

BSc in

AEROSPACE ENGINEERING

About the program

The program utilizes the principles of science and engineering to design and analyze flight vehicles and related aerospace systems in well-designed course sequences to ensure that students gain experience in developing flight vehicles from concept to testing. Using advanced computer modeling and simulations, as well as hands-on laboratories and real-life projects, students are equipped with the tools to contribute effectively to the blooming aerospace industries in UAE and the region.

Specializations

Aeronautical engineering and Astronautical engineering.

Aeronautical engineering deals with systems that operate within Earth's Atmosphere: aircraft, helicopters, UAVs, and missiles, as well as with systems that perform outside of Earth's Atmosphere or Space: rockets, satellites, and spacecraft.

Labs: Space Dynamics, Aircraft Design, Material Testing, Aerodynamics, Composites Manufacturing, Guidance Navigation and Control (GNC) & Avionics, Computer Aided Design (CAD).

The Khalifa University Student Chapter of the American Institute of Aeronautics and Astronautics (KU AIAA) promotes the profession of aerospace engineering through organizing activities in the areas of academic study and research, and to offer quality engineering experiences that go beyond the classroom environment.

Graduates of the program will

Be involved in a wide range of economic sectors, including manufacturing, heating, refrigeration and air-conditioning; structural design, vehicle engineering, robotics, fabrication, processing and testing of materials; desalination and water treatment, nuclear engineering, renewable and sustainable energy and the environment.

Our graduates are working in one of the following fields such as Aviation Industries, Air Carriers, Space Industries, Defense and Security Sectors, Research Centers. The intent of our program is to prepare our graduates to work and learn in a professional environment as: Systems Engineering, Robotics Software, Testing, Design and Innovation, Computational Analysis, Project Management, Research and Development.



WHY KHALIFA UNIVERSITY?



GLOBAL RECOGNITION

Khalifa University stands out as the leading institution in the UAE, with 90 of its faculty members acknowledged among the world's top 2% most-cited scientists in Stanford University's prestigious 2023 listing.



CONSISTENTLY HIGH-RANKED

Ranked top in the UAE, 2nd in the Arab world, and ranked 27th in Asia in Sustainability; and among top 250 in the world



GLOBALLY-ACCREDITED ACADEMIC PROGRAMS

Khalifa University is fully licensed and all its programs are accredited by the Commission for Academic Accreditation (CAA) of the UAE Ministry of Education.



UNIQUE AND DIVERSE RESEARCH

Including energy, water and environment, healthcare, aerospace, cybersecurity, Intelligent Systems, advanced materials, and fundamental science..



WORLD'S SAFEST CITY

Abu Dhabi, the largest emirate in the UAE, remains the world's safest city for the 8th consecutive year in 2024. Experience safety and a cosmopolitan lifestyle that enhances your learning experience, reinforcing its status as a safe and secure place to live, work, study, and invest.



EXPERT GUIDANCE

We are committed to empowering students for success, fostering collaboration in a diverse community led by world-class faculty. Experience personalized guidance and a conducive learning environment with an impressive 11:6 student-to-faculty ratio, ensuring your path to success is well-supported and rewarding.



DYNAMIC CAREER OPPORTUNITIES

Attractive graduate employment opportunities across a wide spectrum of industries with the opportunity to present research projects at major international conferences.