to transfer. Courses taken more than five years prior to applying as a student at EAU are not transferable. Furthermore, of the total credits required to obtain a degree at EAU, a maximum of 50 percent of the required total credits can be transferred from other institutions of higher education.
- Complete and submit course equivalence application forms for the courses to be transferred.
- Pay the appropriate fees.

Transfer Credits (Course Equivalency)

A transfer applicant will receive credit for the courses s/he had completed at the previous institute of higher education provided that:

1. His/her cumulative grade point average is above 2.0 or equivalent (according to the nature of the programme in which they previously enrolled) unless transferring to a programme in a field different from the one from which the student is transferring.
2. S/he had obtained a grade of 'C' or better, or equivalent, in the courses that are considered for equivalency.
3. The courses completed at the previous institute have equivalent courses in the student's proposed programme of study at EAU. This includes the number of credit hours, contents and level of the course.
4. S/he completes the transfer application and submits all the necessary supporting documents to the Admission and Registration Department during the time frame outlined in the academic calendar.

All transfer students must complete their transfer file to ensure that the transfer credits are awarded to them during their first semester at EAU.

Decisions pertaining to credits awarded can be made only by the appropriate Faculty at EAU. The Admission and Registration Department will communicate the outcome of the evaluation to the student.

Transferred courses are not included in the calculation of the student's Cumulative Grade Point Average (CGPA).

7.3 Advanced Standing Policy

EAU does not award credit through Advanced Standing.

7.4 Recognition of Prior Learning Policy

EAU does not award credit based on Recognition of Prior Learning, for the academic programmes, as defined by Clause 6.5 of the CAA 2019 Standards.

7.5 Documents Required for Admission

1. Completed application form.
2. Official secondary school certificate or its equivalent certified by the appropriate authorities.
3. A photocopy of the applicant's passport.
4. Four recent, coloured, passport-sized photographs.
5. A TOEFL (Test of English as Foreign Language) or IELTS (International English Language Testing System) test result.

7.6 Application Procedure

Applicants who would like to join an undergraduate academic programme at EAU shall follow the procedure given below:

- Submit the completed application form along with all required documents to the Admission and Registration Department during the admission period that is specified in the academic calendar.
- Pay the appropriate fees.

8. Withdrawal & Re-Admission

8.1 Temporary Withdrawal (Suspension of Registration)

A student is permitted to suspend his/her registration provided that s/he has completed at least one semester of study at EAU. The total number of semesters for which the registration can be suspended is two (2) semesters. A student who wants to suspend his/her registration must inform the Registration Department in writing after consulting with his/her academic advisor and obtaining the approval of the Programme Co-ordinator. A student requesting to suspend his/her registration during a semester will receive a grade of W or LW, depending on the date s/he submits the request. A refund may apply as per the refund policy.

8.2 Complete Withdrawal from the Programme

a) Where a student indicates a desire to permanently withdraw from a programme, the date of withdrawal shall be taken as the date on which withdrawal is formally accepted; retrospective withdrawal dates shall not be accepted. It is the student's responsibility to notify the withdrawal by submitting the appropriate form to the Registration Department. All marks attained up to

the time of withdrawal shall stand, and the student may re-enrol for the programme in later years if appropriate (see Section 7).

b) A student may be required to withdraw where they have not fully engaged with the programme or not complied with their financial commitments. Examples (not exhaustive) of not fully engaging include: repeated non-attendance at teaching sessions and/or not taking part in (formal or informal) assessments and not responding to requests sent to explain such non-attendance.

c) Under Clause 8.2 (b), a student may submit an appeal, within ten working days of the date of the letter confirming the withdrawal, on the basis of material irregularity or if there is significant new evidence of mitigation against the student's non-engagement. The appeal must be submitted in writing to the appropriate Dean (or nominee), who must be satisfied that the conditions set out in 8.2 (b) are met. The student may be required to sign a learning agreement giving a written undertaking as to their future.

9. Student Finance Policy

9.1 Registration Fee

New student applicants are required to pay a non-refundable registration fee of AED 2,625 (including VAT 5%) along with the tuition fee, once the student applicant is accepted in the programme of study.

Payment of new registration fees will not apply to students who completed a foundation programme and were accepted in any other programme or to those students who transferred from academic to vocational/applied programmes or vice versa.

Students who withdraw from a university programme are not entitle for a registration fee refund. A student who has withdrawn from the University and reapplies to any of EAU programmes, will be liable for a new registration fee.

The Vice Chancellor may at his discretion vary the terms of the refund policy dependent on the individual circumstances.

9.1.1 Reservation Fee

To secure a place in a programme, students may be required to pay a reservation fee of AED 10,000 which will be deducted from their first fee. This fee is non-refundable.

The Vice Chancellor may at his discretion vary the terms of the refund policy dependent on the individual circumstances.

9.2 Tuition Fees

Tuition fees of the undergraduate programmes (Vocational programmes) for the academic year 2024-2025, are shown in the table below.

Tuition Fees Academic Year 2024-2025 (Amounts shown in UAE Dirham)	
Faculty of Business Management	**Tuition Fees (AED)**
BSc (Hons.) in Air Transport Management	77,175 Per year
BSc (Hons.) in Air Transport Management – Top-up	77,175 All Programme
BA (Hons.) in Applied Business - Top-up	55,125 All Programme
BA (Hons.) in Business Administration	52,500 Per year
BSc (Hons.) in Global Logistics and Supply Chain Management	52,500 Per year
BA (Hons) in Business with Human Resource Management	52,500 Per year
BA (Hons) in Business with Accounting and Finance	52,500 Per year
BA (Hons) in Business with Marketing	52,500 Per year
Extended Diploma in Business	52,500 Per year
Extended Diploma in Aviation Operations	52,500 Per year
Faculty of Engineering	**Tuition Fees (AED)**
BEng (Hons) in Aerospace Technology*	80,703 Per year
BEng (Hons) in Aerospace Technology (Top-up)	80,703 All Programme
BEng (Hons) in Avionics Technology*	80,703 Per year
BEng (Hons) in Avionics Technology (Top-up)	80,703 All Programme
BEng (Hons) in Applied Mechanical Engineering*	80,703 Per year
BEng (Hons) in Applied Mechanical Engineering (Top Up)	80,703 All Programme
BEng (Hons) in Aircraft Maintenance - Part Time	99,225 All Programme
Higher Diploma in Aircraft Maintenance Engineering	83,790 Per year
Extended Diploma in Aeronautical Engineering	52,500 Per year
Faculty of Mathematics and Data Science	**Tuition Fees (AED)**
BSc (Hons) in Computer Science with Artificial Intelligence	80,703 Per year
BSc (Hons) in Data Science	80,703 Per year

For students in the Vocational Programmes, the tuition fee per semester allows students to register for a minimum of four subjects. A supplementary tuition fee on a pro rata basis applies to those students who will be registering for more than four subjects.

* Additional fees are applicable when retaking a course or more. The additional fee is charged per credit hour whether repeating a semester or a year or enrolling for an additional course.

9.3 Service Charges

The charges for various services provided to students in the University are given in the following table:

Description	AED
Official Documents	
EAU Certificate (Re-print)	250
Certificate Amendments	250
Student ID Card (Re-print)	250
Airport Pass (for OJT Students)	60
EAU Official Transcript	150
Assignment Cover Page (Re-print)	50
Official Letter (English or Arabic)	30
Accommodation Charges *Inclusive of 5% VAT*	
Single En-Suite Room *(Monthly rate)*	2,363
Visa Charges *Inclusive of 5% VAT; excluding visa deposit – N/A*	
Admin charges	525
Visa Issuance (Students inside UAE)	2,888
Visa Issuance (Students outside UAE)	2,363
Visa Amendment (Applicable to students inside UAE)	1,050
Health Insurance	1,750
Visa Renewal (1 Year)	577
Visa Cancellation (Inside UAE)	263
Visa Cancellation (Outside UAE)	525
Visa Deposit	5,000
Others	
OJT Fee	2,000
Airport Pass	620
Re-sit Exam (per subject)	1,500
Resubmission of Assignment	1,500
Late registration fee	2,000

9.4 Payment Policy

Registration and tuition fees are due immediately upon the acceptance of the offer letter. Registration in the respective programme will only be confirmed upon receipt of payment. Tuition fees must be paid either on a full programme or on yearly basis.

Students must arrange full tuition fee payments at the time of registration in one payment. If tuition fee payments are not made after the registration deadline, students will not be considered enrolled in

the programme of study and will not be permitted to attend classes. Instalment plans will be offered if requested by students with the following approvals:

- The Finance Manager if it is up to 2 instalments per semester
- The Vice-Chancellor if it is more than 2 instalments per semester

During the course period, the University reserves the right to suspend a student from class, refuse to permit the student to take examinations or withhold a student's grades until the fees due are paid in full. After completion of any programme, official certificates, letters and other requested official documents from the University will not be issued if there are remaining fees unpaid.

Students with overdue or delinquent accounts from the previous academic year or programme (in cases of programme transfers) will not be allowed to register for the next academic year or programme unless satisfactory payment arrangements with the EAU Accounts Office are made, and approved by the Vice-Chancellor.

9.5 Mode of Payment

EAU accepts cash, card, cash deposit, bank transfer or cheque drawn only in local banks in UAE Dirhams for the payment of fees. Please take note that any charges incurred due to late payments will be added to the total amount of fees due.

Fees may be deposited or transferred directly to the following bank account:

Account Title	Emirates Aviation University
Account Number	101 200 568 1805
Bank	Emirates-NBD PJSC
Branch	Al Ithihad, Dubai, UAE
Swift Code	EBILAEAD
IBAN	AE110260001012005681805

IBAN is mandatory for all transfers made in UAE. Copy of the deposit slip or bank transfer confirmation (SWIFT or MT-103 form which can be obtained from the bank) must be submitted to the EAU Accounts Office upon remittance of fees either in person, email, by post or by fax. Bank charges and transfer fees may apply from the bank and students must ensure that the amount transferred will not be reduced with these charges.

9.6 Suspension of Registration & Withdrawal Policy

In the event that a student wishes to suspend registration or withdraw from the programme of study, s/he must submit a withdrawal form to the Registration Department. Fees will be refunded only after the withdrawal form has been submitted and the necessary approvals obtained. Fees will not be refunded to students who are suspended or expelled from the University due to disciplinary action.

Withdrawal forms can be obtained from the Registration Department and may be submitted by the student, parents or sponsor.

9.7 Refund Policy

The Vice Chancellor may at his discretion vary the terms of the refund dependent on the individual circumstances of the person involved. Any such variation will need to be supported by a written representation to the Vice Chancellor.

The Vice Chancellor's decision is final and no further appeals are permitted.

Agreed refund of tuition fees will be processed in a timely manner. Students must provide written proof that all cheques submitted have been cleared by the University. Where a student is in receipt of an EAU visa, any refund of fees paid will only be considered once proof is provided that the visa has been cancelled. Failure to do so will prevent any refund from proceeding. Registration and Reservation fee are non-refundable.

Refund of tuition fees will be processed within 30 working days from the date the refund was requested. A proof of cheque clearance must be provided for cheque payments. Refund of fees paid by credit card will be credited back to the card account.

9.7.1 Undergraduate Full-time Programmes

For Semester Programmes

- Withdrawal after registration and within week one of the semester - refund of 50% of the semester fees
- Withdrawal during week two to five of the semester - refund of 25% of the semester fees
- Withdrawal after week five of the semester - no refund.

The Vice Chancellor may at his discretion vary the terms of the refund policy dependent on the individual circumstances.

9.7.2 Undergraduate Part-time Programmes

- Withdrawal after registration - Students must pay tuition fees of each module covered.
- In case the amount paid or deducted from salary exceeds the fees due based on the number of modules attended, such excess fees, regardless of the amount, will not be refunded if a student neglects to formally withdraw from the program after six months from the last module attended.
- The same policy will apply to those students availing of the salary deduction scheme for Emirates Staff wherein the total amount due will be continuously deducted from salary or settled in the final pay in case of resignation.

9.8 Scholarships

EAU offers scholarships to assist academically distinguished in financing their undergraduate education. Details, requirements, and procedures can be obtained from the Admission and Registration Department.

10. Student Services

EAU provides its students with a variety of services that include academic advising, professional counselling, and a career development programme as well as recreational facilities and physical resources that include a library, computer laboratories, a student lounge, prayer rooms and cafeteria.

More details, on the services offered to students, are provided in the EAU Student Handbook – Undergraduate Vocational Programmes 2024-2025.

11. Student Rights & Responsibilities

11.1 Student Rights

1. Each member of EAU has academic freedom, personal rights and liberties. The University treats every member with due fairness.
2. Admission to the University and the University's services, facilities and activities are open to all students without regard to race, gender or national origin.
3. The freedom of students to learn and to evaluate ideas and concepts is basic to the educational process.
4. Students are free to discuss, to express opinions and to hear expression of diverse opinions. Such expression of opinions and discussion must be accomplished without disrupting operations of the University.
5. Students have a right to be evaluated in courses solely on the basis of their performance in meeting appropriate academic criteria established for the course.
6. Students are free to form and join associations with other University students provided such organisations are in conformity with the purpose of the University and conform to established University regulations and UAE laws.
7. In the administration of disciplinary matters, the concerned parties shall be accorded procedural fairness. In such situations, whether formal or informal, the fundamental principles of due process shall be recognised.
8. Students have the right to appeal for hearing their grievances.

11.2 Student Responsibilities

As part of the University community, each student enjoys social, cultural and educational opportunities. S/he also agrees to abide by the regulations and standards of conduct operative in the University community. Becoming a member of this community implies a positive responsibility toward the well-being of the entire community. Students at EAU are expected to fulfil the following responsibilities:

1. Students shall act in a civil and responsible manner that is supportive of the educational process. Disruption of the education process by a student or group of students denies all other members of the University community their individual educational rights.

2. Students shall accept responsibility for their actions and serve as positive role models for others.
3. Students shall abide by the laws, rules and regulations. Obedience to Dubai and UAE laws and to University regulations is expected of each member of the University community.
4. Students shall share and agree to advance the purpose of the University. They shall contribute in promoting an environment that is conducive to learning and nurturing a sense of shared and mutual community responsibility.
5. Students are expected to have respect for truth, honesty and integrity in all their activities at the University.
6. Students are expected to demonstrate high moral standards. Each student is expected to give consideration to the highest standards of conduct and character. No one should either offend the wider community or infringe upon the rights and privileges of others.
7. Each student must recognise that his/her actions and values reflect upon the University community.

11.3 Student Code of Conduct

11.3.1 Student Dress Code

1. Students are requested to dress conservatively respecting local culture.
2. Male students should either wear national dress or long trousers and must have their upper arms and shoulders covered. They are not permitted to wear earrings or body piercings.
3. Female students should wear national dress or skirts covering the knees or long trousers. Upper arms must be covered, and acceptable, conservative dress must be maintained at all times.
4. Slippers and sandals are not permitted on campus.
5. T shirts / trousers bearing images or implying messages which are not in accordance with the UAE culture will not be tolerated. Students who do not meet the dress code will be prevented from attending class and may face disciplinary action.
6. Male students with long hair or spikes will not be permitted in workshops and will not be permitted for On-Job-Training (OJT). Female students are required to tie their hair when in the workshop or OJT facilities at all times. *(excluding Business and Software Students).*
7. Students not conforming to the dress code of the University will not be permitted to attend classes and will be marked absent.
8. Students not wearing safety shoes and overalls will not be permitted in the workshops and On-Job-Training (OJT) facility. *(excluding Business and Software Students).*
9. Students must ensure they take care of their personal hygiene.

11.3.2 Misconduct

The following acts of misconduct are subject to disciplinary action:

1. In view of the cultural norms of Dubai and the UAE, physical contact between male and female students is strictly prohibited.
2. Inappropriate dress.
3. Abuse, verbal or physical, of any person on the University premises or at any event or function sponsored by the University.
4. Reckless and unruly damage of University premises or property.
5. Theft in any form or unauthorised taking of University property, or property belonging to any member of the University or any visitor to the University.
6. Fraud in any form, such as alteration or misuse of University records, or unauthorised use of documents with intent to deceive.
7. Intentional obstruction or disruption of teaching or teaching-related activities.
8. Entering, or attempting to enter, University premises without authorisation.
9. Failure to comply with published policies or regulations on the use of University facilities.
10. Alcohol and drug violations as defined by University policy and the laws of Dubai and the UAE.
11. Smoking inside any of the buildings on campus. Smoking is only permitted in the external designated smoking areas.
12. Use or possession of prohibited material such as fireworks, explosives or weapons on University premises.
13. Gambling or any other illegal activity on University premises or at any function sponsored by the University.
14. Unauthorised use of the University name and/or its property by any person or organisation.
15. Harassment or intimidation.
16. Abuse or misuse of any University computer and its equipment, such as theft of parts, deleting information, internet theft or knowingly introducing a computer virus.
17. Failure to comply with the direction of University staff, faculty or other officials in the performance of their duties.
18. Violations of traffic laws on campus such as reckless driving and unauthorised parking inside the University grounds.
19. Violations of Dubai or UAE law.

Any violation of rules and regulations or misconduct will result in a disciplinary action taken against the student which ranges from a verbal warning to suspension or even dismissal from the University.

All records concerning violation of the Code of Conduct or academic integrity rules will be maintained for a period of at least five years. In case of severe violations resulting in suspension or dismissal, the penalty will become a permanent part of the student record and will be maintained indefinitely.

12. Complaint Proceedings

Any member of the University community may file a complaint against a student or group of students, to the Faculty Dean, if s/he feels that there is a violation of his/her rights or the Student Code of Conduct. The complaint should be a concise and complete statement of allegations. Based on the information provided, the Faculty Dean, or his designee, will forward the complaint to the Disciplinary Committee, which in turn will determine whether a violation has occurred, meet with the student(s) and decide on the sanctions or a further course of action. The concerned student will be notified in writing of the decisions taken and disciplinary actions levied, if any.

A student may appeal to the Vice-Chancellor regarding any disciplinary action taken against him/her. All appeals must be in writing and submitted to the Vice-Chancellor office within seven working days after the decision is delivered. The Vice-Chancellor will review the appeal, determine its viability and decide the course of action.

13. Student Academic Integrity Policy

13.1 Academic Dishonesty

Students at EAU are expected to act responsibly in all their academic pursuits. They must adhere to the highest standards of academic integrity in all their work and should not attempt to violate the academic integrity rules. Academic violations include, but are not limited to, the following:

1. Dishonesty in class assignments and projects.
2. Cheating or attempting to cheat or helping others cheat in examinations.
3. Plagiarism; to plagiarise is to steal or pass off as one's own (the idea or words of another); use (a created production) without crediting the source; to commit literary theft; present as new and original an idea or product derived from an existing source (Webster's Third New International Dictionary of the English Language, Unabridged, p. 1728). Plagiarism may involve using the ideas, images, words, statements or an entire passage of someone else without attribution. Plagiarism also includes copying or downloading articles, research papers or other material from the Internet without giving proper attribution. Students' should avoid plagiarism in all their assignments.
4. Submitting work or material prepared by another person.
5. Giving unauthorised assistance to other students in their experimental work or lab projects.
6. Complicity in any form of academic dishonesty.
7. Deliberate falsification or alteration of data or information.
8. Any act carried out with the intention of deceiving the course instructor to obtain a false grade.

9. Intentionally interfering (altering or damaging) the work of other students including course projects, laboratory experiments and computer files, etc.

13.2 Disciplinary Action

Any student who is caught and proved to have attempted to carry out any of the academically dishonest acts above shall be liable to disciplinary action. The instructor of the course will have the right to consider the student "fail" in the test or exam or the assignment in which the misconduct took place, if this act was part of the semester work. The Programme Co-ordinator will be informed of the case. If the act was during the final, end of semester, examination the case will be referred to a disciplinary committee, formed by the Faculty Dean. The committee will investigate the case and make its recommendations to the Dean. The Dean will make the final decision with regards to the case, and if the academic dishonesty is upheld, the student will be considered "fail" in the assessment, course or in all courses registered in that semester.

14. Student Appeals and Grievance

14.1 Student Appeals

A student may appeal to the Vice-Chancellor any disciplinary action taken against him/her. All appeals must be in writing and submitted to the Vice-Chancellor office within seven working days after the decision is delivered. The Vice-Chancellor or his designee will review the appeal, determine its viability and decide the course of action.

14.2 Student Grievance

EAU is committed to treating all students equitably and fairly. It does not differentiate between students on the basis of race, colour, religion, gender and national origin. It is the policy of the University that students shall be free from the effects of misconduct by other members of the University community, including faculty members and University officials. Accordingly, EAU has developed regulations and procedures regarding student grievances whereby students are given the opportunity to appeal for hearing their grievances.

A grievance arises when a student has reasons to believe that s/he has been treated in an arbitrary or discriminatory manner or subjected to inappropriate behaviour by an official member of the University community. While the students have the right to bring a grievance forward against the concerned official, they are encouraged to first attempt a good-faith resolution of the grievance. This can be achieved by either direct discussions with the concerned official or by bringing the matter to the attention of his/her academic advisor or the head of the unit or Department in which the grievance arises. If such attempts do not succeed in settling the dispute amicably or the student decides to proceed directly, s/he must initiate the formal process within three weeks of the incident in dispute. This is done by submitting a formal grievance in writing to the Faculty Dean. This written grievance must include the following:

1. Name, ID number, Faculty/Programme and phone number of the student submitting the grievance.

2. Identification of the office or individual(s) against whom the grievance is brought.
3. A description of the incident that caused this grievance.
4. The date, time and location of the incident.
5. A listing of all individuals who witnessed any part of the incident in dispute.

Upon receipt of the formal grievance, the Faculty Dean shall form a committee to investigate the dispute. The committee shall carry out detailed investigations including interviews with the concerned parties and witnesses from both sides. Depending upon the grievance, pertinent data and information may also be gathered by the committee. At the completion of the investigation, the committee shall submit its report with appropriate recommendations to the Faculty Dean who will take the decision, to be communicated to both parties.

If the grievant is not satisfied with the decision, s/he may seek relief through direct appeal to the Vice-Chancellor within two weeks of receiving the decision. The decision of the Vice-Chancellor shall be final.

15. The Educational Programmes

15.1 Course Credits

All vocational courses are evaluated in Guided Learning Hours (GLH). Normally, each GLH represents 50 minutes of contact class instruction per week in a semester of 15 weeks. Students are expected to spend two hours outside of class in independent learning or specific course assignment for every hour in class.

15.2 Degree and Programme Completion Requirements

A student will be awarded the bachelor/diploma degree after successfully completing all the programme requirements (courses, internship, etc.), as specified in the programme curriculum, which is included in Appendix A.

The curriculum of each programme that is included in Appendix A must specify courses, prerequisites and distribution of credits within the programme.

Transfer Credits

A maximum of fifty percent (50%) of the total credits required to obtain a degree at EAU can be transferred from other institutions of higher education, subject to EAU Transfer Admission Policy (Section 7.2). Furthermore, the majority of the final thirty credit hours must be completed at EAU.

Minimum and Maximum Periods of Enrolment

The baccalaureate degree programmes offered by EAU normally require eight regular semesters (four years), to fulfil all the graduation requirements. For these programmes, the maximum allowed time is seven years from admission to EAU as an undergraduate student including any period of approved

registration suspension. A student in good standing could be allowed to suspend his/her registration for up to two semesters. Only in exceptional cases, an extension of up to two semesters may be granted by the Faculty Dean upon the recommendation of the Programme Co-ordinator and the approval of the Faculty Council.

The higher/advanced diploma degree programmes offered by EAU normally require six regular semesters (three years), to fulfil all the graduation requirements. For these programmes, the maximum allowed time is six years from admission to EAU as an undergraduate student including any period of approved registration suspension. A student in good standing could be allowed to suspend his/her registration for up to two semesters. Only in exceptional cases, an extension of up to two semesters may be granted by the Faculty Dean upon the recommendation of the Programme Co-ordinator and the approval of the Faculty Council.

The diploma degree programmes offered by EAU normally require four regular semesters (two years), to fulfil all the graduation requirements. For these programmes, the maximum allowed time is five years from admission to EAU as an undergraduate student including any period of approved registration suspension. A student in good standing could be allowed to suspend his/her registration for up to two semesters. Only in exceptional cases, an extension of up to two semesters may be granted by the Faculty Dean upon the recommendation of the Programme Co-ordinator and the approval of the Faculty Council.

Award and Classification

The normal method for calculating degree classifications is documented below.

- The classification for the award of a vocational degree to be made to each student shall be based on performance in courses.
- The average percentage is calculated for each year. The overall average used for the classification will be based on equal weighting.
- The classification boundaries for First Class, Upper Second Class, Lower Second Class and Third Class shall be 70%, 60%, 50% and 40% respectively.

The degree classification of a partner university, where there is a dual award, will be based on the relevant approved regulations.

15.3 Programme Learning Outcomes & Alignment to the UAE Qualification Framework

The learning outcomes of each undergraduate vocational programme, offered by EAU, are shown in Appendix B together with a matrix linking those to the appropriate level of the National Learning Outcomes of the UAE Qualification Framework.

15.4 Course Descriptions

Engineering Courses

BEMath1000 Analytical Methods for Engineers 3 GLH/Week

This course provides engineering students with the basic mathematical techniques in Algebra, Trigonometry, Calculus, and Statistics, required in various engineering disciplines. The first learning outcome covers algebraic methods including polynomial division, partial fractions, real life applications of arithmetic and geometric progressions and power series, as well as equations involving exponential, trigonometric and hyperbolic functions. The second learning outcome is focused on trigonometric methods and their applications in engineering situations, especially the sinusoidal functions and waveforms. In the third learning outcome, topics in calculus are introduced such as differentiation, integration, and their implementation in modelling Engineering situations. The last outcome is an overview of the fundamentals of statistics and probability including representation of statistical data using graphs and tables, measures of central tendency and dispersion, probability distributions, and linear regression.

BEMath1010 Further Analytical Methods for Engineers 3 GLH/Week

This course provides, more in depth, the mathematical techniques that can be used in complex engineering situations. In the first outcome, conversion between various number systems are studied and applied to logic circuits. In addition, operations of complex numbers in Cartesian and polar forms are considered along with their applications in engineering situations. In the second learning outcome, several types of graphs, diagrams, and charts are used to estimate engineering variables. Moreover, numerical integration and iterative techniques are implemented to make estimates for of engineering parameters. The third learning outcome introduces vector geometry in analysing and modelling engineering problems. The second part of this outcome reviews the theory of matrices and how it is used to solve systems of equations arising in engineering situations. Finally, the fourth learning outcome covers first and second order ordinary differential equations and their implementation in engineering.

BEMath1020 Advanced Mathematics 3 GLH/Week

This course is designed for engineering students at degree level. It aims to provide them with advanced analytical methods that can be needed in a range of engineering careers. In learning outcome 1 the students will implement the power series method in addition to some numerical techniques to solve ordinary differential equations arising in engineering situations. Learning outcome 2 introduces Laplace transform approach to solve ordinary differential equations and systems of ordinary differential equations. In the third learning outcome, Fourier series for periodic functions as well as its complex form are used to analyse various engineering situations. The last learning outcome starts with a revision of partial derivatives and integrals necessary to introduce partial differential equations techniques. Finally, partial differential equation techniques are implemented to model and solve real life situations related to Engineering.

Prerequisite: BEMath1010

BECore1000 Engineering Science 4 GLH/Week

This course aims to provide students with an understanding of the mechanical and electrical principles that underpin mechanical and electrically focused engineering systems. Engineers, no matter from

what discipline, need to acquire a fundamental understanding of the mechanical and electrical principles that underpin the design and operation of a large range of engineering equipment and systems. In particular, students will study elements of engineering statics including the analysis of beams, columns and shafts. They will then be introduced to elements of engineering dynamics, including the behavioural analysis of mechanical systems subject to uniform acceleration, the effects of energy transfer in systems and to natural and forced oscillatory motion. The electrical system principles in learning begin by refreshing students' understanding of resistors and then developing the use of Ohm's law and Kirchhoff's law to solve problems involving at least two power sources. Circuit theorems are also considered for resistive networks only together with a study of the characteristics of growth and decay of current/voltage in series C-R and L-R circuits. The final learning outcome develops students' understanding of the characteristics of various AC circuits and finishes by considering an important application – the transformer.

BECore1010 Construction and Operation of Aircraft Fluid Systems 4 GLH/Week

This course will investigate the constructional detail, operating principles and system function of a variety of aircraft hydraulic and pneumatic system components. Students will interpret and analyse hydraulic and pneumatic circuit drawings and use a variety of illustrative methods and conventions so that fluid system operational status may be determined. The course will also enable students to inspect a range of aircraft hydraulic and pneumatic systems. On the completion of this course, students will have a more complete understanding of the hydraulic and pneumatic systems used in aircraft. Important facets of aircraft flight such as actuation of control surfaces, landing gear and brake actuation, air conditioning, cabin pressurisation, wing de-icing etc. will be understood in detail by the students. Students will also have hands on training, enabling them to put into practice, the principles taught in class.

BECore1020 Electrical Electronic and Digital Principles 4 GLH/Week

This course aims to develop students' understanding of the electrical, electronic and digital principles needed for further study of electro-mechanical systems. Students will analyse LCR circuits (series and parallel) with the use of complex notation and to evaluate the circuits' performance when impedance varies. Students will calculate currents and voltages in electrical circuits by applying different circuit theorems. Analysis and evaluation of different types and classes of operation of electronic amplifiers will be covered as well as designing and testing of amplifiers; practical results compared with theoretical results. In addition, students will be able to understand digital principles; digital families as well as to design, build and test of digital circuits theoretically and practically (bread-boarded and computer software simulation).

BECore1030 Business Management Techniques for Engineers 3 GLH/Week

Engineering Management requires understanding of business management techniques in order to advance business interests. This course will provide the student with the key knowledge and understanding of management skills required by engineering managers. Students will apply the skills of costing, financial planning and control associated with engineered products or services.

BECore1040 Aerodynamic Principles and Aircraft Design 4 GLH/Week

This course will develop students' understanding of how aerodynamic principles influence aircraft design. It provides students with an understanding of aircraft flight principles, including the means by which aircraft are controlled, manoeuvred and stabilised. Students will look at the properties of air and how these relate to the behaviour of aircraft. They will then investigate the forces that act on an aircraft in subsonic flight such as lift, drag and thrust. They will also examine the main design features of aircraft that are required to assist aircraft to fly safely.

BECore1050 Aircraft Systems Principles and Applications 4 GLH/Week

This course will develop students' understanding of the principles and components; transducers, signal conditioning and amplifiers, to control and monitor the performance of aircraft systems. It will enable students to apply the necessary mechanical, electrical and electronic principles to the examination of aircraft systems. Students will be able to understand the construction and operation of aircraft power systems as well as to be able to analyse the range of methods used to ensure the integrity and safety aircraft power distribution and to analyse the response of typical aircraft systems when control methods are applied.

BECore1060 Aircraft Communication and Navigation Systems 4 GLH/Week

The aim of this course is to develop students' understanding of the principles of operating aircraft communication and navigation systems. The students will investigate the operation of radio transmitters, receivers and aircraft radio navigation systems. They will examine aircraft inertial navigation systems and their operation and will carry out calculations to solve navigation problems. The course also provides an opportunity for students to investigate the types, operation and operating parameters of continuous wave aircraft radar systems.

BECore1070 Engineering Design 4 GLH/Week

This course will enable students to prepare an engineering design specification that meets customer requirements and produce a final design report. It will enable the student to appreciate that design involves synthesising parameters that will affect the design solution. The student will prepare a design specification against a customer's specific requirements. They will then prepare a design report that provides an analysis of possible design solutions, an evaluation of costs and an indication of how the proposed design meets the customer's specification. It is expected that the student will, during the design processes, make full use of appropriate information and communication technology (ICT).

BECore1080 Project Design, Implementation and Evaluation 8 GLH/Week

This course provides opportunities for students to develop skills in decision making, problem solving and communication, integrated with the skills and knowledge developed in many of the other courses within the programme to complete a realistic project. The four stages of this course are project formulation, project implementation, project evaluation and project documentation. The course requires students to select, plan, implement and evaluate a project and finally present the outcomes, in terms of the process and the product of the project. It also allows students to develop the ability to work individually and/or with others, within a defined timescale and given constraints, to produce an acceptable and viable solution to an agreed brief. If this course is treated as a group project, each member of the team must be clear about their responsibilities at the start of the project and supervisors

must ensure that everyone is accountable for each aspect of the work and makes a contribution to the end result. Students must work under the supervision of programme tutors or work-based managers.
Prerequisite: Completion of 900 GLH

BECore1085 Industrial Training 4 GLH/Week

Industrial training is an integral part of the BEng engineering program and the main purpose of it is to complement the courses given in classroom with on-the-job training in order to develop both the technical and generic skills of the students. Trainees spend five weeks on a full-time basis in an industrial plant, engineering or consulting office in the UAE or abroad, under the supervision of a designated faculty member (the University Supervisor), to earn practical skills. A report should be submitted at the end of the training period. This report should cover all activities carried out by the trainee at the training site and goals achieved.
Prerequisite: Completion of 1350 GLH

BECore1090 Control & Instrumentation 4 GLH/Week

Control and Instrumentation is a fundamental discipline in supporting the technological advances and developments which find application in a wide range of areas including process control, aerospace, automotive, robotics, environmental and energy efficient manufacturing industries. The aim of this course is to develop a good understanding of the principles, techniques, and applications associated with control engineering and instrumentation. The course includes modelling of electrical, mechanical, thermal, hydraulic and pneumatic systems, Laplace transform, time domain analysis, steady state error analysis, block diagram representation and extracting time domain parameters from 1st order and 2nd order time responses. Furthermore, the course contains root locus analysis, Routh-Hurwitz stability creation and the design of PID controllers.

BECore1100 Project Management 4 GLH/Week

This course introduces students to project management and provides a foundation for developing project skills, both human and technical, that will enable them to work on a variety of projects, primarily with a computer or knowledge based element. Students are encouraged from the outset to see the role of the project manager within the broader perspective of strategic business management, understanding where projects come from and why they are selected. The roles of both the purchaser and the supplier of a computer or knowledge based project is recognised and explored. The importance of de facto project management scheduling skills, quality and estimating standards is emphasised. The human and change aspects of projects are considered in order that the student may understand the effect on morale, productivity and quality of management decisions.
Prerequisite: BECore1030

BECore1110 Individual Project 4 GLH/Week

The aim of this course is to provide an opportunity to research, critically evaluate, design and implement a functional or simulated system, artefact or concept and to acquire further knowledge of a specialist technical area with direct instruction from the supervisor. Students will undertake a comprehensive engineering task which will exercise the in-depth application of the technical, creative, troubleshooting and other skills required of a professional engineer. It provides experience of the

planning, self-management and communication required for the successful execution and reporting of a substantial, well-defined project. Student achievement is judged in the context of 200 hours of study time.
Prerequisite: Completion of 1350 GLH

BECore1120 Aerospace Technology II 4 GLH/Week
The aim of this course is to continue the development of the technology and the application of technology associated with the aerospace industry. The course also aims to enhance the student awareness of the design of typical aerospace systems through the study of the relevant aerodynamic theory and aircraft systems. Students will review, explore and apply the principles of helicopter flight, the theory of supersonic air flow and the phenomena governing space flight.

BECore1130 Aerospace Applications 4 GLH/Week
This course's aim is to enhance the student's awareness of technical and professional activities. Building on and utilising knowledge and skills gained from earlier years of the programme, students undertake work on the design, production, and test of an aerospace system or component. The course is intended to nurture professionalism and prepare students for employment and business opportunities. Vocational, numerical and IT (enterprise) capabilities are refined and the application of these capabilities to complex problems and the development of personal and inter-personal capabilities is achieved through group project work.
Prerequisite: Completion of 1350 GLH

BECore1140 Total Quality Management 4 GLH/Week
The intention of this course is to convey the importance of quality as a strategy for continuous improvement in business performance. This will be achieved through the study of philosophies, tools, systems and techniques associated with Total Quality Management. Students will differentiate between Inspection, Quality Control, Quality Assurance and TQM. They will identify quality activities which can be used within each approach and use this to assess the maturity of an organisations quality programme.
Prerequisite: BECore1030

BEAero1000 Aircraft Workshop Principles and Practice 4 GLH/Week
This course will give students the knowledge, understanding and skills needed to safely carry out a range of practical tasks in an aircraft workshop. An understanding of aircraft workshop principles and practice is a fundamental requirement for those wishing to practice as aircraft engineering technicians or engineers, irrespective of their chosen specialisation. The course will give students an understanding of the safe working practices associated with aircraft workshop activities and the care, control and safe use of aircraft workshop tools and equipment and the ability to read and interpret all types of engineering drawings (schematic, block, assembly, charts...) and conventional methods of projection (isometric, oblique, orthographic first or third angle…) especially aircraft engineering drawings and the current national and international standards to practice and achieve the required tasks on aircraft hardware: fasteners, fluid plumbing hardware, transmission systems and control cable. and in addition to mechanical activities this course also covers the electrical tasks and fitting activities on aircraft

electrical cables including the primary checks for electrical harness: continuity, bonding and insulation test and the students will practice soldering techniques and know about welding and brazing methods including all safety precautions, performing and inspecting.

BEAero1010 Engineering Thermodynamics 4 GLH/Week

This course will extend students' knowledge of heat and work transfer. It will develop students' understanding of the principles and laws of thermodynamics and their application to engineering thermodynamic systems.

Firstly, it will build on students' understanding of polytropic expansion/compression processes, the first law of thermodynamics and the concepts of closed and open thermodynamic systems. Secondly, the students' will be introduced to the second law of thermodynamics and its application in the measurement and evaluation of internal combustion engine performance. This will be followed by measurement and evaluation of air compressor performance. Finally, students will develop an understanding of the layout and operation of steam and gas turbine power plants.

BEAero1020 Aerodynamic Principles and Aircraft Stability and Performance 4 GLH/Week

This course will give students an understanding of experimental aerodynamics, the analysis of aircraft manoeuvres and aircraft performance. It will enable students to carry out practical wind tunnel investigations and will develop their understanding of the use and limitations of experimental aerodynamics. Students will also examine aircraft instability and the methods used to control it. The forces acting on an aircraft during manoeuvres will be explored along with the related potential hazards. Finally, students will investigate the effects that aerodynamics can have on aircraft performance.

Prerequisite: BECore1040

BEAero1030 Strengths of Materials 4 GLH/Week

This course will enable students' to use stress analysis techniques to determine the behavioural characteristics of engineering components and materials. It will introduce students to the theoretical and experimental methods of complex stress analysis, together with the theories of elastic failure. Appropriate use of these can be made throughout the unit to determine operational factors of safety. Students will investigate the theoretical behaviour of structural members under load and will verify the characteristics by experimental testing. They will then analyse loaded structural members from considerations of strain energy and again carry out experimental verification of the analysis.

Prerequisite: BECore1000

BEAero1040 Aircraft Propulsion Technology 4 GLH/Week

This course aims to develop students' understanding of the principles and laws of aircraft propulsion and their application to gas turbine systems and design.

Firstly, students will examine the scientific principles that relate to aircraft gas turbines and how they affect the performance of aircraft propulsion engines. They will also consider the aerodynamic and

mechanical design of gas turbine engine courses and propellers. Secondly, the course will develop students' understanding of the performance parameters of gas turbine engines, the material limitations of engine courses and the information used to monitor engine performance. Finally, the students will investigate the construction, operation and layout of aircraft engines and engine components.

BEAero1050 Materials Engineering 4 GLH/Week

This course will thus provide students with the necessary background knowledge and understanding of the properties, testing, treatments, processing, selection, failure modes and prevention of a variety of engineering materials. In addition, this course offers students the opportunity to consider environmental issues related to increased productivity and sustainability that lead to less waste and to the more efficient use of energy and resources when selecting materials for particular applications. By the completion of this course, students will improve their understanding of engineering materials and their various properties and processing methods. A better understanding of the environmental effects of material processing will enable the students to make better choices that will lead to a lesser environmental impact through efficient use of energy and resources. Students will also be well trained when it comes to the early detection, assessment and damage prevention of in service engineering materials.

BEAero1060 Aircraft Gas Turbine Science 4 GLH/Week

This course will develop students' understanding of the principles of aircraft gas turbine technology and their application in gas turbine engine courses and systems. Students will investigate aircraft gas turbine fluids, including the measurement of fluid flow and aerodynamic losses in gas turbine courses. They will apply the thermodynamic principles that relate to aircraft gas turbine engines and investigate the importance of thermodynamics in the design of aircraft engines and control systems. The course will also provide a basis for further study in aircraft thermofluids.
Prerequisite: BEAero1010

BEAero1070 Aerospace Industrial Studies 4 GLH/Week

This course aims to provide the student with an awareness of the international nature of the aerospace industry and provide the opportunity to study how the global nature impacts upon the business, economics, structure, strategic philosophies and practices. Students will acquire sufficient basic management and business, skills and terminology for direct entry into the management structure of an aerospace business.

BEAvio1000 Electronic Principles 4 GLH/Week

This course aims to further develop students' understanding of analogue electronics and their applications across the engineering sector. Students will examine the use of current manufacturers' data and support, apply current circuit analyses and design, implement and then test the created applications. Although fault-finding skills are not the main emphasis of the unit they will form an integral part of the later development, in terms of testing. The course includes semiconductor theory, diode operation, diode application, special purpose diodes, bipolar junction transistor (BJT), transistor characteristics and parameters, the transistor as an amplifier (CE,CB,CC), the transistor as a switch,

transistor packages and terminal identification, transistor bias circuits, operation amplifier (OP-AMP), circuit and applications. The course includes laboratory demonstrations on electronic circuits.
Prerequisite: BECore1020

BEAvio1010 Combinational and Sequential Logic 4 GLH/Week

This course aims to provide students with the skills and understanding required to design and build electronic circuits that use combinational and sequential logic. It will develop students' understanding of digital techniques and the practical applications of both combinational and sequential logic. Students will investigate the characteristics and applications of combinational and sequential logic devices. They will then design, construct and test combinational and sequential circuits and will use relevant computer software to simulate and verify circuits. Students will then go on to design a digital system that meets a specification and will evaluate the design against given criteria. They will investigate the minimisation of digital circuits and will improve the digital system design through the use of programmable logic devices (PLDs).
Prerequisite: BECore1020

BEAvio1020 Automatic Flight Control Systems 4 GLH/Week

This course will develop students' understanding of the function, characteristics and operating parameters of aircraft automatic flight control systems. It will examine the automatic flight control systems that are key to the safe operation of aircraft. Students will investigate and carry out a systems analysis on aircraft servo-mechanisms, such as control and indication systems and integrated flight control systems. They will then analyse the function and operation of yaw damper systems and will examine yaw channel instability. The behaviour and parameters of auto pilot and auto throttle systems are also investigated, before students look at the characteristics of auto land systems.
Prerequisite: BEAvio1030

BEAvio1030 Integrated Flight Instrument Systems 4 GLH/Week

This course aims to develop students' understanding of the principles and applications of aircraft flight instrument systems such as aircraft attitude indicators, air data systems and flight deck instruments. The course is concerned with aircraft flight instruments and their integration into aircraft flight deck systems. It aims to develop students' understanding of the scientific principles that underpin the design and construction of aircraft flight instruments. It also considers the purpose and application of the main traditional groupings of flight data instruments and the ways in which traditional and newer forms of flight information are being integrated into current flight deck systems.

BEAvio1040 Electrical and Electronic Principles 4 GLH/Week

This course provides an understanding of electrical and electronic principles used in a range of engineering careers and provides the basis for further study of more specialist areas of electrical/electronic engineering. Circuits and their characteristics are fundamental to any study of electrical and electronic engineering and therefore a good understanding is important to any engineer. The engineer must be able to take complex electrical circuit problems, break them down into acceptable elements and apply techniques to solve or analyse the characteristics. Additionally, fine-tuning of the circuits can be performed to obtain required output dynamics.

This course draws together a logical appreciation of the topic and offers a structured approach to the development of the broad learning required at this level.
Prerequisite: BECore1020

BEAvio1050 Digital and Analogue Devices and Circuits 4 GLH/Week

This course aims to develop the knowledge and skills needed to design and test DC power supply systems, operational amplifier circuits and digital electronic circuits. It provides students with a practical understanding of a range of integrated circuit operational amplifiers and digital devices and circuits. Students will investigate the design and operation of DC power supplies. They will then analyse the applications of operational amplifiers, before designing and testing operational amplifier circuits. Finally, the unit will enable students to design, construct and test digital electronic circuits.
Prerequisite: BEAvio1010

BEAvio1060 Avionics systems II 4 GLH/Week

The aim of this course is to develop the introductory knowledge previously acquired to form a complete strategic view of the aircraft as an integrated avionics platform. It includes coverage of advanced navigation systems, satellite communication systems, signal processing techniques and avionic applications of microcontrollers.

BEMech1000 Mechanical Principles 4 GLH/Week

This course aims to develop students' understanding of an extended range of mechanical principles that underpin the design and operation of mechanical engineering systems. It will develop students' understanding of complex loading systems including two and three-dimensional loading and will provide an introduction to the concept of volumetric strain and the relationship between elastic constants. The expressions derived for linear and volumetric strain then form a basis for determining dimensional changes in loaded cylinders. The course will build upon students' existing knowledge of the relationship between the distribution of shear force and bending moment in loaded beams, to include the relationship between bending moment, slope and deflection. Students will analyse stresses in thin and thick walled cylindrical pressure vessels subjected to internal and external pressure including Lame's theory, use of boundary conditions and distribution of stress in cylinder walls. Students will analyse the use of mechanical power transmission systems, such as belt drives, friction clutches and gear trains, both individually and in the combinations that are used in practical situations. Students' knowledge of rotating system elements is further extended through an investigation of the dynamic characteristics of the slider-crank and four-bar linkage. The balancing of rotating systems is also investigated, together with the determination of flywheel mass and size to give sufficiently smooth operating conditions.

BEMech1010 Health, Safety and Risk Assessment in Engineering 4 GLH/Week

This course aims to provide students with an understanding of health and safety planning, implementation and legislation within an engineering environment. This unit has been designed to develop the student's awareness of the principles, planning and implementation of health and safety practice within an industrial environment such as those to be found in engineering production, manufacture, services and maintenance and those in the chemical, transport such as aviation and

engineering industries. In particular, the selection, application and evaluation of safe working procedures, for operations appropriate to particular industrial activities, are first considered. Then current UK and EU health and safety legislation, the role of the inspectorate, safety audits and current codes of practice are covered. Next, risk is assessed and evaluated by identifying, rating and assessing the severity of hazards and recording all evidence and actions taken for future monitoring of these hazards. Finally, risk management activities are considered including the methods used for gathering evidence, dissemination of information, complying with current regulations and implementing policy to minimise risk to life and property, for activities within a general engineering environment.

BEMech1020 Fluid Mechanics **4 GLH/Week**

The aim of this course is to extend students' knowledge of the principles of fluid mechanics and the techniques used to predict the behaviour of fluids in engineering applications. This unit will begin by looking at the forces exerted by a static fluid on immersed surfaces and the concept of centre of pressure. It also examines a range of hydraulic devices and systems that incorporate the transmission of hydraulic pressure. Students will then examine viscosity in fluids, its measurement and the characteristics of Newtonian and non-Newtonian fluids. The course then examines fluid flow phenomena. These include the estimation of head loss in pipes, viscous drag around streamlined and bluff bodies and the concept of Reynolds' number. It also introduces students to the techniques and applications of dimensional analysis. Finally, students will examine the operational characteristics of hydraulic machines, including impact of a jet with particular focus on the operating principles of water turbines and pumps.

BEMech1030 Computer-aided Design and Manufacture **4 GLH/Week**

This course will develop students' understanding of the practical applications of a Computer-aided Design and Computer-aided Manufacture (CAD/CAM) system. Most successful businesses invest substantially in research and development in order to gain competitive advantage. Engineering advances offer sales and marketing teams the ability to sell more products and gain a larger market share. In order to facilitate this, engineers must be able to quickly bring their designs to manufacture to achieve what is known as speed to market. The use of Computer-aided Design (CAD) has allowed engineers to communicate designs quickly.

This course will enable students to produce component drawings using a CAD system specifically for transfer to a CAM system. They will also develop an understanding of structured data within CAD/CAM systems and the use of data transfer methods. Practical work will include the simulation of cutter paths on a CAM system and the production of a component from a transferred data file.

BEMech1040 Manufacturing Process **4 GLH/Week**

This course will develop students' knowledge of manufacturing processes and techniques that can be applied to a range of materials for a variety of manufacturing applications. It is essential that engineering technicians involved in the planning, operation and management of manufacturing systems should have a broad underpinning knowledge of conventional production processes. Computer-aided processes are now the norm in medium- to large-scale manufacturing companies and are also to be found with small-scale specialist producers. The full potential of computer-aided systems cannot however be fully appreciated without knowledge of the conventional processes from which

they are derived. This course provides students with this knowledge of manufacturing processes and techniques.

BEMech1050 Application of Machine Tools 4 GLH/Week

This course will develop the skills and understanding needed for the safe and efficient production of components on manual machine tools.

Firstly, it introduces students to the types of manually operated machine tools commonly used in industry and typical applications of such equipment. Secondly, it introduces the theory of cutting tools, the practice of tool and work setting for production on manual machine tools and the checking of critical features and dimensions against specifications. Safe use of equipment will be a continuing theme throughout the course.

BEMech1055 Mechanical Workshop Practices 4 GLH/Week

The complex and sophisticated engineering manufacturing processes used to mass produce the products we see and use daily has its roots in the hand-operated lathes and milling machines still used in small engineering companies. To appreciate the fundamentals underpinning complex manufacturing processes, it is essential that engineers are able to read engineering drawings and produce simple components accurately and efficiently. This course introduces students to the effective use of textual, numeric and graphical information, how best to extract and interpret information from engineering drawings, and the practices of workshop-based turning and milling machining. On successful completion of this unit students will be able to identify the mechanical measurement and quality control processes to analyse the dimensional accuracy of a machined component; operate machining equipment to produce a range of components to specification; explain the importance of material selection when choosing the most appropriate machining process; and apply safe working practices throughout.

BEMech1060 Mechanical Industry and Professional Studies 4 GLH/Week

This course aims to provide the student with an awareness of the mechanical engineering industry and provide the opportunity to study how the activity impacts upon the business, economics, structure, strategic philosophies and practices. To provide the student with sufficient basic management and business skills and terminology for direct entry into the management structure of an engineering business.

BEMech1070 Mechanical Applications 8 GLH/Week

This course's aim is to enhance the students' awareness of technical and professional activities. Building on and utilising knowledge and skills gained from earlier years of the course, students undertake work on the design, production and test of a Mechanical system or component. The course is intended to nurture professionalism and prepare lerners for employment and business opportunities. Vocational, numerical and IT (enterprise) capabilities are refined and the application of these capabilities to complex problems and the development of personal and inter-personal capabilities is achieved through group project work.

Prerequisite: Completion of 1350 GLH

BEMech1080 Mechanical Systems Modelling **4 GLH/Week**

This course develops a critical approach to mechanical engineering investigation, comparing alternative approaches to the analysis of engineering systems. In addition to taught material, students will be given assignments and directed reading to extend their knowledge and to enhance their appreciation of the relevance of the material covered. In approach, students will need to undertake analysis by calculation, experimentation and computer base methods. Students will be given an introduction into the basic concepts and principles of Finite Element (FE) or Computational Fluid Dynamics (CFD) theory and applications including general advantages, limitations and pitfalls of such approaches.

Prerequisite: BEMech1020

16. General Education Programme

The undergraduate vocational programmes offered by EAU include a general education component to help students acquire knowledge and skills that serve as the foundation for success in society and in one's major discipline. The general education component consists of general education courses that are designed to provide students with a breadth of intellectual experiences and prepare them for living in a dynamic, knowledge-based society. They also aim to enhance skills and abilities needed for studies in students' major disciplines and subsequently in their professional careers. These skills include effective oral and written communication, critical thinking, computer proficiency, and acquisition and integration of knowledge.

16.1 The Learning Outcomes of the General Education Programme

Students will demonstrate ability to:

1) Communicate ideas clearly and effectively, orally and in writing, using English language.
2) Utilise essential IT skills for their studies.
3) Discuss various concepts and characteristics of Islamic culture and civilisation.
4) Demonstrate knowledge in the general field of natural sciences.
5) Demonstrate knowledge of the historical developments in science and technology.
6) Demonstrate knowledge of the multifaceted social issues confronting the world.

16.2 General Education Requirements

16.2.1 Engineering Programmes

A student who is enrolled in a bachelor or advanced diploma vocational engineering programme has to complete the following six compulsory courses (270 GLH):

1. BEngGE1000 English I
2. BEngGE1010 Introduction to IT
3. BEngGE1020 Islamic Culture

4. BEngGE1030 Environmental Science
5. BEngGE1040 Innovation and Entrepreneurship
6. BEngGE1050 Cross Cultural Studies

For a student to obtain a diploma award, s/he must complete the first three courses in addition to one of the last three (a total of 180 GLH).

16.3 Descriptions of GE Courses

BEngGE1000 English I **4/3 GLH/Week**

This course will teach the fundamentals necessary to address the development of skills in reading and writing for specific academic purposes where the core skills of summary, critique, synthesis and analysis are considered instrumental in enhancing the quality of critical thinking and written work.

BEngGE1010 Introduction to IT **4/3 GLH/Week**

This course covers operating systems, word-processing, spreadsheets, database, and presentation packages at an introductory level.

BEngGE1030 Environmental Science **4/3 GLH/Week**

This course covers environmental problems, causes and history, critical thinking, demographics, energy resources and efficiency, air, pollution and climate, water pollution and solid and hazardous waste.

BEngGE1020 Islamic Culture **4/3 GLH/Week**

This course will cover various aspects of Islamic culture and civilisation. It will explain the concept of Islamic culture, its resources and characteristics, and its relationship to Islamic thought, civilisation, and scientific achievements. It examines human rights in Islam, ethics in Islam, moral values, and contribution of Muslims in the development of science. It presents a brief history of Islamic legislation and explains the impact of holy Koran, Sunnah, and other legislation resources on enriching the Islamic culture. It also discusses some contemporary issues and intellectual challenges facing present day Muslims.

BEngGE1040 Innovation and Entrepreneurship **4/3 GLH/Week**

This course is a Stanford-informed approach to learning innovation and entrepreneurship that can be applied to any high-growth enterprise or other organisation in the UAE. The class is composed of three modules: (1) Design Thinking, (2) Entrepreneurship, and (3) Growth and Leadership.

BEngGE1050 Cross Cultural Studies **4/3 GLH/Week**

Given that globalisation and its consequences represent one of the most urgent and complex challenges of the twenty-first century, this course presents students with the essential information necessary for an understanding of the complex set of interconnected issues confronting today's globalised world.

17. Academic Regulations

17.1 Student Study Load

Student Study Load is the total number of courses a student is registered for during a semester. It is determined by the student ability and achievement. A student who is enrolled in an undergraduate vocational programme usually registers for four to five courses in each regular semester. The required minimum study load is three courses in any regular semester. Under special conditions and with the approval of the Faculty Dean, based on a recommendation by the Programme Co-ordinator, a student may be allowed to increase his/her study load six courses in one semester, in which case a supplemental fee is applicable. A student can register for up to two courses in a summer semester. However, graduating students may be allowed to register for up to three courses in the summer semester if recommended by their academic advisors.

17.2 Attendance Requirement

Students must attend a minimum of 75% of the direct contact time of each course. Failing to attend 25% of the classes in any course may result in failing that course. In such circumstances, recovery from failure shall require a repeat reassessment at a future offering of the course. Any student has the right to draw attention to personal extenuating circumstances which seriously impair his/her ability to attend a course, and to request deferral under the procedures detailed in Section 17.4.3.

17.3 Progression

1. To progress from one year of a programme to a subsequent year, whether by full-time or part-time study, a student must pass all courses required by the previous year, which includes meeting any pre-requisite or any other requirement set out in the programme definitive documentation.
2. Students who fail to attain sufficient courses to progress as set out in (1) above may, at the discretion of the appropriate Council:
    a) be transferred onto a new programme subject to eligibility and availability; or
    b) be recommended to withdraw from the programme; or
    c) be academically dismissed from the programme; or
    d) be required to repeat the year, in whole or part, which may include proceeding on a further year of study on a ‘mixed diet’ of courses at different levels, and according to the following

Year (Level)	Number of Failed Courses	Action
One	1	Progress to Level 2 'mixed-diet'
	2 to 5	Retake in one semester
	6 to 10	Retake in two semesters (one year)
Two	1 to 5	Retake in one semester
	6 to 10	Retake in two semesters (one year)
Three	1 to 3	Retake in one semester
	3 to 6	Retake in two semesters (one year)

Additional fees will be applicable when retaking courses as per the EAU Student Finance Policy.

3. Repeating Courses (based on 2d)

a) A student who has not succeeded in redeeming previous failure via reassessment by resit/referral, may register, at the discretion of the concerned Board/Council, to repeat the course(s) at the next available opportunity during the student's next enrolment period (and normally complete within one year of the original failure).

b) A student who has been permitted by the concerned Board/Council to repeat a course(s) shall be required to take the current version of the course.

c) Complete reassessment in all components shall be required, with the original component and course mark(s) not being taken forward or recombined with the repeat marks. In repeating a course, the student shall be eligible for reassessment by resit as set out in 4.5 below. This is subject to the course or an equivalent still being offered.

d) Any course failed at the first attempt and passed at the repeat attempt shall be capped at 40%; this is applicable to all year 3 courses and years 1 and 2 courses for which grading is numeric. Any reassessment required during the repeat period of study shall not be considered as deferred unless a student makes a submission under the extenuating circumstances procedure by submitting the appropriate forms and evidence to the Registration Department.

e) Only one repeat opportunity shall normally be permitted for any course.

f) Students may not repeat a course to improve marks in a previously passed course.

17.4 Grading & Assessment

17.4.1 Assessment

1. In order to confer credit, all courses shall be assessed by formal written examination and/or coursework.
2.
    a) A student shall be deemed to have passed a course on obtaining an overall course mark of 40% (or pass for some of years 1 and 2 courses for which grading is non-numeric) or more, subject to any criteria notified as to how the mark is to be calculated (e.g. by specifying the relative weighting of any components).
    b) The minimum pass requirement for each course component is 40%. Marks between 39.5 and 40 inclusive shall be regarded as 40% for these purposes; this is applicable to all year 3 courses and years 1 and 2 courses for which grading is numeric.
    c) In courses with more than one component, there may be provision for a compensation band to enable good performance on one component to offset poor performance in another component. In such cases, the minimum component mark required is 35%, and such criteria must be specified in the approved course descriptor. Failure compensation between course components is normally only permitted when there is an overlap of assessment of intended learning outcomes across the course.
3. Students who fail to submit work for assessment or attend examinations shall be deemed to have been absent from the assessments concerned and to have failed them accordingly.
4. When a student cannot, through disability, be fairly assessed by the methods prescribed for the course concerned, the concerned Council/Board may agree to vary those as deemed appropriate, bearing in mind the intended learning outcomes of the course and the need to assess each student on equal terms with other students.
5. Late Submission

    For all year 3 courses and years 1 and 2 courses for which grading is numeric, coursework submitted up to one week after the due date for submission will lose 10% of the mark awarded. Coursework submitted after one week and within two weeks will lose 20% of the mark awarded. Coursework submitted more than two weeks after the due date will be awarded a mark of zero on the assessments concerned. If a student is unable to submit a coursework by the specified date because of extenuating circumstances, s/he may request an extension of up to three weeks (see Section 7.4.3).
6. Review of Course Assessment

    Students are entitled to professional, fair evaluation of their academic work. Should a student have a legitimate reason to believe that there is a need to review his/her examination or coursework mark in a particular course, s/he may submit a petition to the Registration Department within a period of two weeks following the announcement of the results. The request will be transferred to the concerned faculty member to review the assessment and

calculation of marks. The Registration Department will notify the student of the decision. If the student continues to believe that the issue is not resolved, s/he may submit an appeal to the appropriate Faculty Dean who, after reviewing the student's work, will make the final decision on the grade appeal.

17.4.2 Reassessment by Resit/Referral

1. course that has not specified an attendance requirement or minimum mark (see Section 7.2), where an attempt in all components has been made or a deferral granted (see Section 7.4.3). A student can only be granted a deferral without re-registration in any failed course for a maximum period of 2 years, after which time further deferrals can only be granted on the basis of repeating the current version(s) of the failed course(s) with attendance. Where an attempt has not been made or a deferral granted students may be required to withdraw from their course.
2. The resit/referral must normally be carried out by the same combination of written examination, coursework etc. as in the first attempt.
3. If a course is failed, all components with a mark below 40% (or did not achieve a pass for some of years 1 and 2 courses for which grading is non-numeric) must be reassessed; the mark in the other component(s) shall be carried forward and combined with the reassessed component(s). Any course component failed at the first attempt and failed at the second attempt shall carry the higher component mark of the two attempts.
4. Reassessment by resit/referral of a course shall be restricted to one attempt. This must normally be completed within the resit period associated with the academic session in which the course was studied and failed.
5. A student shall not be permitted to be reassessed by resit/referral in any course that has received a pass mark, or in a component that has received a mark of 40% or above. This is applicable to all year 3 courses and years 1 and 2 courses for which grading is numeric.
6. A student shall not be permitted to be reassessed by resit in any course that has been condoned, where applicable (see 8).
7. Any course component failed at the first attempt and failed at the second attempt shall carry the higher component mark of the two attempts. Any course failed at the first attempt and passed at the second attempt shall carry the higher of 40% or the original course mark concerned, unless the original attempt has been nullified by the process notified. This is applicable to all year 3 courses and years 1 and 2 courses for which grading is numeric. Deferred first assessments shall be treated as a first attempt (see Section 17.4.3).
8. A course failed at the resit attempt may be assigned as condoned, where applicable, and receive full credit at the discretion of the Programme Assessment Board subject to the following limitations:

    a) the student shall have attained a minimum overall course mark of 30%. Marks between 29.5 and 30 inclusive shall be regarded as 30% for this purpose;

b) no more than 20 credits may be condoned at level 1 plus no more than 20 credits at levels 2/3 (or above) combined, where applicable, with a maximum of 40 credits overall in any programme of study;

c) the following types of courses may not be condoned: courses required for professional accreditation of any type; courses with a value over 20 credits, and any courses specified within the Programme Specification as ineligible for condonement;

d) condoned courses may not be used as APL;

e) condoned courses may not be repeated or reassessed in any way;

f) condoned courses may not be raised to a pass;

g) the student shall have made an attempt at all components at the relevant assessment period;

h) courses for a top-up stage on any programme, cannot be condoned;

i) any courses failed due to academic misconduct, cannot be condoned;

j) courses at levels 3 or above may not be condoned if by so doing, the student's classification average would be lower than 40%; and

k) the student shall have already passed at least 100 credits from the relevant stage.

9. In the case of part-time students, a decision about whether a failed course will be condoned can be taken at the level they accrue 100 credits, whether or not in the same academic year, provided they are within the overall permitted duration of the programme. Should a student have passed less than 100 credits from the relevant level, as in (8k), but have met all the other criteria in (8), the Programme Assessment Board has the discretion to assign a course failed at the resit attempt as condoned. Exceptionally, should a student have failed only one condonable course at the first attempt, the Assessment Board may condone that course without requiring the student to resit it.

10. A student may choose not to accept a condonement.

17.4.3 Deferrals for Extenuating Circumstances

1. Students who submit work for assessment or who sit an examination are declaring themselves fit to be assessed and no subsequent claim for extenuating circumstances shall normally be accepted.

2. Any student has the right to draw attention to personal extenuating circumstances which seriously impair his/her ability to undertake an assessment, and to request deferral of the assessment. Requests for deferral on grounds of extenuating circumstances may only be made in advance of the submission/assessment date by submitting the appropriate form to the Registration Department, and must be accompanied by verifiable and current third party evidence.

3. Deferred first assessments shall be treated as a first attempt.

4. The deferral procedure is not an appropriate measure in respect of permanent or long-term conditions or situations. Students experiencing special long term difficulties arising from changes in their personal, medical or work circumstances may apply, be advised or be required to interrupt their studies for up to 12 consecutive months by submitting a temporary withdrawal application to the Registration Department. The period of interruption shall be included within the maximum registration period for the award. A student returning from a period of interruption of studies shall be subject to the Regulations that apply to the cohort being joined. Marks obtained up to the point of interruption shall stand.
5. Students who fail to submit work for assessment or attend examinations shall be.

18. List of Full-time Faculty

Name	Degree	Institution	Year	Major/ Specialisation
Abou Hasan, Muner	Ph.D.	Cairo University, Egypt	2019	Pure Mathematics
Abou Hweij, Walid	Ph.D.	The American University of Beirut, Lebanon	2022	Mechanical Engineering
Abu Zaytoon, Mohammad	Ph.D.	University of New Brunswick, NB, Canada	2015	Mathematics
Ahmadian, Sevda	Ph.D.	Girne American University, Cyprus	2018	Management
Ajengui, Alaa	B.A.	Emirates Aviation University, UAE	2019	Aerospace Engineering
Al Ali, Hannah	Ph.D.	Coventry University, UK	2022	Mathematics
Al Halabi, Hassan	MBA	Coventry University, UK	2012	Aviation Management
Altaf, Afaq	Ph.D.	Monash University, Australia	2016	Mechanical Engineering
Ambashe, Mohamud	Ph.D.	University of Bolton, UK	2021	Finance and Accounting
Anna Jacob, Anju	Ph.D.	Vellore Institute of Technology (VIT), India	2019	Band-Gap Engineering in Zinc Oxide & Fabrication of Visible Photodetectors
Arab, Reham	B.Sc.	Emirates Aviation University, UAE	2018	Aeronautical Engineering
Ashbar Ismayil	B.Eng.	Emirates Aviation University, UAE	2021	Aerospace Technology
Baig, Furqan	M.Sc.	NED University of Engineering & Technology, Pakistan	2011	Telecommunications
Canbary, Zara	Ph.D.	Brunel University, UK	2019	Economics
Chafic, Omar	M.Sc.	University of New South Wales, Australia	2007	Aerospace Engineering
Chaturvedi, Nidhi	Ph.D.	Banasthali Vidyapith, India	2020	Management (Marketing)
Chockalingam, Annamalai	Ph.D.	University Sains Malaysia, Malaysia	2016	Management
Dagsa Abong, Manuel	B.Eng.	Central Colleges of Philippines, Philippines	1983	Mechanical Engineering
Daneshkhah, Alireza	Ph.D.	University of Warwick, UK	2003	Artificial Intelligence & Statistics
Essen, Ehsaneh	Ph.D.	Ministry of Science and Technology of Iran	2021	Aerospace Engineering

Name	Degree	Institution	Year	Major/ Specialisation
Fernandes, Shirley	B.Eng.	Dharwad University, India	2000	Electronics & Communication
Hilal, Daoud	Ph.D.	Cranfield University, UK	1994	Software Engineering Methodologies
Ioannou, Crystal	Ph.D.	University of New South Wales, Australia	2011	Human Factors & Systems Safety
Jahwash, Muneer	Ph.D.	Luleå University of Technology, Sweden	2023	Industrial Marketing
Kamil, Mostafa	Ph.D.	Yuan Ze University, Taiwan	2015	Communications Engineering
Kamran, Rukshanda	Ph.D.	University Malaysia Sarawak (UNIMAS), Malaysia	2022	High-Performance Computing & Cloud Computing
Kaur Phull, Disha	Ph.D.	Vellore Institute of Technology (VIT), India	2020	Computer Science
Khateeb, Mohammed	M.Sc.	University of Liège, Belgium	2021	Aerospace Engineering
Lad, Ronak	MBA	University of Luton, UK	2004	International Business
Lakshmana Kumar	B.Eng.	Institute of Engineers, Kolkatta, India	1990	Mechanical Engineering
Machmouchi, Hicham	Ph.D.	The University of Birmingham, UK	1994	Mechanical Engineering
Mgonja, Thomas	Ph.D.	Utah State University, USA	2021	Curriculum & Instruction
Mirchandani, Anita	Ph.D.	Mohanlal Sukhadia University, India	1999	Commerce
Mohammed, Ahlam	Ph.D.	Girne American University, Cyprus	2017	Business Management
Mohsen, Baha	Ph.D.	Wayne State University,USA	2024	Industrial Engineering
Mukandavire, Zindoga	Ph.D.	National University of Science and Technology, Zimbabwe	2007	Applied Mathematics
Nasser, Mawada	B.Sc.	Emirates Aviation University, UAE	2018	Aeronautical Engineering
Neelakandan, Deepudev	Ph.D.	National Institute of Technology Tiruchirappalli (NIT-T), India	2021	Machine Learning & Air Traffic Flow Management
Omar, Tarek	MBA	Emirates Aviation University, UAE	2020	General Management

Name	Degree	Institution	Year	Major/ Specialisation
Pantelaki, Evangelia	Ph.D.	University of Insubria, Italy	2021	Transport Economics
Ranclaud, Elif	MA	The University of Sydney, Australia	2005	Applied Linguistics
Rasheed, Zainab	Ph.D.	University of Liverpool, UK	2022	Higher Education
Rashid, Nashmia	MBA	Emirates Aviation University, UAE	2017	Logistics & Supply Chain Management
Shepherd, Blessy	Ph.D.	Vellore Institute of Technology, India	2019	Computer Science
Sidhik, Aboobacker	MBA	Emirates Aviation University, UAE	2022	General Management
Soliby, Rfaat Moner	Ph.D.	UTHM University, Malaysia	2023	Applied Mathematics
Souzan Sarraj	B.Eng.	Ajman University, UAE	2020	Electrical Engineering/Communication
Svoboda, Petr	Ph.D.	University of Economics in Prague, Czechia	2018	Economics & Management
Thomas, Toms	M.Sc.	Embry Riddle Aeronautical University, USA	2012	Aerospace Engineering
Thomson, Roderick	MA	University of Oxford, UK	1982	Engineering Science
Tolouei, Elham	Ph.D.	Monash University, Australia	2012	Mechanical Engineering
Uzair Attique	B.Eng	Ajman University, UAE	2015	Electrical Engineering/Instrumentation & Control
Yesodharan, Ajit	M.Sc.	Rochester institute of Technology, USA	2015	Mechanical Engineering
Zuhair, Mhd	B.Eng	Britans Air University Scotland, UK	1965	Aircraft Maintenance Engineering

19. EAU Staff Directory

The full EAU staff directory is also available and updated regularly on the EAU website.

Name	Designation	Direct Number	Email
Office of Vice - Chancellor			
Professor Dr Ahmad Al Ali	Vice-Chancellor	+971 4 6050102	tabarek.ayad@emirates.com
Tabarak AL Qaderi	Administration Officer – Vice-Chancellor`s Office	+971 4 6050102	tabarek.ayad@emirates.com
Robert Johnson	Board Secretary	+971 4 6050119	robert.johnson@emirates.com
Faculty of Business Management			
Professor Zindoga Mukandavire	Acting Dean- Faculty of Business Management	+971 4 6050189	zindoga.mukandavire@emirates.com
Dr Ahlam Al-Zoubi	Head of Department	+971 4 6050178	ahlam.alzoubi@eau.ac.ae
Prof. Dr Kaitano Dube	Visiting Professor	+971 4 6050184	kaitano.dube@eau.ac.ae
Dr Nidhi Chaturvedi	Programme Coordinator	+971 4 6050185	nidhi.chaturvedi@emirates.com
Dr Zara Canbary	Senior Lecturer	+971 4 6050260	zara.canbary@emirates.com
Dr Evangelia Pantelaki	Senior Lecturer	+971 4 6050177	evangelia.pantelaki@emirates.com
Dr Wasim Ahmad	Assistant Professor	+971 4 6050169	wasim.ahmad@eau.ac.ae
Dr Sevda Ahmadian	Assistant Professor	+971 4 6050121	sevda.ahmadian@eau.ac.ae
Dr Crystal Ioannou	Assistant Professor	+971 4 6050171	crystal.loannou@eau.ac.ae
Dr Annamalai Chockalingam	Assistant Professor	+971 4 6050177	Annamalai.Chockalingam@eau.ac.ae
Ronak J Lad	Senior Lecturer	+971 4 6050126	ronak.lad@emirates.com
Elif Ranclaud	Senior Lecturer	+971 4 6050163	elif.ranclaud@emirates.com
Veena Vinod	Course Support Coordinator	+971 4 6050145	veenavinod.chelat@emirates.com
Calvin Antony Castelino	Teaching Assistant	+971 4 6050255	calvin.castelino@eau.ac.ae
Dr Baha Mohsen	Assistant Professor	+971 4 6050145	S612689@eau.ac.ae
Dr Petr Svoboda	Assistant Professor	+971 4 6050145	EAUS470@eau.ac.ae
Dr Muneer Jahwash	Senior Lecturer	+971 4 6050145	EAUS422@eau.ac.ae
Mohamud Ambashe	Lecturer	+971 4 6050145	mohamud.ambashe@eau.ac.ae
Faculty of Mathematics and Data Science			
Dr Hannah Al Ali	Dean – Faculty of Mathematics and Data Science	+971 4 6050199	hannah.alali@emirates.com
Dr Mostafa Kamil	Programme Coordinator	+971 4 6050175	mostafa.abdulhusain@emirates.com
Dr Alireza Daneshkhah	Associate Professor	+971 4 6050181	alireza.daneshkhah@emirates.com
Dr Blessy Trencia Lincy Simon Shepherd	Assistant Professor	+971 4 6050172	blessytrencialincy.simonshepherd@emirates.com
Dr Deepudev Neelakandan	Assistant Professor	+971 4 6050154	EAUS417@eau.ac.ae
Dr Muner Abou Hasan	Assistant Professor	+971 4 6050198	EAUS419@eau.ac.ae
Dr Rfaat Soliby	Assistant Professor	+971 4 6050197	rfaat.soliby@eau.ac.ae
Dr Mohammad Abu Zaytoon	Assistant Professor	+971 4 6050146	Mohammadsaleh.Abuzaytoon@eau.ac.ae
Dr Rukshanda Kamran	Assistant Professor	+971 4 6050271	rukshanda.kamran@eau.ac.ae

Name	Designation	Direct Number	Email
Dr Zainab Rasheed	Assistant Professor	+971 4 6050196	zainab.rasheed@eau.ac.ae
Abeesh Pushpangadan	Course Support Coordinator	+971 4 6050143	abeesh.pushpangadan@emirates.com
Mawada Nasser	Research/Teaching Assistant	+971 4 6050152	mawada.nasser@eau.ac.ae
Reham Arab	Research/Teaching Assistant	+971 4 6050152	riham.arab@emirates.com
Dr Rukshanda Kamran	Assistant Professor	+971 4 6050143	EAUS328@eau.ac.ae
Dr Zainab Rasheed	Assistant Professor	+971 4 6050143	EAUS454@eau.ac.ae
Dr Thomas Mgonja	Assistant Professor	+971 4 6050143	S611915@eau.ac.ae
Aboobacker Sidhik	Lecturer	+971 4 6050202	aboobacker.sidhik@emirates.com
Dr Bakhtawar Baluch	Assistant Professor	+971 4 6050143	EAUS478@eau.ac.ae
Mahmoud Saed Alkhouli	Lecturer	+971 4 6050143	EAUS477@eau.ac.ae
Hanan Hussain	Lecturer	+971 4 6050143	EAUS471@eau.ac.ae
Institute Of Applied Research & Technology			
Prof Zindoga Mukandavire	Director of Research	+971 4 6050189	zindoga.mukandavire@emirates.com
Dr Daoud Hilal	Dean of Postgraduate Studies	+971 4 6050111	daoud.kassem@emirates.com
Dr Deepudev Neelakandan	Assistant Professor in Data Science	+971 4 6050154	deepu.dev@eau.ac.ae
Sumayya Ali Abdul Rehman	Admin Support	+971 4 6050112	sumeyya.rehman@eau.ac.ae
Faculty of Engineering			
Prof Hicham Machmouchi	Dean-EAU Faculty of Engineering	+971 4 6050187	hicham.machmouchi@emirates.com
Dr Elham Tolouei	Programme Coordinator	+971 4 6050182	elham.tolouei@eau.ac.ae
Ajit Yesodharan	Programme Coordinator	+971 4 6050180	ajit.yesodharan@emirates.com
Dr Anju Anna Jacob	Assistant Professor	+971 4 6050248	Anju.Jacob@eau.ac.ae
Dr Walid Abou Hweij	Assistant Professor	+971 4 6050161	walid.abou@eau.ac.ae
Lakshmana Kumar	Instructor / AME Quality Manager	+971 4 6050129	EAUS441@eau.ac.ae
Manuel Abong	Lecturer/AMEL Examiner	+971 4 6050114	EAUS389@eau.ac.ae
Toms Thomas	Instructor	+971 4 6050148	toms.thomas@eau.ac.ae
Shirley Fernandes	Instructor	+971 4 6050179	shirley.fernandes@eau.ac.ae
Tarek Omar	Lecturer	+971 4 6050243	tarek.omar@emirates.com
Mohammad Khateeb	Instructor	+971 4 6050118	mohammed.khateeb@eau.ac.ae
Ala Eddine Ajengui	Instructor	+971 4 6050242	alaeddine.ajengui@emirates.com
Uzair Attique	Lab Assistant	+971 4 6050245	EAUS430@eau.ac.ae
Ashbar Ismayil	Lab Assistant	+971 4 6050241	ashbar.ismayil@eau.ac.ae
Souzan Sarraj	Lab Assistant	+971 4 6050245	souzan.sarraj@eau.ac.ae
Sarita Fernandes	Course Support Coordinator	+971 4 6050113	sarita.fernandes@emirates.com
Aya Shehadeh	Course Support Coordinator	+971 4 6050158	aya.shehadeh@emirates.com
Dr Crystal Ioannou	Part Time Lecturer	+971 4 6050171	crystal.ioannou@eau.ac.ae
Dr Mohammad Al Akhras	Part Time Lecturer	+971 4 6050113	EAUS306@eau.ac.ae

Name	Designation	Direct Number	Email
Mohamed Zouhir Bazou	Lecturer	+971 4 6050113	EAUS259@eau.ac.ae
Yasmine Morhebi	Part Time Instructor	+971 4 6050113	EAUS099@eau.ac.ae
Nour Ahmad Yousef Qinawi	Part Time Instructor	+971 4 6050113	EAUS325@eau.ac.ae
Dr Afaq Altaf	Assistant Professor	+971 4 6050113	EAUS467@eau.ac.ae
Dr Ehsaneh Essen	Assistant Professor	+971 4 6050113	EAUS476@eau.ac.ae
Hassan Al Halabi	Lecturer	+971 4 6050113	hassan.alhalabi@eau.ac.ae
Furqan Baig	Lecturer	+971 4 6050113	EAUS479@eau.ac.ae
Nivin AlHaji	Part Time Instructor	+971 4 6050113	EAUS472@eau.ac.ae
Mohammad Jawad Khalaji	Lab Assistant	+971 4 6050113	EAUS474@eau.ac.ae
Mohammad Khayatzadeh	Lab Assistant	+971 4 6050113	EAUS473@eau.ac.ae
Admissions & Registration			
Omar Chafic	Head of Admissions & Registration	+971 4 6050188	omar.chafic@emirates.com
Shereen Afana	Registration Manager	+971 4 6050104	shereen.afana@emirates.com
Faten Jadaan	Admissions Officer	+971 4 6050131	eau.admissions@emirates.com
Hiba Barada	Admissions Officer	+971 4 6050176	eau.admissions@emirates.com
Sanaa Tibary	Admissions Officer	+971 4 6050117	eau.admissions@emirates.com
Levi Matthysen	Admissions Officer	+971 4 6050127	eau.admissions@emirates.com
Rawan Selim	Admissions Coordinator	+971 4 6050122	eau.admissions@emirates.com
Israa Said	Admissions Coordinator	+971 4 6050153	eau.admissions@emirates.com
Fariba Afshoon	Registration Coordinator	+971 4 6050142	registration@eau.ac.ae
Suhair Ahmed	Registration Coordinator	+9714 6050156	registration@eau.ac.ae
Diaa Alkabbani	Registration Coordinator	+9714 6050203	registration@eau.ac.ae
Shobana Regurajan	Admin Assistant	+971 4 6050132	registration@eau.ac.ae
Business Development			
Maha Abdullah Hmeid	Business Development Manager	+971 4 6050123	maha.hmeid@emirates.com
Lama Saleh	Alumni and Career Services Controller	+971 4 6050120	lama.saleh@emirates.com
Chinedu Okafor	Social Media Assistant	+971 4 6050165	EAUS428@eau.ac.ae
Institutional Effectiveness Unit (IEU)			
Hend H Al Marzouqi	IEU Manager	+971 4 6050157	hend.almarzouqi@emirates.com
Hadeel Ahmed	IEU Administrator	+971 4 6050147	hadeel.khalaf@emirates.com
Kassem Hilal	IEU Administrator	+971 4 6050130	kassem.hilal@eau.ac.ae
Finance & Accounts			
Aliasgar Gohar	Finance Manager	+971 4 6050137	aliasgar.gohar@emirates.com
Abhayad Patwardhan	Finance Officer	+971 4 6050136	eau.finance@emirates.com
Maria Tresea	Accountant	+971 4 6050150	eau.finance@emirates.com
Mustapha Chafic	Admin Assistant	+971 4 6050155	eau.finance@emirates.com

Name	Designation	Direct Number	Email
Library			
Kavitha Krishnan Unni	LRC Controller	+971 4 6050139	kavitha.satish@emirates.com
Student Visa & Accommodation Services			
Hilda John Dewan	Student Services Officer	+971 4 6050103	hilda.dewan@emirates.com
Sports & Student Services Office			
Anna El Guindi	Student Services Officer	+971 4 6050174	sso@eau.ac.ae
IT Services			
Aboobacker Sidhik	Business Systems Officer	+971 4 6050202	aboobacker.sidhik@emirates.com
Amr Mohamed	Business Systems Officer	+971 4 6050205	amr.mohamed@emirates.com

Appendix A: Curricula

Curriculum of the BEng – Aerospace Technology

For graduation, a student is required to successfully complete a total of 1830 Guided Learning Hours (GLH). The breakdown is as follows:

General Education Courses	270 GLH
Engineering Courses (Compulsory)	435 GLH
Engineering Courses (Electives)	240 GLH
Business Courses (Compulsory)	105 GLH
Major Courses (Compulsory)	660 GLH
Major Courses (Electives)	120 GLH

Course		Semester	GLH/ Week	Prerequisites	Total GLH
Code	**Title**				
General Education Courses					**270**
BEngGE1000	English I	1	3		
BEngGE1010	Introduction to IT	2	3		
BEngGE1020	Islamic Culture	3	3		
BEngGE1030	Environmental Science	4	3		
BEngGE1040	Innovation and Entrepreneurship	6	3		
BEngGE1050	Cross Culture Studies	6	3		
Engineering Courses					**675**
Compulsory					435
BEMath1000	Analytical Methods for Engineers	1	3		
BEMath1010	Further Analytical Methods for Engineers	3	3		
BEMath1020	Advanced Mathematics	5	3	BEMath1010	
BECore1000	Engineering Science	1	4		
BECore1020	Electrical Electronic and Digital Principles	1	4		
BECore1070	Engineering Design	6	4		
BECore1085	Industrial Training	7-8	4	Completion of 1350 GLH	
BECore1090	Control & Instrumentation	7	4		
Electives					240
BEAero1000	Aircraft Workshop Principles And Practice	2	4		
BEAero1010	Engineering Thermodynamics	2	4		
BEAero1030	Strengths of Materials	5	4	BECore1000	
BEAero1050	Materials Engineering	2	4		
BEAvio1040	Electrical and Electronic Principles	5	4	BECore1020	
BEMech1000	Mechanical Principles	3	4		
BEMech1010	Health, Safety and Risk Assessment in Engineering	4	4		

Business Courses (Compulsory)					**105**
BECore1030	Business Management Techniques For Engineers	4	3		
BECore1100	Project Management	8	4	BECore1030	
Major Courses					**780**
Compulsory					660
BEAero1020	Aerodynamic Principles and Aircraft Stability and Performance	5	4	BECore1040	
BEAero1040	Aircraft Propulsion Technology	5	4		
BEAero1070	Aerospace Industrial Studies	8	4		
BECore1010	Construction and Operation Of Aircraft Fluid Systems	3	4		
BECore1040	Aerodynamic Principles and Aircraft Design	4	4		
BECore1050	Aircraft Systems Principles and Applications	3	4		
BECore1080	Project Design, Implementation and Evaluation	5-6	8	Completion of 900 GLH	
BECore1110	Individual Project	8	4	Completion of 1350 GLH	
BECore1120	Aerospace Technology II	7	4		
BECore1130	Aerospace Applications	7	4	Completion of 1350 GLH	
Electives					120
BEAero1060	Aircraft Gas Turbine Science	6	4	BEAero1010	
BEAvio1020	Automatic Flight Control Systems	5	4	BEAvio1030	
BEAvio1030	Integrated Flight Instrument Systems	2	4		
BECore1060	Aircraft Communication and Navigation Systems	4	4		

Curriculum of the BEng – Avionics Technology

For graduation, a student is required to successfully complete a total of 1830 Guided Learning Hours (GLH). The breakdown is as follows:

General Education Courses	270 GLH
Engineering Courses (Compulsory)	435 GLH
Engineering Courses (Electives)	240 GLH
Business Courses (Compulsory)	105 GLH
Major Courses (Compulsory)	780 GLH

Course		Semester	GLH/ Week	Prerequisites	Total GLH
Code	**Title**				
General Education Courses					**270**
BEngGE1000	English I	1	3		
BEngGE1010	Introduction to IT	2	3		
BEngGE1020	Islamic Culture	3	3		
BEngGE1030	Environmental Science	4	3		
BEngGE1040	Innovation and Entrepreneurship	6	3		
BEngGE1050	Cross Culture Studies	6	3		
Engineering Courses					**675**
Compulsory					435
BEMath1000	Analytical Methods for Engineers	1	3		
BEMath1010	Further Analytical Methods for Engineers	3	3		
BEMath1020	Advanced Mathematics	5	3	BEMath1010	
BECore1000	Engineering Science	1	4		
BECore1020	Electrical Electronic and Digital Principles	1	4		
BECore1070	Engineering Design	6	4		
BECore1085	Industrial Training	7-8	4	Completion of 1350 GLH	
BECore1090	Control & Instrumentation	7	4		
Electives					240
BEAero1020	Aerodynamic Principles and Aircraft Stability and Performance	5	4	BECore1040	
BEAero1040	Aircraft Propulsion Technology	5	4		
BEAero1050	Materials Engineering	2	4		
BEMech1010	Health, Safety and Risk Assessment in Engineering	4	4		
BEMech1030	Computer-aided Design and Manufacture	5	4		
BECore1010	Construction and Operation Of Aircraft Fluid Systems	3	4		
BECore1040	Aerodynamic Principles and Aircraft Design	4	4		

BECore1120	Aerospace Technology II	7	4		
Business Courses (Compulsory)					**105**
BECore1030	Business Management Techniques For Engineers	4	3		
BECore1100	Project Management	8	4	BECore1030	
Major Courses (Compulsory)					**780**
BEAvio1000	Electronic Principles	2	4	BECore1020	
BEAvio1010	Combinational and Sequential Logic	2	4	BECore1020	
BEAvio1020	Automatic Flight Control Systems	5	4	BEAvio1030	
BEAvio1030	Integrated Flight Instrument Systems	2	4		
BEAvio1040	Electrical and Electronic Principles	5	4	BECore1020	
BEAvio1050	Digital and Analogue Devices and Circuits	4	4	BEAvio1010	
BEAvio1060	Avionics systems II	8	4		
BECore1050	Aircraft Systems Principles and Applications	3	4		
BECore1060	Aircraft Communication and Navigation Systems	4	4		
BECore1080	Project Design, Implementation and Evaluation	5-6	8	Completion of 900 GLH	
BECore1110	Individual Project	8	4	Completion of 1350 GLH	
BECore1130	Aerospace Applications	7	4	Completion of 1350 GLH	

Curriculum of the BEng – Mechanical Engineering

For graduation, a student is required to successfully complete a total of 1830 Guided Learning Hours (GLH). The breakdown is as follows:

General Education Courses	270 GLH
Engineering Courses (Compulsory)	495 GLH
Engineering Courses (Electives)	180 GLH
Business Courses (Compulsory)	105 GLH
Major Courses (Compulsory)	540 GLH
Major Courses (Electives)	240 GLH

Course		Semester	GLH/ Week	Prerequisites	Total GLH
Code	**Title**				
General Education Courses					**270**
BEngGE1000	English I	1	3		
BEngGE1010	Introduction to IT	2	3		
BEngGE1020	Islamic Culture	3	3		
BEngGE1030	Environmental Science	4	3		
BEngGE1040	Innovation and Entrepreneurship	6	3		
BEngGE1050	Cross Culture Studies	6	3		
Engineering Courses					**675**
Compulsory					495
BEMath1000	Analytical Methods for Engineers	1	3		
BEMath1010	Further Analytical Methods for Engineers	3	3		
BEMath1020	Advanced Mathematics	5	3	BEMath1010	
BEAero1010	Engineering Thermodynamics	2	4		
BEAero1030	Strengths of Materials	5	4	BECore1000	
BECore1000	Engineering Science	1	4		
BECore1020	Electrical Electronic and Digital Principles	1	4		
BECore1070	Engineering Design	6	4		
BECore1085	Industrial Training	7-8	4	Completion of 1350 GLH	
Electives					180
BEAvio1040	Electrical and Electronic Principles	5	4	BECore1020	
BEMech1055	Mechanical Workshop Practices	2	4		
BECore1050	Aircraft Systems Principles and Applications	3	4		
BECore1090	Control & Instrumentation	7	4		
Business Courses (Compulsory)					**105**
BECore1030	Business Management Techniques For Engineers	4	3		

BECore1100	Project Management	8	4	BECore1030	
Major Courses					**780**
Compulsory					540
BEMech1000	Mechanical Principles	3	4		
BEMech1020	Fluid Mechanics	3	4		
BEMech1030	Computer-aided Design and Manufacture	5	4		
BEMech1050	Application of Machine Tools	5	4		
BEMech1060	Mechanical Industry and Professional Studies	8	4		
BEMech1070	Mechanical Applications	7	4	Completion of 1350 GLH	
BECore1080	Project Design, Implementation and Evaluation	5-6	8	Completion of 900 GLH	
BECore1110	Individual Project	8	4	Completion of 1350 GLH	
Electives					240
BEAero1050	Materials Engineering	2	4		
BEMech1010	Health, Safety and Risk Assessment in Engineering	4	4		
BEMech1040	Manufacturing Process	5	4		
BEMech1080	Mechanical Systems Modelling	7	4	BEMech1020	
BECore1040	Aerodynamic Principles and Aircraft Design	4	4		
BECore1060	Aircraft Communication and Navigation Systems	4	4		
BECore1140	Total Quality Management	7	4	BECore1030	

Curriculum of the Advanced Diploma – Aerospace Technology

For graduation, a student is required to successfully complete a total of 1350 Guided Learning Hours (GLH). The breakdown is as follows:

General Education Courses	270 GLH
Engineering Courses (Compulsory)	315 GLH
Engineering Courses (Electives)	240 GLH
Business Courses (Compulsory)	045 GLH
Major Courses (Compulsory)	420 GLH
Major Courses (Electives)	060 GLH

Course		Semester	GLH/ Week	Prerequisites	Total GLH
Code	**Title**				
General Education Courses					**270**
BEngGE1000	English I	1	3		
BEngGE1010	Introduction to IT	2	3		
BEngGE1020	Islamic Culture	3	3		
BEngGE1030	Environmental Science	4	3		
BEngGE1040	Innovation and Entrepreneurship	6	3		
BEngGE1050	Cross Culture Studies	6	3		
Engineering Courses					**555**
Compulsory					315
BEMath1000	Analytical Methods for Engineers	1	3		
BEMath1010	Further Analytical Methods for Engineers	3	3		
BEMath1020	Advanced Mathematics	5	3	BEMath1010	
BECore1000	Engineering Science	1	4		
BECore1020	Electrical Electronic and Digital Principles	1	4		
BECore1070	Engineering Design	6	4		
Electives					240
BEAero1000	Aircraft Workshop Principles And Practice	2	4		
BEAero1010	Engineering Thermodynamics	2	4		
BEAero1030	Strengths of Materials	5	4	BECore1000	
BEAero1050	Materials Engineering	2	4		
BEAvio1040	Electrical and Electronic Principles	5	4	BECore1020	
BEMech1000	Mechanical Principles	3	4		
BEMech1010	Health, Safety and Risk Assessment in Engineering	4	4		
Business Courses (Compulsory)					**45**
BECore1030	Business Management Techniques For Engineers	4	3		

Major Courses					**480**
Compulsory					420
BEAero1020	Aerodynamic Principles and Aircraft Stability and Performance	5	4	BECore1040	
BEAero1040	Aircraft Propulsion Technology	5	4		
BECore1010	Construction and Operation Of Aircraft Fluid Systems	3	4		
BECore1040	Aerodynamic Principles and Aircraft Design	4	4		
BECore1050	Aircraft Systems Principles and Applications	3	4		
BECore1080	Project Design, Implementation and Evaluation	5-6	8	Completion of 900 GLH	
Electives					60
BEAero1060	Aircraft Gas Turbine Science	6	4	BEAero1010	
BEAvio1020	Automatic Flight Control Systems	5	4	BEAvio1030	
BEAvio1030	Integrated Flight Instrument Systems	2	4		
BECore1060	Aircraft Communication and Navigation Systems	4	4		

Curriculum of the Advanced Diploma – Avionics Technology

For graduation, a student is required to successfully complete a total of 1350 Guided Learning Hours (GLH). The breakdown is as follows:

General Education Courses	270 GLH
Engineering Courses (Compulsory)	315 GLH
Engineering Courses (Electives)	240 GLH
Business Courses (Compulsory)	045 GLH
Major Courses (Compulsory)	420 GLH
Major Courses (Electives)	060 GLH

Course		Semester	GLH/ Week	Prerequisites	Total GLH
Code	**Title**				
General Education Courses					**270**
BEngGE1000	English I	1	3		
BEngGE1010	Introduction to IT	2	3		
BEngGE1020	Islamic Culture	3	3		
BEngGE1030	Environmental Science	4	3		
BEngGE1040	Innovation and Entrepreneurship	6	3		
BEngGE1050	Cross Culture Studies	6	3		
Engineering Courses					**555**
Compulsory					315
BEMath1000	Analytical Methods for Engineers	1	3		
BEMath1010	Further Analytical Methods for Engineers	3	3		
BEMath1020	Advanced Mathematics	5	3	BEMath1010	
BECore1000	Engineering Science	1	4		
BECore1020	Electrical Electronic and Digital Principles	1	4		
BECore1070	Engineering Design	6	4		
Electives					240
BEAero1020	Aerodynamic Principles and Aircraft Stability and Performance	5	4	BECore1040	
BEAero1040	Aircraft Propulsion Technology	5	4		
BEAero1050	Materials Engineering	2	4		
BEMech1010	Health, Safety and Risk Assessment in Engineering	4	4		
BEMech1030	Computer-aided Design and Manufacture	5	4		
BECore1010	Construction and Operation Of Aircraft Fluid Systems	3	4		
BECore1040	Aerodynamic Principles and Aircraft Design	4	4		
Business Courses (Compulsory)					**45**

BECore1030	Business Management Techniques For Engineers	4	3		
Major Courses (Compulsory)					**480**
Compulsory					420
BEAvio1000	Electronic Principles	2	4	BECore1020	
BEAvio1010	Combinational and Sequential Logic	2	4	BECore1020	
BEAvio1030	Integrated Flight Instrument Systems	2	4		
BECore1050	Aircraft Systems Principles and Applications	3	4		
BECore1060	Aircraft Communication and Navigation Systems	4	4		
BECore1080	Project Design, Implementation and Evaluation	5-6	8	Completion of 900 GLH	
Electives					60
BEAvio1020	Automatic Flight Control Systems	5	4	BEAvio1030	
BEAvio1040	Electrical and Electronic Principles	5	4	BECore1020	
BEAvio1050	Digital and Analogue Devices and Circuits	4	4	BEAvio1010	

Curriculum of the Advanced Diploma – Mechanical Engineering

For graduation, a student is required to successfully complete a total of 1350 Guided Learning Hours (GLH). The breakdown is as follows:

General Education Courses	270 GLH
Engineering Courses (Compulsory)	435 GLH
Engineering Courses (Electives)	120 GLH
Business Courses (Compulsory)	045 GLH
Major Courses (Compulsory)	360 GLH
Major Courses (Electives)	120 GLH

Course		Semester	GLH/ Week	Prerequisites	Total GLH
Code	**Title**				
General Education Courses					**270**
BEngGE1000	English I	1	3		
BEngGE1010	Introduction to IT	2	3		
BEngGE1020	Islamic Culture	3	3		
BEngGE1030	Environmental Science	4	3		
BEngGE1040	Innovation and Entrepreneurship	6	3		
BEngGE1050	Cross Culture Studies	6	3		
Engineering Courses					**555**
Compulsory					435
BEMath1000	Analytical Methods for Engineers	1	3		
BEMath1010	Further Analytical Methods for Engineers	3	3		
BEMath1020	Advanced Mathematics	5	3	BEMath1010	
BEAero1010	Engineering Thermodynamics	2	4		
BEAero1030	Strengths of Materials	5	4	BECore1000	
BECore1000	Engineering Science	1	4		
BECore1020	Electrical Electronic and Digital Principles	1	4		
BECore1070	Engineering Design	6	4		
Electives					120
BEAvio1040	Electrical and Electronic Principles	5	4	BECore1020	
BEMech1055	Mechanical Workshop Practices	2	4		
BECore1050	Aircraft Systems Principles and Applications	3	4		
Business Courses (Compulsory)					**45**
BECore1030	Business Management Techniques For Engineers	4	3		
Major Courses					**480**
Compulsory					360

BEMech1000	Mechanical Principles	3	4		
BEMech1020	Fluid Mechanics	3	4		
BEMech1030	Computer-aided Design and Manufacture	5	4		
BEMech1050	Application of Machine Tools	5	4		
BECore1080	Project Design, Implementation and Evaluation	5-6	8	Completion of 900 GLH	
Electives					120
BEAero1050	Materials Engineering	2	4		
BEMech1010	Health, Safety and Risk Assessment in Engineering	4	4		
BEMech1040	Manufacturing Process	5	4		
BECore1040	Aerodynamic Principles and Aircraft Design	4	4		
BECore1060	Aircraft Communication and Navigation Systems	4	4		

Curriculum of the Diploma – Aerospace Technology

For graduation, a student is required to successfully complete a total of 930 Guided Learning Hours (GLH). The breakdown is as follows:

General Education Courses	180 GLH
Engineering Courses (Compulsory)	210 GLH
Engineering Courses (Electives)	240 GLH
Major Courses (Compulsory)	240 GLH
Major Courses (Electives)	060 GLH

Course		Semester	GLH/ Week	Prerequisites	Total GLH
Code	**Title**				
General Education Courses					**180**
Compulsory					135
BEngGE1000	English I	1	3		
BEngGE1010	Introduction to IT	2	3		
BEngGE1020	Islamic Culture	3	3		
Electives					45
BEngGE1030	Environmental Science	4	3		
BEngGE1040	Innovation and Entrepreneurship	6	3		
BEngGE1050	Cross Culture Studies	6	3		
Engineering Courses					**450**
Compulsory					210
BEMath1000	Analytical Methods for Engineers	1	3		
BEMath1010	Further Analytical Methods for Engineers	3	3		
BECore1000	Engineering Science	1	4		
BECore1020	Electrical Electronic and Digital Principles	1	4		
Electives					240
BEAero1000	Aircraft Workshop Principles And Practice	2	4		
BEAero1010	Engineering Thermodynamics	2	4		
BEAero1030	Strengths of Materials	5	4	BECore1000	
BEAero1050	Materials Engineering	2	4		
BEAvio1040	Electrical and Electronic Principles	5	4	BECore1020	
BEMech1000	Mechanical Principles	3	4		
BEMech1010	Health, Safety and Risk Assessment in Engineering	4	4		
BECore1070	Engineering Design	6	4		
Major Courses					**300**
Compulsory					240

BECore1010	Construction and Operation Of Aircraft Fluid Systems	3	4		
BECore1040	Aerodynamic Principles and Aircraft Design	4	4		
BECore1050	Aircraft Systems Principles and Applications	3	4		
BECore1060	Aircraft Communication and Navigation Systems	4	4		
Electives					60
BEAero1020	Aerodynamic Principles and Aircraft Stability and Performance	5	4	BECore1040	
BEAero1040	Aircraft Propulsion Technology	5	4		
BEAero1060	Aircraft Gas Turbine Science	6	4	BEAero1010	
BEAvio1020	Automatic Flight Control Systems	5	4	BEAvio1030	
BEAvio1030	Integrated Flight Instrument Systems	2	4		

Curriculum of the Diploma – Avionics Technology

For graduation, a student is required to successfully complete a total of 930 Guided Learning Hours (GLH). The breakdown is as follows:

General Education Courses	180 GLH
Engineering Courses (Compulsory)	210 GLH
Engineering Courses (Electives)	180 GLH
Major Courses (Compulsory)	300 GLH
Major Courses (Electives)	060 GLH

Course		Semester	GLH/ Week	Prerequisites	Total GLH
Code	**Title**				
General Education Courses					**180**
Compulsory					135
BEngGE1000	English I	1	3		
BEngGE1010	Introduction to IT	2	3		
BEngGE1020	Islamic Culture	3	3		
Electives					45
BEngGE1030	Environmental Science	4	3		
BEngGE1040	Innovation and Entrepreneurship	6	3		
BEngGE1050	Cross Culture Studies	6	3		
Engineering Courses					**390**
Compulsory					210
BEMath1000	Analytical Methods for Engineers	1	3		
BEMath1010	Further Analytical Methods for Engineers	3	3		
BECore1000	Engineering Science	1	4		
BECore1020	Electrical Electronic and Digital Principles	1	4		
Electives					180
BEAero1020	Aerodynamic Principles and Aircraft Stability and Performance	5	4	BECore1040	
BEAero1040	Aircraft Propulsion Technology	5	4		
BEAero1050	Materials Engineering	2	4		
BEMech1010	Health, Safety and Risk Assessment in Engineering	4	4		
BEMech1030	Computer-aided Design and Manufacture	5	4		
BECore1010	Construction and Operation Of Aircraft Fluid Systems	3	4		
BECore1040	Aerodynamic Principles and Aircraft Design	4	4		
Major Courses (Compulsory)					**360**
Compulsory					300

BEAvio1000	Electronic Principles	2	4	BECore1020	
BEAvio1010	Combinational and Sequential Logic	2	4	BECore1020	
BEAvio1030	Integrated Flight Instrument Systems	2	4		
BECore1050	Aircraft Systems Principles and Applications	3	4		
BECore1060	Aircraft Communication and Navigation Systems	4	4		
Electives					60
BEAvio1020	Automatic Flight Control Systems	5	4	BEAvio1030	
BEAvio1040	Electrical and Electronic Principles	5	4	BECore1020	
BEAvio1050	Digital and Analogue Devices and Circuits	4	4	BEAvio1010	

Curriculum of the Diploma – Mechanical Engineering

For graduation, a student is required to successfully complete a total of 930 Guided Learning Hours (GLH). The breakdown is as follows:

General Education Courses	180 GLH
Engineering Courses (Compulsory)	330 GLH
Engineering Courses (Electives)	120 GLH
Major Courses (Compulsory)	120 GLH
Major Courses (Electives)	180 GLH

Course		Semester	GLH/ Week	Prerequisites	Total GLH
Code	**Title**				
General Education Courses					**180**
Compulsory					135
BEngGE1000	English I	1	3		
BEngGE1010	Introduction to IT	2	3		
BEngGE1020	Islamic Culture	3	3		
Electives					45
BEngGE1030	Environmental Science	4	3		
BEngGE1040	Innovation and Entrepreneurship	6	3		
BEngGE1050	Cross Culture Studies	6	3		
Engineering Courses					**450**
Compulsory					330
BEMath1000	Analytical Methods for Engineers	1	3		
BEMath1010	Further Analytical Methods for Engineers	3	3		
BEAero1010	Engineering Thermodynamics	2	4		
BECore1000	Engineering Science	1	4		
BECore1020	Electrical Electronic and Digital Principles	1	4		
Electives					120
BEAvio1040	Electrical and Electronic Principles	5	4	BECore1020	
BEMech1055	Mechanical Workshop Practices	2	4		
BECore1050	Aircraft Systems Principles and Applications	3	4		
BECore1070	Engineering Design	6	4		
Major Courses					**300**
Compulsory					120
BEMech1000	Mechanical Principles	3	4		
BEMech1020	Fluid Mechanics	3	4		
Electives					180
BEAero1050	Materials Engineering	2	4		

BEMech1010	Health, Safety and Risk Assessment in Engineering	4	4		
BEMech1030	Computer-aided Design and Manufacture	5	4		
BEMech1040	Manufacturing Process	5	4		
BEMech1050	Application of Machine Tools	5	4		
BECore1040	Aerodynamic Principles and Aircraft Design	4	4		
BECore1060	Aircraft Communication and Navigation Systems	4	4		

Appendix B: Programme Learning Outcomes

BEng – Aerospace Technology

Programme Outcomes

The programme outcomes are distributed in the following four categories:

1. Knowledge and Understanding
2. Cognitive (thinking) Skills
3. Practical Skills
4. Transferable Skills

A graduate would be expected to achieve all ***twenty two*** below programme outcomes (within the confines of their programme options).

Knowledge and Understanding

On successful completion of the programme, a student should be able to demonstrate knowledge and understanding of:

KU1 Advanced Aerospace systems
KU2 Mechanical and electrical science
KU3 Materials and design
KU4 Operation of the aerospace industry
KU5 Management of engineering

The principal teaching, learning and assessment methods used on the programme to achieve these learning outcomes are identified below:

	Teaching and Learning	Assessment
KU1/2/3/4/5	Lectures Seminar discussions Tutorials Independent learning	Examinations Coursework assignments In-class tests Student presentations

Cognitive (thinking) Skills

On successful completion of the programme, the student should be able to:

CS1 Solve engineering problems
CS2 Operate engineering systems
CS3 Design system solutions
CS4 Research and evaluate information sources
CS5 Adopt an holistic approach to aerospace technology in a commercial context

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below:

	Teaching and Learning	Assessment
CS1/2/3/4/5	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Practical Skills

On successful completion of the programme, the student should be able to:

PS1 Undertake experimental investigations
PS2 Employ appropriate engineering tools
PS3 Work on aircraft systems
PS4 Construct and maintain engineering documentation
PS5 Use software tools
PS6 Work in an industrial environment

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below.

	Teaching and Learning	Assessment
PS1/2/3/4/5/6	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Transferable Skills

On successful completion of the programme, the student should be able to:

TS1 Communicate effectively in various modes
TS2 Work as a member of a team
TS3 Apply information and communication technology tools
TS4 Manage self, groups, resources and time
TS5 Learn independently and develop him/herself
TS6 Contribute and observe ethical standards

Transferable/key skills are incorporated within modules and related to relevant assessments as appropriate. Self-directed learning forms an element of all modules and the necessity to work within

tight deadlines is an essential requirement across the curriculum. The ability to communicate orally and in writing will be developed across the range of modules.

The wide range of assessment techniques will ensure that the student is given every opportunity to demonstrate his/her skills in these areas.

BEng – Aerospace Technology

Programme Learning Outcomes-QFEmirates Level 7 Descriptors Mapping Matrix

		Programme Intended Learning Outcomes																					
		Knowledge and Understanding On successful completion of the programme you should be able to demonstrate knowledge and understanding of					Cognitive (Thinking) Skills On successful completion of the programme you should be able to					Practical Skills On successful completion of the programme you should be able to						Transferable Skills On successful completion of the programme you should be able to					
		KU1	KU2	KU3	KU4	KU5	CS1	CS2	CS3	CS4	CS5	PS1	PS2	PS3	PS4	PS5	PS6	TS1	TS2	TS3	TS4	TS5	TS6
QFE Level 7	**Learning Outcomes**	Advanced Aerospace systems	Mechanical and electrical science	Materials and design	Operation of the aerospace industry	Management of engineering	Solve engineering problems	Operate engineering systems	Design system solutions	Research and evaluate information sources	Adopt an holistic approach to aerospace technology in a commercial context	Undertake experimental investigations	Employ appropriate engineering tools	Work on aircraft systems	Construct and maintain engineering documentation	Use software tools	Work in an industrial environment	Communicate effectively in various modes	Work as a member of a team	Apply information and communication technology tools	Manage self, groups, resources and time	Learn independently and develop learner	Contribute and observe ethical standards
Knowledge	specialised factual and theoretical knowledge and an understanding of the boundaries in a field of work or discipline, encompassing a broad and coherent body of knowledge and concepts, with substantive depth in the underlying principles and theoretical concepts	●	●	●	●																		
	an understanding of allied knowledge and theories in related fields of work or disciplines and in the case of professional disciplines including related regulations, standards, codes, conventions		●	●		●									●								
	understanding of critical approach to the creation and compilation of a systematic and coherent body of knowledge and concepts gained from a range of sources						●		●	●		●											

	a comprehensive understanding of critical analysis, research systems and methods and evaluative problem-solving techniques						●		●	●													
	familiarity with sources of current and new research and knowledge with integration of concepts from outside fields	●									●												
Skill	technical, creative and analytical skills appropriate to solving specialised problems using evidentiary and procedural based processes in predictable and new contexts that include devising and sustaining arguments associated with a field of work or discipline						●		●	●		●				●							
	evaluating, selecting and applying appropriate methods, procedures or techniques in processes of investigation towards identified solutions evaluating and implementing appropriate research tools and strategies associated with the field of work or discipline						●		●	●		●	●			●							
	highly developed advanced communication and information technology skills to present, explain and/or critique complex and unpredictable matters															●		●		●			
Autonomy and responsibility	can take responsibility for developing innovative and advanced approaches to evaluating and managing complex and unpredictable work procedures and processes, resources or learning					●	●		●		●										●	●	
	can manage technical, supervisory or design processes in unpredictable, unfamiliar and varying contexts					●						●								●	●		
	can work creatively and/or effectively as an individual, in team leadership, managing contexts, across technical or professional activities					●	●		●												●		
	can express an internalised, personal view, and accept responsibility to society at large and to socio-cultural norms and relationships																	●					
Role in context	can function with full autonomy in technical and supervisory contexts and adopt para-professional roles with little guidance																				●		
	can take responsibility for the setting and achievement of group or individual outcomes and for the management and supervision of the work of others or self in the case of a specialisation in field of work or discipline																		●		●		
	can participate in peer relationships with qualified practitioners and lead multiple, complex groups																	●	●				
	can take responsibility for managing the professional development and direct mentoring of individuals and groups																					●	
Self-development	can self-evaluate and take responsibility for contributing to professional practice, and undertake regular professional																					●	

	development and/ or further learning																						
	can manage learning tasks independently and professionally, in complex and sometimes unfamiliar learning contexts																					●	
	can contribute to and observe ethical standards																						●

BEng – Avionics Technology

Programme Outcomes

The programme outcomes are distributed in the following four categories:

1. Knowledge and Understanding
2. Cognitive (thinking) Skills
3. Practical Skills
4. Transferable Skills

A graduate would be expected to achieve all ***twenty-two*** below programme outcomes (within the confines of their programme options).

Knowledge and Understanding

On successful completion of the programme, a student should be able to demonstrate knowledge and understanding of:

KU1 Advanced Avionics applications
KU2 Aeronautical engineering and the aerospace industry
KU3 Computer software design and programming
KU4 Advanced electronics and electrical science
KU5 Engineering management

The principal teaching, learning and assessment methods used on the programme to achieve these learning outcomes are identified below:

	Teaching and Learning	Assessment
KU1/2/3/4/5	Lectures Seminar discussions Tutorials Independent learning	Examinations Coursework assignments In-class tests Student presentations

Cognitive (thinking) Skills

On successful completion of the programme, the student should be able to:

CS1 Solve engineering problems
CS2 Analyse engineering systems
CS3 Design system solutions
CS4 Research and evaluate information sources
CS5 Adopt an holistic approach to avionics technology in a commercial context

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below:

	Teaching and Learning	Assessment
CS1/2/3/4/5	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Practical Skills

On successful completion of the programme, the student should be able to:

PS1 Undertake experimental investigations
PS2 Employ appropriate engineering tools
PS3 Work on aircraft systems with an emphasis on avionics
PS4 Construct and maintain engineering documentation
PS5 Use software tools
PS6 Work in an industrial environment

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below.

	Teaching and Learning	Assessment
PS1/2/3/4/5/6	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Transferable Skills

On successful completion of the programme, the student should be able to:

TS1 Communicate effectively in various modes
TS2 Work as a member of a team
TS3 Apply information and communication technology tools
TS4 Manage self, groups, resources and time
TS5 Learn independently and develop him/herself
TS6 Contribute and observe ethical standards

Transferable/key skills are incorporated within modules and related to relevant assessments as appropriate. Self-directed learning forms an element of all modules and the necessity to work

within tight deadlines is an essential requirement across the curriculum. The ability to communicate orally and in writing will be developed across the range of modules.

The wide range of assessment techniques will ensure that the student is given every opportunity to demonstrate his/her skills in these areas.

BEng – Avionics Technology

Programme Learning Outcomes-QFEmirates Level 7 Descriptors Mapping Matrix

		Programme Intended Learning Outcomes																					
		Knowledge and Understanding **On successful completion of the programme you should be able to demonstrate knowledge and understanding of**					**Cognitive (Thinking) Skills** **On successful completion of the programme you should be able to**					**Practical Skills** **On successful completion of the programme you should be able to**						**Transferable Skills** **On successful completion of the programme you should be able to**					
		KU1	**KU2**	**KU3**	**KU4**	**KU5**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**PS1**	**PS2**	**PS3**	**PS4**	**PS5**	**PS6**	**TS1**	**TS2**	**TS3**	**TS4**	**TS5**	**TS6**
QFE Level 7	**Learning Outcomes**	Advanced Avionics applications	Aeronautical engineering and the aerospace industry	Computer software design and programming	Advanced electronics and electrical science	Engineering management	Solve engineering problems	Analyse engineering systems	Design system solutions	Research and evaluate information sources	Adopt an holistic approach to avionics technology in a commercial context	Undertake experimental investigations	Employ appropriate engineering tools	Work on aircraft systems with an emphasis on avionics	Construct and maintain engineering documentation	Use software tools	Work in an industrial environment	Communicate effectively in various modes	Work as a member of a team	Apply information and communication technology tools	Manage self, groups, resources and time	Learn independently and develop learner	Contribute and observe ethical standards
Knowledge	specialised factual and theoretical knowledge and an understanding of the boundaries in a field of work or discipline, encompassing a broad and coherent body of knowledge and concepts, with substantive depth in the underlying principles and theoretical concepts	●	●	●	●																		
	an understanding of allied knowledge and theories in related fields of work or disciplines and in the case of professional disciplines including related regulations, standards, codes, conventions		●	●	●	●									●								
	understanding of critical approach to the creation and compilation of a systematic and coherent body of knowledge and concepts gained from a range of sources							●		●	●	●											

	a comprehensive understanding of critical analysis, research systems and methods and evaluative problem-solving techniques						●	●	●	●		●				●							
	familiarity with sources of current and new research and knowledge with integration of concepts from outside fields	●								●													
Skill	technical, creative and analytical skills appropriate to solving specialised problems using evidentiary and procedural based processes in predictable and new contexts that include devising and sustaining arguments associated with a field of work or discipline						●	●	●	●		●				●							
	evaluating, selecting and applying appropriate methods, procedures or techniques in processes of investigation towards identified solutions evaluating and implementing appropriate research tools and strategies associated with the field of work or discipline						●	●	●	●		●				●							
	highly developed advanced communication and information technology skills to present, explain and/or critique complex and unpredictable matters																	●		●			
Autonomy and responsibility	can take responsibility for developing innovative and advanced approaches to evaluating and managing complex and unpredictable work procedures and processes, resources or learning					●								●							●		
	can manage technical, supervisory or design processes in unpredictable, unfamiliar and varying contexts					●															●		
	can work creatively and/or effectively as an individual, in team leadership, managing contexts, across technical or professional activities					●													●		●		
	can express an internalised, personal view, and accept responsibility to society at large and to socio-cultural norms and relationships																	●					
Role in context	can function with full autonomy in technical and supervisory contexts and adopt para-professional roles with little guidance					●													●		●		
	can take responsibility for the setting and achievement of group or individual outcomes and for the management and supervision of the work of others or self in the case of a specialisation in field of work or discipline																		●		●		
	can participate in peer relationships with qualified practitioners and lead multiple, complex groups														●				●				

	can take responsibility for managing the professional development and direct mentoring of individuals and groups																				●	●	
Self-development	can self-evaluate and take responsibility for contributing to professional practice, and undertake regular professional development and/ or further learning																					●	
	can manage learning tasks independently and professionally, in complex and sometimes unfamiliar learning contexts																					●	
	can contribute to and observe ethical standards																						●

BEng - Mechanical Engineering

Programme Outcomes

The programme outcomes are distributed in the following four categories:

1. Knowledge and Understanding
2. Cognitive (thinking) Skills
3. Practical Skills
4. Transferable Skills

A graduate would be expected to achieve all ***nineteen*** below programme outcomes (within the confines of their programme options).

Knowledge and Understanding

On successful completion of the programme a student should be able to demonstrate knowledge and understanding of:

KU1 The function, materials, and manufacture and assembly of a wide range of engineering products

KU2 The advanced principles of engineering science and advanced mathematics and their application and capability in defining and proving the performance of innovative engineering products

KU3 Aspects of innovative mechanical design including the design process, design standards and codes, selection of materials and methods of manufacture, and design tools for optimisation in terms of performance, reliability, weight, cost and sustainability

KU4 Development and testing strategies for engineering products involving appropriate instrumentation, experimental methods, and data analysis techniques

KU5 Engineering management of people, processes and projects to promote the commercial success of an engineering enterprise

The principal teaching, learning and assessment methods used on the programme to achieve these learning outcomes are identified below:

	Teaching and Learning	Assessment
KU1/2/3/4/5	Lectures Seminar discussions Tutorials Independent learning	Examinations Coursework assignments In-class tests Student presentations

Cognitive (thinking) Skills

On successful completion of the programme a student should be able to:

CS1 Model and analyse innovative engineering systems using appropriate engineering science and mathematical analysis techniques

CS2 Synthesise solutions to innovative engineering design problems

CS3 Select appropriate instrumentation for the functional design of innovative engineering products and systems and to support development and test work

CS4 Research for and evaluate information sources to identify information essential to solving engineering problems

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below:

	Teaching and Learning	Assessment
CS1/2/3/4	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Practical Skills

On successful completion of the programme a student should be able to:

PS1 Use test equipment and machines for experimental work to support product development

PS2 Use commercial software in the solution of engineering problems

PS3 Communicate graphically the design of a component or system through sketches, CAD, etc.

PS4 Work in an industrial environment

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below.

	Teaching and Learning	Assessment
PS1/2/3/4	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Transferable Skills

On successful completion of the programme a student should be able to:

TS1 Communicate effectively in various modes

TS2 Lead or work within a team with the necessary planning, reviewing, empathy with others, adaptability, and drive to achieve the required objectives

TS3 Use IT to find relevant information, to manipulate numerical information and to prepare documents and presentations

TS4 Manage self, groups, resources and time

TS5 Learn independently and develop

TS6 Contribute and observe ethical standards

Transferable/key skills are incorporated within modules and related to relevant assessments as appropriate. Self-directed learning forms an element of all modules and the necessity to work within tight deadlines is an essential requirement across the curriculum. The ability to communicate orally and in writing will be developed across the range of modules.

The wide range of assessment techniques will ensure that the student is given every opportunity to demonstrate his/her skills in these areas.

BEng – Mechanical Engineering

Programme Learning Outcomes-QFEmirates Level 7 Descriptors Mapping Matrix

		Programme Intended Learning Outcomes																	
		Knowledge and Understanding On successful completion of the programme you should be able to demonstrate knowledge and understanding of					**Cognitive (Thinking) Skills** On successful completion of the programme you should be able to				**Practical Skills** On successful completion of the programme you should be able to				**Transferable Skills** On successful completion of the programme you should be able to					
		KU1	**KU2**	**KU3**	**KU4**	**KU5**	**CS1**	**CS2**	**CS3**	**CS4**	**PS1**	**PS2**	**PS3**	**PS4**	**TS1**	**TS2**	**TS3**	**TS4**	**TS5**	**TS6**
QFE Level 7	**Learning Outcomes**	The function, materials, and manufacture and assembly of a wide range of engineering	The advanced principles of engineering science and advanced mathematics and their application and capability in defining and proving the performance of innovative engineering products	Aspects of innovative mechanical design including the design process, design standards and codes, selection of materials and methods of manufacture, and design tools for optimisation in terms of performance, reliability,	Development and testing strategies for engineering products involving appropriate instrumentation, experimental methods, and data analysis techniques	Engineering management of people, processes and projects to promote the commercial success of an engineering enterprise	Model and analyse innovative engineering systems using appropriate engineering science and mathematical analysis techniques	Synthesise solutions to innovative engineering design problems	Select appropriate instrumentation for the functional design of innovative engineering products and systems and to support development and test work	Research for and evaluate information sources to identify information essential to solving engineering problems	Use test equipment and machines for experimental work to support product development	Use commercial software in the solution of engineering problems	Communicate graphically the design of a component or system through sketches, CAD, etc.	Work in an industrial environment	Communicate effectively in various modes	Lead or work within a team with the necessary planning, reviewing, empathy with others, adaptability, and drive to achieve the required objectives	Use IT to find relevant information, to manipulate numerical information and to prepare documents and presentations	Manage self, groups, resources and time	Learn independently and develop	Contribute and observe ethical standards
Knowledge	specialised factual and theoretical knowledge and an understanding of the boundaries in a field of work or discipline, encompassing a broad and coherent body of knowledge and concepts, with substantive depth in the underlying principles and theoretical concepts	●	●	●	●														
	an understanding of allied knowledge and theories in related fields of work or disciplines and in the case of professional disciplines including related regulations, standards, codes, conventions		●			●													
	understanding of critical approach to the creation and compilation of a systematic and coherent body of knowledge and concepts gained from a range of sources									●	●	●							

	a comprehensive understanding of critical analysis, research systems and methods and evaluative problem-solving techniques						●	●		●	●	●								
	familiarity with sources of current and new research and knowledge with integration of concepts from outside fields									●										
Skill	technical, creative and analytical skills appropriate to solving specialised problems using evidentiary and procedural based processes in predictable and new contexts that include devising and sustaining arguments associated with a field of work or discipline						●	●	●	●	●	●								
	evaluating, selecting and applying appropriate methods, procedures or techniques in processes of investigation towards identified solutions evaluating and implementing appropriate research tools and strategies associated with the field of work or discipline						●	●	●	●	●	●								
	highly developed advanced communication and information technology skills to present, explain and/or critique complex and unpredictable matters												●		●		●			
Autonomy and responsibility	can take responsibility for developing innovative and advanced approaches to evaluating and managing complex and unpredictable work procedures and processes, resources or learning					●	●					●						●		
	can manage technical, supervisory or design processes in unpredictable, unfamiliar and varying contexts					●										●		●		
	can work creatively and/or effectively as an individual, in team leadership, managing contexts, across technical or professional activities					●										●		●		
	can express an internalised, personal view, and accept responsibility to society at large and to socio-cultural norms and relationships														●					
Role in context	can function with full autonomy in technical and supervisory contexts and adopt para-professional roles with little guidance																	●		
	can take responsibility for the setting and achievement of group or individual outcomes and for the management and supervision of the work of others or self in the case of a specialisation in field of work or discipline					●										●				
	can participate in peer relationships with qualified practitioners and lead multiple, complex groups														●	●		●		

	can take responsibility for managing the professional development and direct mentoring of individuals and groups																		●	
Self-development	can self-evaluate and take responsibility for contributing to professional practice, and undertake regular professional development and/ or further learning																		●	
	can manage learning tasks independently and professionally, in complex and sometimes unfamiliar learning contexts																		●	
	can contribute to and observe ethical standards																			●

Advanced Diploma – Aerospace Technology

Programme Outcomes

The programme outcomes are distributed in the following four categories:

1. Knowledge and Understanding
2. Cognitive (thinking) Skills
3. Practical Skills
4. Transferable Skills

A graduate would be expected to achieve all ***eighteen*** below programme outcomes (within the confines of their programme options).

Knowledge and Understanding

On successful completion of the programme, a student should be able to demonstrate knowledge and understanding of:

KU1 Aerospace systems
KU2 Mechanical and electrical science
KU3 Materials and design
KU5 Management of engineering

The principal teaching, learning and assessment methods used on the programme to achieve these learning outcomes are identified below:

	Teaching and Learning	Assessment
KU1/2/3/5	Lectures Seminar discussions Tutorials Independent learning	Examinations Coursework assignments In-class tests Student presentations

Cognitive (thinking) Skills

On successful completion of the programme, the student should be able to:

CS1 Solve engineering problems
CS2 Operate engineering systems
CS3 Design system solutions
CS4 Search and evaluate information sources

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below:

	Teaching and Learning	Assessment
CS1/2/3/4	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Practical Skills

On successful completion of the programme, the student should be able to:

PS1 Undertake experimental investigations
PS2 Employ appropriate engineering tools
PS3 Work on aircraft systems
PS4 Construct and maintain engineering documentation
PS5 Use software tools

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below.

	Teaching and Learning	Assessment
PS1/2/3/4/5	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Transferable Skills

On successful completion of the programme, the student should be able to:

TS1 Communicate effectively in various modes
TS2 Work as a member of a team
TS3 Apply information and communication technology tools
TS4 Supervise self, groups, resources and time
TS5 Learn independently and develop him/herself
TS6 Support and observe ethical standards

Transferable/key skills are incorporated within modules and related to relevant assessments as appropriate. Self-directed learning forms an element of all modules and the necessity to work within tight deadlines is an essential requirement across the curriculum. The ability to communicate orally and in writing will be developed across the range of modules.

The wide range of assessment techniques will ensure that the student is given every opportunity to demonstrate his/her skills in these areas.

Advanced Diploma – Aerospace Technology

Programme Learning Outcomes-QFEmirates Level 6 Descriptors Mapping Matrix

		Programme Intended Learning Outcomes																		
		Knowledge and Understanding On successful completion of the programme you should be able to demonstrate knowledge and understanding of				Cognitive (Thinking) Skills On successful completion of the programme you should be able to				Practical Skills On successful completion of the programme you should be able to					Transferable Skills On successful completion of the programme you should be able to					
		KU1	KU2	KU3	KU5	CS1	CS2	CS3	CS4	PS1	PS2	PS3	PS4	PS5	TS1	TS2	TS3	TS4	TS5	TS6
QFE Level 6	**Learning Outcomes**	Aerospace systems	Mechanical and electrical science	Materials and design	Management of engineering	Solve engineering problems	Operate engineering systems	Design system solutions	Search and evaluate information sources	Undertake experimental investigations	Employ appropriate engineering tools	Work on aircraft systems	Construct and maintain engineering documentation	Use software tools	Communicate effectively in various modes	Work as a member of a team	Apply information and communication technology tools	Supervise self, groups, resources and time	Learn independently and develop yourself	Support and observe ethical standards
Knowledge	specialised factual knowledge and an understanding of the boundaries in a field of work or discipline, encompassing a broad and coherent body of knowledge and concepts, with depth in the underlying understanding of the principles and concepts	●	●	●																
	an understanding of allied knowledge and theories in related fields of work or disciplines and in the case of para-professional respective discipline including related regulations, standards, codes, conventions		●	●	●								●							
	an understanding of critical approach and analysis, research approaches and methods and analytical problem-solving techniques from a range of sources familiarity with sources of current and existing knowledge and the integration of concepts from related fields					●		●	●	●										

	literacy to comprehend and/or produce coherent texts, covering complex and/or diverse relations from a wide-range of information					●		●	●											
	numeracy covering a wide-range of mathematical procedures and representations used across a broad-range of contexts	●	●			●			●									●		●	
Skill	specialist technical, creative and conceptual skills appropriate to solving complex problems associated with a field of work or discipline					●		●	●	●				●						
	a comprehensive range of specialist cognitive and practical skills appropriate to planning and implementing solutions to varied, unpredictable and unfamiliar problems within a field of work or discipline					●		●	●	●	●			●						
	selection and use of appropriate research tools and strategies associated with the field of work or discipline					●		●	●	●	●			●						
	advanced communication and information technology skills to present, explain and/or critique interdependent complex matters													●	●		●			
	literacy skills to comprehend and/ or produce, from a wide-range of information, coherent texts covering complex and/or diverse relations												●		●				●	
	numeracy skills to select, apply, assess and communicate a wide range of mathematical procedures and representations in a broad-range of contexts					●			●								●		●	
Autonomy and responsibility	can take responsibility for developing appropriate approaches to managing complex work procedures and processes, resources or learning, including leading teams within a technical or professional activity with little support				●	●		●								●	●	●		
	can supervise technical, supervisory or design processes in varied, unpredictable, unfamiliar and a broad-range of contexts				●					●							●	●		
	can work effectively as a specialist or in team leadership roles				●	●		●								●		●		
	can express an internalised, personal world view, reflecting engagement in society at large and in socio-cultural relationships														●					
Role in context	can function with full autonomy in technical and supervisory contexts and adopt para-professional roles under guidance																	●		
	can take responsibility for the setting and achievement of group outcomes and for the supervision of the work of others															●		●		
	can take responsibility for supervising the development of individuals and groups																	●	●	

	can participate in peer relationships with qualified practitioners and lead multiple groups														●	●		●	●	
Self-development	can evaluate own learning and identify learning weaknesses and needs, in a familiar and unfamiliar environment																		●	
	can take initiative to address learning needs and function independently and within learning groups															●		●	●	
	can support and observe ethical standards																			●

Advanced Diploma – Avionics Technology

Programme Outcomes

The programme outcomes are distributed in the following four categories:

1. Knowledge and Understanding
2. Cognitive (thinking) Skills
3. Practical Skills
4. Transferable Skills

A graduate would be expected to achieve all ***eighteen*** below programme outcomes (within the confines of their programme options).

Knowledge and Understanding

On successful completion of the programme, a student should be able to demonstrate knowledge and understanding of:

KU1 Avionics applications
KU2 Aeronautical engineering
KU4 Advanced electronics and electrical science
KU5 Engineering management

The principal teaching, learning and assessment methods used on the programme to achieve these learning outcomes are identified below:

	Teaching and Learning	Assessment
KU1/2/4/5	Lectures Seminar discussions Tutorials Independent learning	Examinations Coursework assignments In-class tests Student presentations

Cognitive (thinking) Skills

On successful completion of the programme, the student should be able to:

CS1 Solve engineering problems
CS2 Analyse engineering systems
CS3 Design system solutions
CS4 Search and evaluate information sources

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below:

	Teaching and Learning	Assessment
CS1/2/3/4	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Practical Skills

On successful completion of the programme, the student should be able to:

PS1 Undertake experimental investigations
PS2 Employ appropriate engineering tools
PS3 Work on aircraft systems with an emphasis on avionics
PS4 Construct and maintain engineering documentation
PS5 Use software tools

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below.

	Teaching and Learning	Assessment
PS1/2/3/4/5	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Transferable Skills

On successful completion of the programme, the student should be able to:

TS1 Communicate effectively in various modes
TS2 Work as a member of a team
TS3 Apply information and communication technology tools
TS4 Supervise self, groups, resources and time
TS5 Learn independently and develop him/herself
TS6 Support and observe ethical standards

Transferable/key skills are incorporated within modules and related to relevant assessments as appropriate. Self-directed learning forms an element of all modules and the necessity to work within tight deadlines is an essential requirement across the curriculum. The ability to communicate orally and in writing will be developed across the range of modules.

The wide range of assessment techniques will ensure that the student is given every opportunity to demonstrate his/her skills in these areas.

Advanced Diploma – Avionics Technology

Programme Learning Outcomes-QFEmirates Level 6 Descriptors Mapping Matrix

		Programme Intended Learning Outcomes																		
		Knowledge and Understanding **On successful completion of the programme you should be able to demonstrate knowledge and understanding of**				**Cognitive (Thinking) Skills** **On successful completion of the programme you should be able to**				**Practical Skills** **On successful completion of the programme you should be able to**					**Transferable Skills** **On successful completion of the programme you should be able to**					
		KU1	**KU2**	**KU4**	**KU5**	**CS1**	**CS2**	**CS3**	**CS4**	**PS1**	**PS2**	**PS3**	**PS4**	**PS5**	**TS1**	**TS2**	**TS3**	**TS4**	**TS5**	**TS6**
QFE Level 6	**Learning Outcomes**	Avionics applications	Aeronautical engineering	Advanced electronics and electrical science	Engineering management	Solve engineering problems	Analyse engineering systems	Design system solutions	Search and evaluate information sources	Undertake experimental investigations	Employ appropriate engineering tools	Work on aircraft systems with an emphasis on avionics	Construct and maintain engineering documentation	Use software tools	Communicate effectively in various modes	Work as a member of a team	Apply information and communication technology tools	Supervise self, groups, resources and time	Learn independently and develop yourself	Support and observe ethical standards
Knowledge	specialised factual knowledge and an understanding of the boundaries in a field of work or discipline, encompassing a broad and coherent body of knowledge and concepts, with depth in the underlying understanding of the principles and concepts	●	●	●																
	an understanding of allied knowledge and theories in related fields of work or disciplines and in the case of para-professional respective discipline including related regulations, standards, codes, conventions		●	●	●								●							
	an understanding of critical approach and analysis, research approaches and methods and analytical problem-solving techniques from a range of sources familiarity with sources of current and existing knowledge and the integration of concepts from related fields						●		●	●										

	literacy to comprehend and/or produce coherent texts, covering complex and/or diverse relations from a wide-range of information					●	●	●	●												
	numeracy covering a wide-range of mathematical procedures and representations used across a broad-range of contexts			●		●	●								●				●		
Skill	specialist technical, creative and conceptual skills appropriate to solving complex problems associated with a field of work or discipline					●	●	●		●				●							
	a comprehensive range of specialist cognitive and practical skills appropriate to planning and implementing solutions to varied, unpredictable and unfamiliar problems within a field of work or discipline					●	●	●		●				●							
	selection and use of appropriate research tools and strategies associated with the field of work or discipline					●	●	●	●	●											
	advanced communication and information technology skills to present, explain and/or critique interdependent complex matters														●		●				
	literacy skills to comprehend and/ or produce, from a wide-range of information, coherent texts covering complex and/or diverse relations												●		●				●		
	numeracy skills to select, apply, assess and communicate a wide range of mathematical procedures and representations in a broad-range of contexts					●			●								●		●		
Autonomy and responsibility	can take responsibility for developing appropriate approaches to managing complex work procedures and processes, resources or learning, including leading teams within a technical or professional activity with little support				●	●		●				●				●	●	●			
	can supervise technical, supervisory or design processes in varied, unpredictable, unfamiliar and a broad-range of contexts				●			●									●	●			
	can work effectively as a specialist or in team leadership roles				●	●		●								●		●			
	can express an internalised, personal world view, reflecting engagement in society at large and in socio-cultural relationships														●						
Role in context	can function with full autonomy in technical and supervisory contexts and adopt para-professional roles under guidance																	●			
	can take responsibility for the setting and achievement of group outcomes and for the supervision of the work of others															●		●			
	can take responsibility for supervising the development of individuals and groups																	●	●		

	can participate in peer relationships with qualified practitioners and lead multiple groups														●	●		●	●	
Self-development	can evaluate own learning and identify learning weaknesses and needs, in a familiar and unfamiliar environment																		●	
	can take initiative to address learning needs and function independently and within learning groups															●		●	●	
	can support and observe ethical standards																			●

Advanced Diploma – Mechanical Engineering

Programme Outcomes

The programme outcomes are distributed in the following four categories:

1. Knowledge and Understanding
2. Cognitive (thinking) Skills
3. Practical Skills
4. Transferable Skills

A graduate would be expected to achieve all ***sixteen*** below programme outcomes (within the confines of their programme options).

Knowledge and Understanding

On successful completion of the programme a student should be able to demonstrate knowledge and understanding of:

KU1 The function, materials, and manufacture and assembly of a wide range of engineering products

KU2 The advanced principles of engineering science and advanced mathematics and their application and capability in defining and proving the performance of innovative engineering products

KU4 Development and testing strategies for engineering products involving appropriate instrumentation, experimental methods, and data analysis techniques

KU5 Engineering management of people, processes and projects to promote the commercial success of an engineering enterprise

The principal teaching, learning and assessment methods used on the programme to achieve these learning outcomes are identified below:

	Teaching and Learning	Assessment
KU1/2/4/5	Lectures Seminar discussions Tutorials Independent learning	Examinations Coursework assignments In-class tests Student presentations

Cognitive (thinking) Skills

On successful completion of the programme a student should be able to:

CS1 Model and analyse innovative engineering systems using appropriate engineering science and mathematical analysis techniques

CS2 Synthesise solutions to innovative engineering design problems

CS3 Select appropriate instrumentation for the functional design of innovative engineering products

CS4 Search for and evaluate information sources to identify information essential to solving engineering problems

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below:

	Teaching and Learning	Assessment
CS1/2/3/4	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Practical Skills

On successful completion of the programme a student should be able to:

PS1 Use test equipment and machines for experimental work to support product development

PS2 Use commercial software in the solution of engineering problems

PS3 Communicate graphically the design of a component or system through sketches, CAD, etc.

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below.

	Teaching and Learning	Assessment
PS1/2/3	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Transferable Skills

On successful completion of the programme a student should be able to:

TS1 Communicate effectively in various modes

TS2 Lead or work within a team with the necessary planning, reviewing, empathy with others, adaptability, and drive to achieve the required objectives

TS3 Use IT to find relevant information, to manipulate numerical information and to prepare documents and presentations

TS4 Supervise self, groups, resources and time

TS5 Learn independently and develop

TS6 Support and observe ethical standards

Transferable/key skills are incorporated within modules and related to relevant assessments as appropriate. Self-directed learning forms an element of all modules and the necessity to work within tight deadlines is an essential requirement across the curriculum. The ability to communicate orally and in writing will be developed across the range of modules.

The wide range of assessment techniques will ensure that the student is given every opportunity to demonstrate his/her skills in these areas.

Advanced Diploma – Mechanical Engineering

Programme Learning Outcomes-QFEmirates Level 6 Descriptors Mapping Matrix

		Programme Intended Learning Outcomes																	
		Knowledge and Understanding **On successful completion of the programme you should be able to demonstrate knowledge and understanding of**				**Cognitive (Thinking) Skills** **On successful completion of the programme you should be able to**				**Practical Skills** **On successful completion of the programme you should be able to**			**Transferable Skills** **On successful completion of the programme you should be able to**					
		KU1	**KU2**	**KU4**	**KU5**	**CS1**	**CS2**	**CS3**	**CS4**	**PS1**	**PS2**	**PS3**	**TS1**	**TS2**	**TS3**	**TS4**	**TS5**	**TS6**
QFE Level 6	**Learning Outcomes**	The function, materials, and manufacture and assembly of a wide range of engineering	The advanced principles of engineering science and advanced mathematics and their application and capability in defining and proving the performance of innovative engineering products	Development and testing strategies for engineering products involving appropriate instrumentation, experimental methods, and data analysis techniques	Engineering management of people, processes and projects to promote the commercial success of an engineering enterprise	Model and analyse innovative engineering systems using appropriate engineering science and mathematical analysis techniques	Synthesise solutions to innovative engineering design problems	Select appropriate instrumentation for the functional design of innovative engineering products and systems and to support development and test work	Search for and evaluate information sources to identify information essential to solving engineering problems	Use test equipment and machines for experimental work to support product development	Use commercial software in the solution of engineering problems	Communicate graphically the design of a component or system through sketches, CAD, etc.	Communicate effectively in various modes	Lead or work within a team with the necessary planning, reviewing, empathy with others, adaptability, and drive to achieve the required objectives	Use IT to find relevant information, to manipulate numerical information and to prepare documents and presentations	Supervise self, groups, resources and time	Learn independently and develop	Support and observe ethical standards
Knowledge	specialised factual knowledge and an understanding of the boundaries in a field of work or discipline, encompassing a broad and coherent body of knowledge and concepts, with depth in the underlying understanding of the principles and concepts	●	●	●														
	an understanding of allied knowledge and theories in related fields of work or disciplines and in the case of para-professional respective discipline including related regulations, standards, codes, conventions		●		●													
	an understanding of critical approach and analysis, research approaches and methods and analytical problem-solving techniques from a range of sources familiarity with sources of current and existing knowledge and the integration of concepts								●	●	●							

	from related fields																	
	literacy to comprehend and/or produce coherent texts, covering complex and/or diverse relations from a wide-range of information					●	●		●	●	●							
	numeracy covering a wide-range of mathematical procedures and representations used across a broad-range of contexts		●						●									
Skill	specialist technical, creative and conceptual skills appropriate to solving complex problems associated with a field of work or discipline					●	●	●	●	●	●							
	a comprehensive range of specialist cognitive and practical skills appropriate to planning and implementing solutions to varied, unpredictable and unfamiliar problems within a field of work or discipline					●	●	●	●	●	●							
	selection and use of appropriate research tools and strategies associated with the field of work or discipline					●	●	●	●	●	●							
	advanced communication and information technology skills to present, explain and/or critique interdependent complex matters											●	●		●			
	literacy skills to comprehend and/ or produce, from a wide-range of information, coherent texts covering complex and/or diverse relations												●		●			
	numeracy skills to select, apply, assess and communicate a wide range of mathematical procedures and representations in a broad-range of contexts		●			●			●						●		●	
Autonomy and responsibility	can take responsibility for developing appropriate approaches to managing complex work procedures and processes, resources or learning, including leading teams within a technical or professional activity with little support				●		●							●		●		
	can supervise technical, supervisory or design processes in varied, unpredictable, unfamiliar and a broad-range of contexts				●		●							●		●		
	can work effectively as a specialist or in team leadership roles													●		●		
	can express an internalised, personal world view, reflecting engagement in society at large and in socio-cultural relationships												●					
Role in context	can function with full autonomy in technical and supervisory contexts and adopt para-professional roles under guidance													●		●		

	can take responsibility for the setting and achievement of group outcomes and for the supervision of the work of others													●		●		
	can take responsibility for supervising the development of individuals and groups													●		●	●	
	can participate in peer relationships with qualified practitioners and lead multiple groups												●	●		●	●	
Self-development	can evaluate own learning and identify learning weaknesses and needs, in a familiar and unfamiliar environment																●	
	can take initiative to address learning needs and function independently and within learning groups													●		●	●	
	can support and observe ethical standards																	●

Diploma – Aerospace Technology

Programme Outcomes

The programme outcomes are distributed in the following four categories:

1. Knowledge and Understanding
2. Cognitive (thinking) Skills
3. Practical Skills
4. Transferable Skills

A graduate would be expected to achieve all ***fifteen*** below programme outcomes (within the confines of their programme options).

Knowledge and Understanding

On successful completion of the programme, a student should be able to demonstrate knowledge and understanding of:

KU1 Basic Aerospace systems
KU2 Mechanical and electrical science
KU3 Materials and design

The principal teaching, learning and assessment methods used on the programme to achieve these learning outcomes are identified below:

	Teaching and Learning	Assessment
KU1/2/3	Lectures Seminar discussions Tutorials Independent learning	Examinations Coursework assignments In-class tests Student presentations

Cognitive (thinking) Skills

On successful completion of the programme, the student should be able to:

CS1 Solve engineering problems
CS2 Operate engineering systems
CS4 Search and evaluate information sources

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below:

	Teaching and Learning	Assessment
CS1/2/4	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Practical Skills

On successful completion of the programme, the student should be able to:

PS1 Undertake experimental investigations
PS2 Employ appropriate engineering tools
PS3 Work on aircraft systems
PS4 Construct and maintain engineering documentation
PS5 Use software tools

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below.

	Teaching and Learning	Assessment
PS1/2/3/4/5	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Transferable Skills

On successful completion of the programme, the student should be able to:

TS1 Communicate effectively in various modes
TS3 Apply information and communication technology tools
TS4 Coordinate self, groups, resources and time
TS5 Learn independently and develop him/herself
TS6 Comprehend and observe ethical standards

Transferable/key skills are incorporated within modules and related to relevant assessments as appropriate. Self-directed learning forms an element of all modules and the necessity to work within tight deadlines is an essential requirement across the curriculum. The ability to communicate orally and in writing will be developed across the range of modules.

The wide range of assessment techniques will ensure that the student is given every opportunity to demonstrate his/her skills in these areas.

Diploma – Aerospace Technology

Programme Learning Outcomes-QFEmirates Level 5 Descriptors Mapping Matrix

		Programme Intended Learning Outcomes															
		Knowledge and Understanding On successful completion of the programme you should be able to demonstrate knowledge and understanding of			Cognitive (Thinking) Skills On successful completion of the programme you should be able to			Practical Skills On successful completion of the programme you should be able to					Transferable Skills On successful completion of the programme you should be able to				
		KU1	KU2	KU3	CS1	CS2	CS4	PS1	PS2	PS3	PS4	PS5	TS1	TS3	TS4	TS5	TS6
QFE Level 5	**Learning Outcomes**	Basic Aerospace systems	Mechanical and electrical science	Materials and design	Solve engineering problems	Operate engineering systems	Search and evaluate information sources	Undertake experimental investigations	Employ appropriate engineering tools	Work on aircraft systems	Construct and maintain engineering documentation	Use software tools	Communicate effectively in various modes	Apply information and communication technology tools	Coordinate self, groups, resources and time	Learn independently and develop yourself	Comprehend and observe ethical standards
Knowledge	comprehensive, specialised knowledge within a broad field of work or discipline, including an understanding of the underlying theoretical and abstract concepts with significant depth in some areas	●	●	●													
	a broad understanding of allied knowledge and theories in related fields of work or disciplines including related regulations, standards, codes, conventions and procedures		●	●							●						
	an understanding of information assembly, retrieval methods and logical problem-solving techniques from a range of sources				●		●	●									
	recognition of sources of current knowledge and the integration of concepts from related fields literacy to comprehend and/or produce coherent texts covering complex relations from an array of information and contexts				●		●										

	numeracy covering an array of mathematical procedures and representations and contexts	●	●		●		●						●		●	
Skill	technical, creative and conceptual skills appropriate to solving a wide-range of problems associated with a field of work or discipline that include a comprehensive range of specialist cognitive and practical skills appropriate to diagnosing and implementing solutions to abstract, familiar and non-routine problems within a field of work or discipline				●		●	●				●					
	use of appropriate information retrieval methods and tools and techniques associated with the field of work or discipline				●		●	●	●			●					
	comprehensive communication and information technology skills to present, explain and/or critique complex matters literacy skills to comprehend and/or produce, from array of information, coherent texts covering complex relations											●	●	●			
	numeracy skills to select, apply, reflect and communicate an array of mathematical procedures and representations and contexts				●		●							●		●	
Autonomy and responsibility	can take responsibility for coordinating the implementation of appropriate approaches to complex work procedures and processes, resources or learning, including leading teams within a technical or para-professional activity				●									●	●		
	can exercise coordination and/ or supervision in routine, familiar and some non-routine work or learning contexts can coordinate technical, design processes in routine, familiar, non-routine and an array of contexts with support available, if required							●						●	●		
	can express an internalised, personal world view, in the context of an understanding of socio-cultural relationships												●				
Role in context	can function with autonomy in technical and coordination contexts and support paraprofessional roles under guidance														●		
	can function both independently and in a coordination role with multiple groups														●		
	can take responsibility for coordinating the development of individuals and groups														●	●	
	can review and develop the performance of self and others														●	●	
Self-development	can evaluate own learning and identify learning needs in a familiar environment															●	

	can take responsibility for and plan own learning within a managed and non-routine environment														●	●	
	can comprehend and observe ethical standards																●

Diploma – Avionics Technology

Programme Outcomes

The programme outcomes are distributed in the following four categories:

1. Knowledge and Understanding
2. Cognitive (thinking) Skills
3. Practical Skills
4. Transferable Skills

A graduate would be expected to achieve all ***fifteen*** below programme outcomes (within the confines of their programme options).

Knowledge and Understanding

On successful completion of the programme, a student should be able to demonstrate knowledge and understanding of:

KU1 Basic Avionics applications
KU2 Aeronautical engineering
KU4 Basic Electronics and electrical science

The principal teaching, learning and assessment methods used on the programme to achieve these learning outcomes are identified below:

	Teaching and Learning	Assessment
KU1/2/4	Lectures Seminar discussions Tutorials Independent learning	Examinations Coursework assignments In-class tests Student presentations

Cognitive (thinking) Skills

On successful completion of the programme, the student should be able to:

CS1 Solve engineering problems
CS2 Analyse engineering systems
CS4 Search and evaluate information sources

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below:

	Teaching and Learning	Assessment
CS1/2/4	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Practical Skills

On successful completion of the programme, the student should be able to:

PS1 Undertake experimental investigations
PS2 Employ appropriate engineering tools
PS3 Work on aircraft systems with an emphasis on avionics
PS4 Construct and maintain engineering documentation
PS5 Use software tools

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below.

	Teaching and Learning	Assessment
PS1/2/3/4/5	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Transferable Skills

On successful completion of the programme, the student should be able to:

TS1 Communicate effectively in various modes
TS3 Apply information and communication technology tools
TS4 Coordinate self, groups, resources and time
TS5 Learn independently and develop him/herself
TS6 Comprehend and observe ethical standards

Transferable/key skills are incorporated within modules and related to relevant assessments as appropriate. Self-directed learning forms an element of all modules and the necessity to work within tight deadlines is an essential requirement across the curriculum. The ability to communicate orally and in writing will be developed across the range of modules.

The wide range of assessment techniques will ensure that the student is given every opportunity to demonstrate his/her skills in these areas.

Diploma – Avionics Technology

Programme Learning Outcomes-QFEmirates Level 5 Descriptors Mapping Matrix

		Programme Intended Learning Outcomes															
		Knowledge and Understanding On successful completion of the programme you should be able to demonstrate knowledge and understanding of			Cognitive (Thinking) Skills On successful completion of the programme you should be able to			Practical Skills On successful completion of the programme you should be able to					Transferable Skills On successful completion of the programme you should be able to				
		KU1	KU2	KU4	CS1	CS2	CS4	PS1	PS2	PS3	PS4	PS5	TS1	TS3	TS4	TS5	TS6
QFE Level 5	**Learning Outcomes**	Basic Avionics applications	Aeronautical engineering and the aerospace industry	Basic Electronics and electrical science	Solve engineering problems	Analyse engineering systems	Search and evaluate information sources	Undertake experimental investigations	Employ appropriate engineering tools	Work on aircraft systems with an emphasis on avionics	Construct and maintain engineering documentation	Use software tools	Communicate effectively in various modes	Apply information and communication technology	Coordinate self, groups, resources and time	Learn independently and develop yourself	Comprehend and observe ethical standards
Knowledge	comprehensive, specialised knowledge within a broad field of work or discipline, including an understanding of the underlying theoretical and abstract concepts with significant depth in some areas	●	●	●													
	a broad understanding of allied knowledge and theories in related fields of work or disciplines including related regulations, standards, codes, conventions and procedures		●	●							●						
	an understanding of information assembly, retrieval methods and logical problem-solving techniques from a range of sources					●	●	●									
	recognition of sources of current knowledge and the integration of concepts from related fields literacy to comprehend and/or produce coherent texts covering complex relations from an array of information and contexts				●	●	●										
	numeracy covering an array of mathematical procedures and representations and contexts	●	●		●		●							●		●	

Skill	technical, creative and conceptual skills appropriate to solving a wide-range of problems associated with a field of work or discipline that include a comprehensive range of specialist cognitive and practical skills appropriate to diagnosing and implementing solutions to abstract, familiar and non-routine problems within a field of work or discipline				●		●	●				●						
	use of appropriate information retrieval methods and tools and techniques associated with the field of work or discipline				●		●	●	●			●						
	comprehensive communication and information technology skills to present, explain and/or critique complex matters literacy skills to comprehend and/or produce, from array of information, coherent texts covering complex relations											●	●	●				
	numeracy skills to select, apply, reflect and communicate an array of mathematical procedures and representations and contexts				●		●							●		●		
Autonomy and responsibility	can take responsibility for coordinating the implementation of appropriate approaches to complex work procedures and processes, resources or learning, including leading teams within a technical or para-professional activity				●									●	●			
	can exercise coordination and/ or supervision in routine, familiar and some non-routine work or learning contexts can coordinate technical, design processes in routine, familiar, non-routine and an array of contexts with support available, if required							●						●	●			
	can express an internalised, personal world view, in the context of an understanding of socio-cultural relationships												●					
Role in context	can function with autonomy in technical and coordination contexts and support paraprofessional roles under guidance														●			
	can function both independently and in a coordination role with multiple groups														●			
	can take responsibility for coordinating the development of individuals and groups														●	●		
	can review and develop the performance of self and others														●	●		
Self-development	can evaluate own learning and identify learning needs in a familiar environment															●		
	can take responsibility for and plan own learning within a managed and non-routine environment														●	●		

	can comprehend and observe ethical standards																●

Diploma – Mechanical Engineering

Programme Outcomes

The programme outcomes are distributed in the following four categories:

1. Knowledge and Understanding
2. Cognitive (thinking) Skills
3. Practical Skills
4. Transferable Skills

A graduate would be expected to achieve all ***twelve*** below programme outcomes (within the confines of their programme options).

Knowledge and Understanding

On successful completion of the programme a student should be able to demonstrate knowledge and understanding of:

KU1 The function, materials, and assembly of a wide range of engineering products

KU2 The principles of engineering science and mathematics and their application and capability in defining and proving the performance of innovative engineering products

KU4 Development and testing strategies for engineering products involving appropriate instrumentation, experimental methods, and data analysis techniques

The principal teaching, learning and assessment methods used on the programme to achieve these learning outcomes are identified below:

	Teaching and Learning	Assessment
KU1/2/4	Lectures Seminar discussions Tutorials Independent learning	Examinations Coursework assignments In-class tests Student presentations

Cognitive (thinking) Skills

On successful completion of the programme a student should be able to:

CS1 Model and analyse innovative engineering systems using appropriate engineering science and mathematical analysis techniques

CS3 Select appropriate instrumentation for the functional design of innovative engineering products

CS4 Search for and evaluate information sources to identify information essential to solving engineering problems

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below:

	Teaching and Learning	Assessment
CS1/3/4	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Practical Skills

On successful completion of the programme a student should be able to:

PS1 Use test equipment and machines for experimental work to support product development

PS2 Use commercial software in the solution of engineering problems

The principal teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated are identified below.

	Teaching and Learning	Assessment
PS1/2	Project work Problem based learning Laboratories Design exercises	Reports Demonstrations In-laboratory tests Viva-voce examinations Student presentations

Transferable Skills

On successful completion of the programme a student should be able to:

TS1 Communicate effectively in various modes

TS3 Use IT to find relevant information, to manipulate numerical information and to prepare documents and presentations

TS4 Coordinate self, groups, resources and time

TS5 Learn independently and develop

TS6 Comprehend and observe ethical standards

Transferable/key skills are incorporated within modules and related to relevant assessments as appropriate. Self-directed learning forms an element of all modules and the necessity to work within tight deadlines is an essential requirement across the curriculum. The ability to communicate orally and in writing will be developed across the range of modules.

The wide range of assessment techniques will ensure that the student is given every opportunity to demonstrate his/her skills in these areas.

Diploma – Mechanical Engineering

Programme Learning Outcomes-QFEmirates Level 5 Descriptors Mapping Matrix

		Programme Intended Learning Outcomes													
		Knowledge and Understanding On successful completion of the programme you should be able to demonstrate knowledge and understanding of			Cognitive (Thinking) Skills On successful completion of the programme you should be able to			Practical Skills On successful completion of the programme you should be able to		Transferable Skills On successful completion of the programme you should be able to					
		KU1	KU2	KU4	CS1	CS3	CS4	PS1	PS2	TS1	TS2	TS3	TS4	TS5	TS6
QFE Level 5	Learning Outcomes	The function, materials, and assembly of a wide range of engineering	The principles of engineering science and mathematics and their application and capability in defining and proving the performance of innovative engineering products	Development and testing strategies for engineering products involving appropriate instrumentation, experimental methods, and data analysis techniques	Model and analyse innovative engineering systems using appropriate engineering science and mathematical analysis techniques	Select appropriate instrumentation for the functional design of innovative engineering products and systems and to support development and test work	Search for and evaluate information sources to identify information essential to solving engineering problems	Use test equipment and machines for experimental work to support product development	Use commercial software in the solution of engineering problems	Communicate effectively in various modes	Lead or work within a team with the necessary planning, reviewing, empathy with others, adaptability, and drive to achieve the required objectives	Use IT to find relevant information, to manipulate numerical information and to prepare documents and presentations	Coordinate self, groups, resources and time	Learn independently and develop	Comprehend and observe ethical standards
Knowledge	comprehensive, specialised knowledge within a broad field of work or discipline, including an understanding of the underlying theoretical and abstract concepts with significant depth in some areas	●	●	●											
	a broad understanding of allied knowledge and theories in related fields of work or disciplines including related regulations, standards, codes, conventions and procedures		●												
	an understanding of information assembly, retrieval methods and logical problem-solving techniques from a range of sources						●	●	●						

	recognition of sources of current knowledge and the integration of concepts from related fields literacy to comprehend and/or produce coherent texts covering complex relations from an array of information and contexts				●		●	●	●							
	numeracy covering an array of mathematical procedures and representations and contexts		●				●									
Skill	technical, creative and conceptual skills appropriate to solving a wide-range of problems associated with a field of work or discipline that include a comprehensive range of specialist cognitive and practical skills appropriate to diagnosing and implementing solutions to abstract, familiar and non-routine problems within a field of work or discipline				●	●	●	●	●							
	use of appropriate information retrieval methods and tools and techniques associated with the field of work or discipline				●	●	●	●	●							
	comprehensive communication and information technology skills to present, explain and/or critique complex matters literacy skills to comprehend and/or produce, from array of information, coherent texts covering complex relations									●		●				
	numeracy skills to select, apply, reflect and communicate an array of mathematical procedures and representations and contexts		●		●		●					●		●		
Autonomy and responsibility	can take responsibility for coordinating the implementation of appropriate approaches to complex work procedures and processes, resources or learning, including leading teams within a technical or para-professional activity				●							●	●			
	can exercise coordination and/ or supervision in routine, familiar and some non-routine work or learning contexts can coordinate technical, design processes in routine, familiar, non-routine and an array of contexts with support available, if required							●				●	●			
	can express an internalised, personal world view, in the context of an understanding of socio-cultural relationships									●						
Role in context	can function with autonomy in technical and coordination contexts and support paraprofessional roles under guidance												●			
	can function both independently and in a coordination role with multiple groups												●			
	can take responsibility for coordinating the development of individuals and groups												●	●		
	can review and develop the performance of self and others												●	●		

Self-development	can evaluate own learning and identify learning needs in a familiar environment													●	
	can take responsibility for and plan own learning within a managed and non-routine environment												●	●	
	Can comprehend and observe ethical standards														●

Document History

Version No	Date	Update Information	Approved By:
2019-2020	July, 2020	▪ Added Section 2 University Profile ▪ Few modifications to the section 3.2 mission and 3.3 core values. ▪ Updated the latest organisational chart section 5 ▪ Added section 5.1 List of EAU Board of Governors ▪ Added section 5.2 EAU Contact Information and Location ▪ Updated section 9.2 Tuition Fees ▪ Updated section 9.3 Service Charges ▪ Updated the latest Refund Policy section 9.7 ▪ Updated section 15.2 Minimum and Maximum Periods of Enrolment ▪ Updated section 18 List of Full-time Faculty ▪ Updated Appendix A Curricula ▪ Updated Appendix B Programmes Learning Outcomes	Vice-Chancellor
2021-2022	Dec, 2021	▪ Update section 1 Academic Calendar 2021-2022 ▪ Added point 4 to the Mission section 3.2 ▪ Update section 4 Licensure ▪ Update section 5 EAU Organisation Structure ▪ Update section 5.1 List of EAU Board of Governors ▪ Removed section 5.2 University Administration ▪ Updated the tuition fee for 2021-2022 based on the website section 9.2 ▪ Updated the refund policy section 9.7 ▪ Updated the refund policy section 9.7 ▪ Update section 18 List of Full-time Faculty ▪ Update section 19 Staff Directory	Vice-Chancellor
2021-2022	May, 2022	▪ Added section 19 Staff Directory ▪ Update section 18 List of Full-time faculty ▪ Update “School of Aviation Studies and Business Management” to “School of Aviation and Business Management” in the following sections: o Section 5 (Organisation Chart) o Section 2 (University Profile) o Section 9.2 Tuition fee	Vice-Chancellor / University Council
2022-2023	Oct, 2022	▪ Update to section 1 academic calendar 2022-2023 ▪ Update manual with new academic year 2022-2023 ▪ Penalty charges on bounced back cheques removed ▪ Updated section 19 Staff Directory ▪ Updated list of Full-time Faculty section 18 ▪ Update “School of Aviation and Business Management” to “School of Business Management” in the following sections: o Section 5 (Organisation Chart) o Section 2 (University Profile) o Section 9.2 Tuition fee	Vice-Chancellor
2022-2023	June, 2023	Policy 9.2 changed: * Additional fees are applicable when retaking a course or more. The additional fee is charged per credit hour whether repeating a semester or a year or enrolling for an additional course.	Vice-Chancellor

2022-2023	July, 2023	Update to section 5.1 List of EAU Board of Governors Update to section 18 List of Full-time Faculty Update to section 19 EAU staff Directory Update to policy 9.7.2 Refund policy of undergraduate part-time programmes: Withdrawal after registration - Students must pay ~~AED 6,000 plus~~ tuition fees of each module covered.	Vice-Chancellor
2023-2024	Oct, 2023	Catalogue updated for 2023- 2034 based on new EAU Strategy 2023-2028	Vice-Chancellor
2024 - 2025	August, 2024	Catalogue updated for AY 2024-2025: 1. Academic Calendar 2024-2025 5.1 List of EAU Board of Governors 7.1 Admission Criteria Added: 5. Conditionally admitted students may not take more than 12 credits hours per semester of appropriate General Education coursework. 9.2 Tuition Fees • Table Update 9.3 Service Charges • EAU Official Transcript • Official Letter 18. List of Full-time Faculty 19. EAU Staff Directory	Vice-Chancellor