

The image shows two young men in white lab coats working in a workshop. They are focused on a large, dark-colored mechanical component, possibly a turbine or engine part, which is mounted on a metal frame. The student in the foreground is using a tool to adjust a part of the component. The background features a large window with a grid pattern, allowing natural light to illuminate the scene. The overall atmosphere is one of concentration and technical work.

**School of Engineering
2017 - 2018**

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About EAU

Emirates Aviation University (EAU) is the region's premiere aviation university and one of the leading academic institutions in the UAE. Established in 1991, EAU is part of the Emirates Group and was awarded university status in December 2010 by the UAE Ministry of Education - Higher Education Affairs. With an extensive range of nationally and internationally accredited aviation-related courses and programmes, EAU is the ideal launch pad for a successful career in engineering or business management. Licensed by the UAE Ministry of Education - Higher Education Affairs, the National Qualifications Authority (NQA) and the Knowledge and Human Development Authority (KHDA), EAU offers students postgraduate, undergraduate and vocational programmes that combine the highest standard of academics with the latest developments in the field of aviation. Home to a multicultural student community, the EAU campus in Dubai International Academic City (DIAC) is equipped to the highest international standards. Add to that an experienced faculty in a city that has become a vibrant cosmopolitan centre of business, culture and tourism, and students will have all they need to excel in a truly global environment.

Licensure and Recognition

Emirates Aviation University is licensed and recognised by the following bodies:

- Ministry of Education - Higher Education Affairs
- National Qualifications Authority (NQA)
- Knowledge and Human Development Authority (KHDA)
- General Civil Aviation Authority (GCAA)



Vision

To be one of the world's leading institutes of higher education in aviation-related disciplines..

Mission

- To serve the multifaceted educational needs of aviation students from the UAE as well as the greater Middle Eastern and subcontinent regions
- To offer outstanding applied educational programmes that allow students to develop their creative, analytical, communication and critical thinking skills in a collaborative, nurturing environment that promotes life-long learning and contributes to success in their professional careers
- To value and support academic, vocational and applied research amongst its faculty, both in their disciplines and in the appropriate pedagogy, necessary to be effective teachers and to serve the aviation industry



Undergraduate Programmes

Bachelor of Science in Aeronautical Engineering

Overview

Aeronautical Engineering is a branch of mechanical engineering that deals with the design and development of aircraft. This can range from the cutting-edge technology of today's modern military aircraft to commercial aircraft designed to fly thousands of miles around the world.

Why enrol in this programme?

The Bachelor of Science in Aeronautical Engineering programme is designed in line with international quality standards. It covers the four classical areas of aircraft design, namely: aerodynamics, structure, propulsion, and flight stability and control.

The programme blends theoretical knowledge with experimental testing and simulation applications to ensure that students are well equipped for entry-level positions in their field of specialisation, or to pursue graduate studies.

Accreditation

The Bachelor of Science in Aeronautical Engineering programme is accredited by the UAE Ministry of Higher Education Affairs. Interested students may apply for the Coventry University (UK) dual award programme.

Career prospects

Graduates of the Bachelor of Science in Aeronautical Engineering programme are qualified for entry-level positions in many sectors of the aerospace/aircraft industry, as well as a number of other engineering organisations, including automobile manufacturers, mechanical construction and oil companies. Therefore, graduates may choose to pursue a career in one of the following areas:

- Design and analysis of airframes, engines, satellites and mechanical systems
- Aircraft maintenance and manufacturing

Or they may choose to pursue postgraduate studies (Master's and PhD degrees) in several areas in the engineering field encompassing aerospace and mechanical engineering.

Alumni success

Companies that have employed graduates with a Bachelor of Science in Aeronautical Engineering degree from Emirates Aviation University (EAU) include:

- Emirates
- Etihad Airways
- Mubadala Aerospace
- Air Arabia
- Bahrain Defence Force
- Goodrich Aerospace
- AFFAN Innovative Structures
- Hitachi Water Treatment Plant
- Jetsco Engineering & Technical Services LLC
- Saftech Engineering Works LLC

Universities in which our graduates were accepted/have completed their graduate studies include:

- University of Manchester (UK)
- Concordia University (Canada)
- Masdar Institute of Science and Technology
- American University of Sharjah
- American University in Dubai
- Rochester Institute of Technology

Duration

Four full-time academic years

Mode of delivery

Full-time, based on credit hours



Programme outline

First Year

First Semester

Ref	Module
ENG 1000	Introduction to Math (Functions of one variable)
ENG 2210	Manufacturing Technology
ENG 3190	Mechanical CAD
GEN 1030	Introduction to IT
GEN 1070	Physics

Second Year

First Semester

Ref	Module
ENG 1160	Electrical Principles
ENG 1200	Math II (Linear algebra & ordinary differential equations)
ENG 2230	Engineering Mechanics II: Dynamics
ENG 2220	Introduction to Programming
EAE 2400	Fluid Mechanics

Third Year

First Semester

Ref	Module
ENG 3260	Math IV (Numerical analysis)
EAE 2340	Mechanics of Materials
EAE 2810	Aircraft Propulsion I
EAE 3200	Compressible Aerodynamics
ENG 3330	Introduction to Mechanical Design
GEN 2040	Islamic Culture

Fourth Year

First Semester

Ref	Module
EAE 3820	Modern Automatic Control
EAE 4195	Aircraft Structures
ENG 4210	Engineering Management
EAE ****	Major Elective
EAE 4060	Aerospace Project I
GEN ****	General Education Elective

Second Semester

Ref	Module
ENG 1100	Math I (Vector-valued functions)
ENG 2150	Engineering Mechanics I: Statics
EAE 2300	Engineering Thermodynamics
EAE 2350	Introduction to Aeronautics
GEN 1010	English I

Second Semester

Ref	Module
ENG 1360	Basic Electronics
ENG 3250	Math III (PDEs & complex analysis)
EAE 2310	Heat Transfer and Combustion
EAE 2355	Incompressible Aerodynamics
EAE 3350	Materials Science and Engineering

Second Semester

Ref	Module
EAE 2150	Classical Automatic Control
EAE 3365	Aircraft Propulsion II
EAE 3370	Experimental Techniques
EAE 4190	Structural Analysis
GEN 1080	History of Science and Technology

Summer Semester

Ref	Module
ENG 4110	Industrial Training

Second Semester

Ref	Module
EAE 4250	Aircraft Design
EAE 4240	Aircraft Stability and Control
EAE ****	Major Elective
EAE 4065	Aerospace Project II
GEN 3020	Cross Culture Studies

Entry requirements

High School Certificate or its equivalent – a recognised and officially certified secondary school certificate or equivalent with a minimum total average of 80%, and a minimum score of 80% in Mathematics and Physics. Scores below 80% may be reviewed and applicants will be subject to an interview.

Alternatively:

- British certificates (IGCSE, GCSE, GCE):

- A minimum of seven GCSE/IGCSE O-Level subjects

OR

- Five GCSE/IGCSE O-Level subjects and two GCE AS-Level subjects

OR

- Five GCSE/IGCSE O-levels subjects, one GCE AS-Level subject and one GCE A-Level subject

Note: The subjects should be in the following four streams: Languages, Mathematics, Sciences, and Humanities & Social Studies – with a minimum grade of 'B' in both Mathematics and Physics and a minimum grade of 'C' in the other subjects

- English proficiency: Original certificate for any of the following:

- TOEFL Paper Based (500)
- TOEFL CBT (173)
- TOEFL IBT (61)
- IELTS (5)
- PTE Academic (36)

OR undertake Emirates Aviation University's English language entry test



Applied Bachelor in Aerospace Technology

Overview

Aerospace and aeronautical engineering is a highly-advanced discipline that explores how flight is possible and how aircrafts are manufactured, powered, operated, controlled and maintained.

The Applied Bachelor in Aerospace Technology programme offers a stimulating, dynamic and applied study of aerospace and aeronautical engineering. This programme provides students with the practical training and commercial acumen needed to succeed in this high-technology field. The programme prepares students to enter various job positions in the airline industry in the areas of aircraft acquisition, planning, configuration and maintenance.

The following qualification is also available as an exit award of the Applied Bachelor in Aerospace Technology:

- Advanced Diploma in Aeronautical Engineering - 2 Years

Why enrol in this programme?

The Applied Bachelor in Aerospace Technology is a three-year programme based on the British system for higher education. Over the course of three years, students will receive a broad education and application in all aerospace disciplines, such as aerodynamics, flight mechanics, propulsion, structures and systems.

From the very beginning, students will use an aircraft as the object of study. As the semester progresses, the emphasis will gradually shift from theory to application. Lectures will alternate between seminars, laboratory courses and projects where students will put the theories they have acquired into practice. The programme paradigm is skill-based with more focus on coursework and application than theory.

The aerospace industry offers many exciting opportunities ranging from design and construction to maintenance and operations. The Applied Bachelor in Aerospace Technology programme provides students with the knowledge and skill sets they need to seize these opportunities. Students will develop the technical skills required to maintain 21st century aviation and aerospace fleets into the future. Students will learn how to inspect, maintain, troubleshoot, diagnose, develop and repair aircraft using highly advanced equipment and techniques.

Accreditation

The Applied Bachelor in Aerospace Technology is a dual award programme conferred by Emirates Aviation University (EAU) and Coventry University, UK. The EAU award is recognised by the National Qualifications Authority (NQA) in the UAE.

The Advanced Diploma in Aeronautical Engineering is a dual exit award conferred by Emirates Aviation University (EAU) and BTEC Pearson, UK. The EAU diploma is recognised by the National Qualifications Authority (NQA) in the UAE.

Career prospects

The programme aims to equip graduates with the skill sets they need to become successful engineers and engineering managers, both in aerospace and the wider engineering industry. Graduates of this programme have gone on to become aircraft maintenance engineers, planning engineers, design engineers, quality engineers and engineering managers for a wide range of companies; while some graduates have chosen to become pilots. Graduates may also choose to pursue higher education (Master's and PhD degrees) in several areas in the engineering field that include aeronautical and mechanical engineering.

Practical experience

Not only will students learn comprehensive theory, but they will also gain practical experience in well-equipped laboratories and workshops, as well as hands on experience in a real workplace environment through on-job training and internships where applicable.

Alumni success

Companies that have employed graduates of the Applied Bachelor in Aerospace Technology degree from EAU include:

- Emirates
- Etihad Airways
- Air Arabia
- FlyDubai
- Mubadala Aerospace
- MASCO - Mideast Aircraft Services Company
- Rolls-Royce Aviation
- GE Aviation
- Bahrain Air Force

Duration

Three years

Mode of delivery

This programme is delivered on a full-time and part-time basis.

Programme outline

A typical three-year study plan.

First Year

Module
Analytical Methods for Engineers
Engineering Science
Aircraft Systems Principles and Applications
Aircraft Workshop Principles and Practices
Electrical, Electronic and Digital Principles
Engineering Thermodynamics
Construction and Operation of Aircraft Fluid Systems
Aerodynamic Principles and Aircraft Design
Aircraft Communication and Navigation Systems
Further Analytical Methods for Engineers

Third Year

Module
Aerospace Applications
Aerospace Technology II
Control and Instrumentation
Aerospace Industry Studies
Project Management
Individual Project

The above programme of study is for illustrative purposes only and may be subject to change.

Entry requirements

High School Certificate - a recognised and officially certified secondary school certificate or equivalent with a minimum total average of 80%. Applicants with averages between 70 and 79% will be subject to an interview.

Alternatively:

- British certificates (IGCSE, GCSE, GCE):
 - Five GCSE/IGCSE O-Level subjects and two GCE AS-level subjects with a minimum grade of 'C' in all
 - OR
 - Five GCSE/IGCSE O-Level subjects and one GCE A-Level subject with a minimum grade of 'D' in either Mathematics or Physics
 - English proficiency: Original certificate for any of the following:
 - TOEFL Paper Based (500)
 - TOEFL CBT (173)
 - TOEFL IBT (61)
 - IELTS (5)
 - PTE Academic (36)
- OR undertake Emirates Aviation University's English language entry test.

Transfer admission/Accreditation of Prior Learning (APL) is possible and is subject to the applicable EAU regulations, in Years 1 and 2 only.

Second Year

Module
Advanced Mathematics for Engineering
Aircraft Propulsion Technology
Aerodynamic Principles and Aircraft Stability and Performance
Business Management for Engineers
Strength of Materials
Aircraft Gas Turbine Science
Engineering Design
Material Engineering
Project Design, Implementation and Evaluation

Applied Bachelor in Avionics Technology

Overview

The Applied Bachelor in Avionics Technology programme offers a stimulating, dynamic and hands-on learning environment in avionics engineering. It includes the study of design, manufacture, development and maintenance of electrical and electronic systems in aeroplanes, satellites, helicopters and Unmanned Aerial Vehicles (UAVs).

The programme also offers strong foundations in key aspects of the avionics field such as communication, navigation, aircraft flight-control systems, collision-avoidance systems, black boxes, radar and sonar. It prepares students to enter various positions in the following fields: electrical, electronics, communication and navigation – with greater emphasis on the aviation industry.

The following qualification is also available as an exit award of the Applied Bachelor in Avionics Technology:

- Advanced Diploma in Avionics Engineering – 2 Years

Why enrol in this programme?

Avionics engineers work in one of the most technologically advanced branches of engineering. They design, construct, test and maintain electrical and electronics equipment on aircraft. Working within this field gives students the chance to conceptualise a project from the drawing board to planning and implementation.

The programme paradigm is skill-based with more focus on coursework and application than theory. Students will learn the intricacies of aircraft avionics systems, the various types of system failures that can occur and the implications of these failures. The programme combines various disciplines such as mathematics, science and avionics technology (including aerodynamics, flight control, electronics and communication).

Accreditation

The Applied Bachelor in Avionics Technology is a dual award programme conferred by Emirates Aviation University (EAU) and Coventry University, UK. The EAU award is recognised by the National Qualifications Authority (NQA) in the UAE.

The Advanced Diploma in Avionics Engineering is a dual exit award conferred by Emirates Aviation University (EAU) and Pearson, UK. The EAU diploma is recognised by the National Qualifications Authority (NQA) in the UAE.

Career prospects

Emirates Aviation University (EAU) has a first-rate working relationship with Emirates and other UAE aviation establishments, offering excellent career opportunities. Our graduates have landed careers in both avionics design and application, as well as maintenance engineering with aerospace companies, system suppliers, component manufacturers and service providers.

Practical experience

Not only will students study comprehensive theory, but they will also gain practical experience in well-equipped laboratories and workshops, as well as hands on experience in a real workplace environment through on-job training and internships where applicable.

Alumni success

Companies that have employed graduates of the Applied Bachelor in Avionics Technology programme include:

- Emirates
- Etihad Airways
- Air Arabia
- FlyDubai
- Mubadala Aerospace
- Bahrain Air Force

Duration

Three years

Mode of delivery

This programme is offered on a full-time semester basis.

First Year

Module
Analytical Methods for Engineers
Engineering Science
Aircraft Systems Principles and Applications
Combinational and Sequential Logic
Electrical, Electronic and Digital Principles
Electronic Principles
Construction and Operation of Aircraft Fluid Systems
Aerodynamic Principles and Aircraft Design
Aircraft Communication and Navigation Systems
Further Analytical Methods for Engineers

Third Year

Module
Aerospace Applications
Aerospace Technology II
Control and Instrumentation
Avionics Systems II
Project Management
Individual Project

The above programme of study is for illustrative purposes only and may be subject to change.

Entry requirements

High School Certificate – a recognised and officially certified secondary school certificate or equivalent with a minimum total average of 80%. Applicants with averages between 70 and 79% will be subject to an interview.

Alternatively:

- British certificates (IGCSE, GCSE, GCE):
 - Five GCSE/IGCSE O-Level subjects and two GCE AS-level subjects with a minimum grade of 'C' in all
- OR
- Five GCSE/IGCSE O-Level subjects and one GCE A-Level subject with a minimum grade of 'D' in either Mathematics or Physics
- English proficiency: Original certificate for any of the following:
 - TOEFL Paper Based (500)
 - TOEFL CBT (173)
 - TOEFL IBT (61)
 - IELTS (5)
 - PTE Academic (36)
- OR undertake Emirates Aviation University's English language entry test.

Transfer admission/Accreditation of Prior Learning (APL) is possible and is subject to the applicable EAU regulations, in Years 1 and 2 only.



Applied Bachelor in Mechanical Engineering

Overview

Mechanical Engineering forms the basis of various engineering disciplines. Graduates of this field will be exposed to a vast range of career opportunities. The programme is designed to enable future engineers to develop their skill sets and competencies in the mechanical, maintenance and manufacturing engineering sectors to meet the needs of today's industry.

The following qualification is also available as an exit award of the Applied Bachelor in Mechanical Engineering:

- Advanced Diploma in Mechanical Engineering – 2 Years

Why enrol in this programme?

Students will acquire a wide range of fundamental competencies in areas relevant to their current or future employment, such as CAD, drafting, engineering design, engineering management and project management. Students will learn how to use their mathematical and analytical skills to solve real-life problems. They will be equipped with the tools they need to be able to organise and analyse information, interact with computing technology and select appropriate engineering materials.

Accreditation

The Applied Bachelor in Mechanical Engineering is a dual award programme currently being developed and finalised to be conferred by Emirates Aviation University (EAU) and Coventry University, UK.

The Advanced Diploma in Mechanical Engineering is a dual exit award conferred by Emirates Aviation University and BTEC Pearson, UK. The EAU diploma is recognised by the National Qualifications Authority (NQA) in the UAE.

Career prospects

Mechanical engineers are sought-after in all types of industries, such as construction, marine, oil & gas and aerospace. Graduates may also choose to pursue a higher education (Master's and PhD degrees) in several engineering areas.

Practical experience

Not only will students study comprehensive theory, but they will also gain practical experience in well-equipped laboratories and workshops, as well as hands on experience in a real workplace environment through on-job training and internships where applicable.

Duration

Three years

Mode of delivery

This programme is offered on a full-time semester basis.

Programme outline

A typical three-year study plan.

First Year

Module
Analytical Methods for Engineers
Engineering Science
Engineering Design
Mechanical Principles
Workshop Practices and Principles
Health, Safety and Risk Assessment in Engineering
Engineering Thermodynamics
Further Analytical Methods for Engineers
Fluid Mechanics
Business Management Techniques for Engineers

Third Year

Module
Mechanical Applications
Mechanical Systems Modelling
Mechanical Industry and Professional Studies
Control and Instrumentation
Project Management
Individual Project

The above programme of study is for illustrative purposes only and may be subject to change.

Second Year

Module
Aerodynamic Principles and Aircraft Design
Aircraft Communication and Navigation
Materials Engineering
Strengths of Materials
Advanced Mathematics for Engineering
Computer-aided Design and Manufacture
Manufacturing Process
Application of Machine Tools
Project Design, Implementation and Evaluation

Entry requirements

High School Certificate – a recognised and officially certified secondary school certificate or equivalent with a minimum total average of 80%. Applicants with averages between 70 and 79% will be subject to an interview.

Alternatively:

- Five GCSE/IGCSE O-Level subjects and two GCE AS-level subjects with a minimum grade of 'C' in all

OR

- Five GCSE/IGCSE O-Level subjects and one GCE A-Level subject with a minimum grade of 'D' in either Mathematics or Physics

- English proficiency: Original certificate for any of the following:

- TOEFL Paper Based (500)
- TOEFL CBT (173)
- TOEFL IBT (61)
- IELTS (5)
- PTE Academic (36)

OR undertake Emirates Aviation University's English language entry test.

Transfer admission/Accreditation of Prior Learning (APL) is possible and is subject to the applicable EAU regulations, in Years 1 and 2 only.



Applied Bachelor in Aviation Maintenance Engineering (Part-Time)

Overview

The Applied Bachelor in Aviation Maintenance Engineering is delivered in collaboration with Coventry University, UK. The two-year part-time programme is designed to provide a higher education to those possessing the equivalent of a European Aviation Safety Agency (EASA) or General Civil Aviation Authority (GCAA) Certificate of Recognition (Category B1 or B2). The curriculum provides extensive knowledge in areas of aircraft safety and quality management that are relevant to maintenance engineers.

Why enrol in this programme?

Applied Bachelor in Aviation Maintenance Engineering offers the opportunity for aircraft maintenance engineers to strengthen their professional experience and enhance their career progression by earning an academic degree while balancing a part-time job. It also provides maintenance engineers the opportunity to work in areas such as technical services, support services, maintenance, planning, management and product development.

Accreditation

The Applied Bachelor in Aviation Maintenance Engineering is a dual award programme conferred by Emirates Aviation University (EAU) and Coventry University, UK. The EAU award is recognised by the National Qualifications Authority (NQA) in the UAE.

Graduates of this programme will receive two awards:

- Applied Bachelor in Aircraft Maintenance from Coventry University
- Applied Bachelor in Aviation Maintenance Engineering from EAU

Career prospects

Emirates Aviation University has a first-rate working relationship with Emirates and other UAE aviation establishments, offering excellent job opportunities. Our graduates have successfully landed jobs in maintenance engineering with various aerospace companies, component manufacturers and service providers.

Entry requirements

European Aviation Safety Agency (EASA) or General Civil Aviation Authority (GCAA) Certificate of Recognition (Category B1 or B2) or equivalent.

English proficiency

Non-native speakers, who have earned the Certificate of Recognition (in Categories B1 or B2) in a language other than English, will require an IELTS with a score of 6.5 or equivalent.

Duration

Two years

Mode of delivery

This programme is delivered on a part-time basis with classes normally held every 11 weeks (five days per module, Thursday to Monday).

Assessment

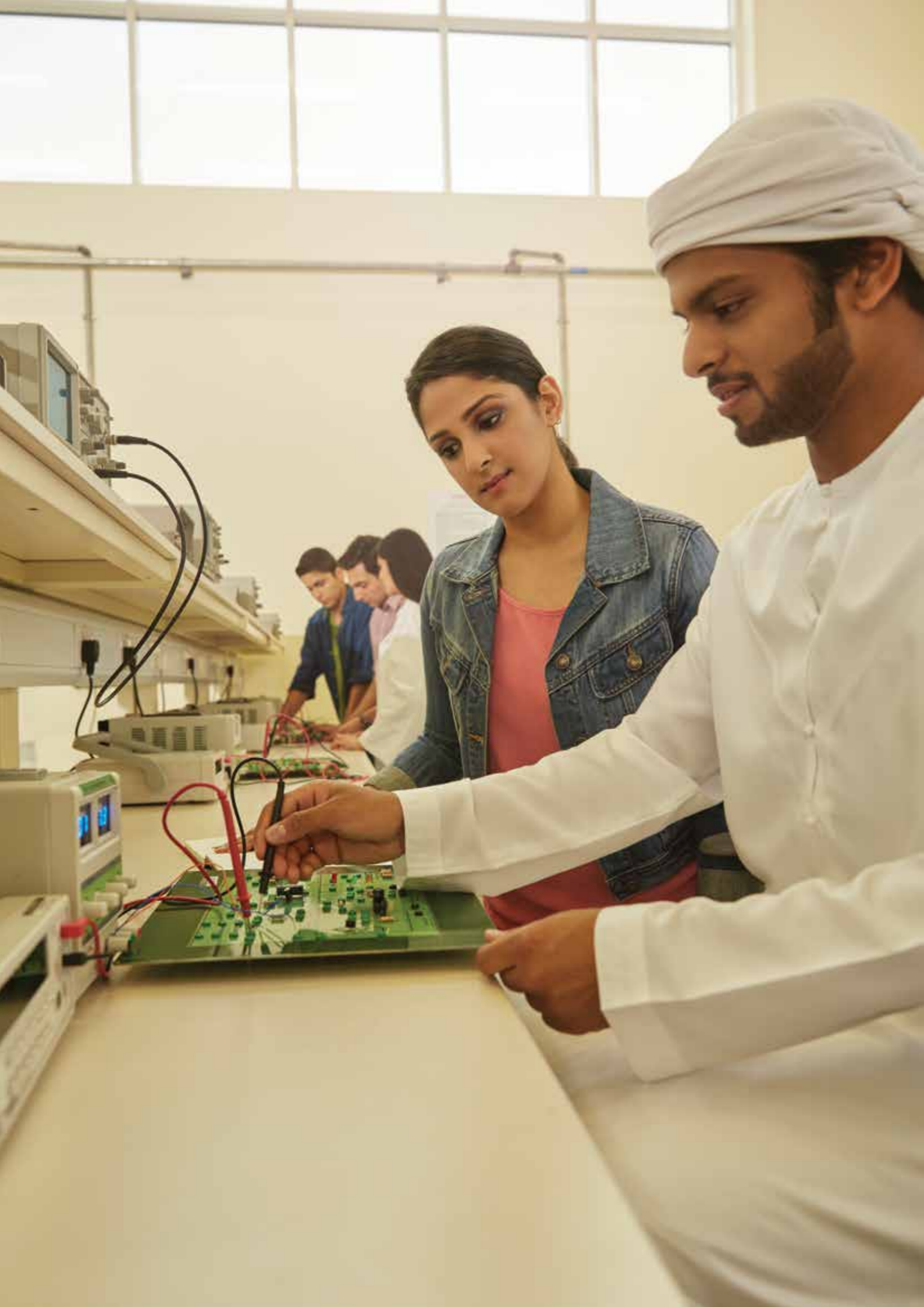
The assessment is based on coursework (in-class assessments and written assignments) and/or a final exam. This will typically involve an average of 40 hours of planned activities per module with additional independent learning.

Programme outline

The programme consists of the below nine modules.

Module
Engineering Mathematics II
Aircraft Maintenance Management
Engineering Science II
Aerospace Technology II
Airworthiness
Aerospace Industry Studies
Total Quality Management
Aircraft Safety, Security and Emergency Planning
Individual Project





Advanced Diploma Programmes

Aircraft Maintenance Engineering

B1.1-CAR66 (Advanced Diploma)

Overview

Not all aircraft maintenance engineers have to be licensed, but the UAE General Civil Aviation Authority (GCAA) requires that all engineering and maintenance work carried out on aircraft must be done under the supervision of a Licensed Aircraft Maintenance Engineer (LAME). This programme provides students with the basic B1.1 licence.

To become fully licensed by the GCAA, students need to acquire an additional two years of experience after the successful completion of the basic syllabus. Without the B1/B2 basic licence, students would normally require five years of experience before being eligible for a licence.

Why enrol in this programme?

Based on the International Civil Aviation Organization (ICAO), in the next 20 years, airlines will have to add 25,000 new aircraft in addition to their current 17,000 strong commercial fleets. By 2026, the industry will need 480,000 new technicians to maintain these aircraft. The international market has a huge shortage of Licensed Aircraft Maintenance Engineers.

Emirates Aviation University's (EAU) Aircraft Maintenance Engineering programme is licensed by the UAE General Civil Aviation Authority and complies with the CAR66 (B1.1) syllabus. Students will benefit from a concurrent advanced diploma recognised by the National Qualifications Authority (NQA) in the UAE.

Accreditation

The Advanced Diploma in Aircraft Maintenance and the Certificate of Recognition B1.1 is a dual award conferred by Emirates Aviation University (EAU) and the UAE General Civil Aviation Authority (GCAA). The EAU award is recognised by the National Qualifications Authority (NQA) in the UAE.

Career prospects

Graduates of this programme will enjoy a high employment rate. Their career path is tailored towards becoming Licensed Aircraft Maintenance Engineers (LAME). They may also work with airline engineering departments or support aircraft maintenance organisations. While working in the industry, graduates have the option of enrolling in a relevant bachelor degree programme at Emirates Aviation University (EAU) on a part-time basis.

Duration

Two and a half years

Mode of delivery

This programme is offered on a full-time semester basis.

Programme outline

A typical two-and-a-half-year study plan.

Module
Mathematics
Physics
Electrical Fundamentals
Electronic Fundamentals
Digital Techniques
Materials and Hardware
Maintenance Practice
Basic Aerodynamics
Human Factors
Aviation Legislation
Aeroplane Aerodynamics, Structures and Systems
Gas Turbine Engines
Propeller

Entry requirements

- Applicants must be at least 18 years of age
- High School Certificate or its equivalent - a recognised and officially certified secondary school certificate or equivalent with a minimum total average of 80%, and a minimum score of 70% in Mathematics and Physics. Applicants with scores below 70% may be reviewed and will be subject to an interview.

Alternatively:

- British certificates (IGCSE, GCSE, GCE):
 - Five GCSE/IGCSE O-Levels and 2 GCE AS-Level with a minimum grade of 'C' in all

OR

- Five GCSE/IGCSE O-Levels and one GCE A-Level with a minimum grade of 'D' in either Mathematics or Physics.

- English proficiency: Original certificate for any of the following:

- TOEFL Paper Based (500)
- TOEFL CBT (173)
- TOEFL IBT (61)
- IELTS (5)
- PTE Academic (36)

OR undertake Emirates Aviation University's English language entry test.



Foundation Programmes

Certificate 4 in Aeronautical Engineering

Overview

The Certificate 4 in Aeronautical Engineering programme provides students with the fundamental knowledge, understanding and skills needed to prepare them for employment as aircraft technicians or to pursue further studies in engineering, offering them a pathway into the aerospace industry.

This is a high school equivalent vocational qualification, ideal for students who are aged 16 and above, seeking an alternative-learning environment to high school.

Why enrol in this programme?

The Certificate 4 in Aeronautical Engineering offers a highly specialised qualification to be able to work in the fields of aviation maintenance and manufacturing. It delivers the knowledge, skills and understanding that the students need, to prepare them for employment. Many students move on to higher education or employment. The Extended Diploma is equivalent to three A-Levels.

Accreditation

The Certificate 4 in Aeronautical Engineering is a dual award programme conferred by Emirates Aviation University (EAU) and BTEC Pearson, UK. The EAU award is recognised by the National Qualifications Authority (NQA) in the UAE.

Career prospects

Graduates of this programme can begin their careers within an airline engineering maintenance facility, aviation maintenance, aviation manufacturing or an engineering services company.

Successful completion of the Certificate 4 in Aeronautical Engineering qualification will also enable students to progress into an applied bachelor programme in a relevant field of study.

Duration

Two years

Mode of delivery

This programme is offered on a full-time semester basis.

Course outline

A typical two-year study plan

First Year

Module
Mathematics for Engineering Technicians
Principles and Applications of Aircraft Mechanical Science
Theory of Flight
Aircraft Electrical Devices and Circuits
Aircraft Workshop Principles and Practice
Aircraft Computers and Electronics Systems
Aircraft Materials and Hardware
Airframe Structural Concepts and Construction Methods
Human Factors in Aircraft Engineering

The above programme of study is for illustrative purposes only and may be subject to change.

Entry requirements

- Grade 11 or equivalent, minimum cumulative average of 60% including Mathematics and Physics
- OR
- Five IGCSE/GCSE/O-level subjects with a minimum grade of 'C', including Mathematics and Physics
- OR
- BTEC Qualification: First Diploma Business or Engineering
- English proficiency: Original certificate for any of the following:
- TOEFL Paper Based (500)
 - TOEFL CBT (173)
 - TOEFL IBT (61)
 - IELTS (5)
 - PTE Academic (36)
- OR undertake Emirates Aviation University's English language entry test.

Second Year

Module
Aircraft Hydraulic Systems
Aviation Legislation
Aircraft Maintenance Practices
Aircraft Gas Turbine Engines
Engineering Project
Airframe Systems
Aircraft Instrument and Indicating Systems



Engineering Foundation Programme

Overview

The Engineering Foundation Programme will provide students with fundamental knowledge and skill sets necessary to prepare them for the three-year applied bachelor engineering programmes.

Students will gain an understanding of how aircrafts operate, in addition to strong foundations in Mathematics and Physics. Students will study a variety of aeronautical and avionics-related subjects, such as theory of flight, aircraft materials and hardware, and aircraft electrical devices and circuits.

Why enrol in this programme?

The Engineering Foundation Programme provides the students with specialised skills and knowledge in aircraft materials and hardware, hydraulics, propulsion, airframes, avionics and more. Many graduates of this programme move onto higher education or to employment.

Accreditation

The Engineering Foundation is a dual award conferred by Emirates Aviation University (EAU) and BTEC Pearson, UK. The EAU diploma is recognised by the National Qualifications Authority (NQA) in the UAE.

Programme outline

A typical one-year study plan.

Module

Mathematics for Engineering Technicians

Principles and Applications of Aircraft Mechanical Science

Theory of Flight

Aircraft Electrical Devices and Circuits

Aircraft Workshop Principles and Practice

Aircraft Computers and Electronics Systems

Aircraft Materials and Hardware

Airframe Structural Concepts and Construction Methods

Human Factors in Aircraft Engineering

Engineering Project

The above programme of study is for illustrative purposes only and may be subject to change.

Entry requirements

Referral from the Admissions Office/school for those who do not meet the admission requirements for the applied bachelor engineering programmes.

Career prospects

Successful completion of the Engineering Foundation Diploma qualification enables graduates to progress to an applied bachelor programme in a relevant field of study.

Duration

One year

Mode of delivery

This programme is offered on a full-time semester basis.



Certificate 3 in Engineering

Overview

The Certificate 3 in Engineering is a foundation diploma providing students with the opportunity to build and apply knowledge in a wide variety of engineering settings. This is a vocational qualification, ideal for students aged 16 years and above who currently do not meet the entry criteria for our Certificate 4 in Aeronautical Engineering.

Why enrol in this programme?

Students will be introduced to the basic principles of engineering and will study in a practical environment, as well as a classroom, using case studies and project work based on real-world scenarios.

Accreditation

Certificate 3 in Engineering is recognised by the National Qualifications Authority (NQA) in the UAE.

Programme outline

Students will undertake eight modules over one semester in preparation for continued study on the Certificate 4 in Aeronautical Engineering programme.

Module

Working Safely and Effectively in Engineering

Interpreting and Using Engineering Information

Mathematics for Engineering Technicians

Electronic Circuit Construction

Operating & Maintenance of Fluid Power Systems & Components

Operating & Maintenance of Mechanical Systems & Components

Operating & Maintenance of Electrical Systems & Components

Selecting Engineering Materials

Entry requirements

- Successful completion of Grade 10 or equivalent
- Must be at least 15 years of age

Career prospects

Students graduating from this programme proceed on to higher education to obtain a Certificate 4 in Aeronautical Engineering followed by Advanced Diploma and/or a bachelor's degree.

Duration

One semester

Mode of delivery

This programme is offered on a full-time semester basis.

