# **Curriculum** (127 Credit Hours)

COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE
General Education Requirements: 33 Credit Hours					
ARL 100	Communication Skills in Arabic I	ENG 200	English II	FWS 100	Academic Skills for Success
FWS 205	UAE and GCC Society	FWS 305	Technical Communication for Work Place	FWS 310	Fundamentals of Innovation and Entrepreneurship
GES 201	General Sciences	ISL 100	Islamic Culture	ITD 100	Introduction to Information and Digital Technology
MTT 101	Pre-Calculus	STT 100	General Statistics		
College Requirements: 6 Credit Hours					
COE 101	Introduction to Artificial Intelligence	COE 102	Introductory Big Data Analytics		
Major Requirements: 76 Credit Hours					
AVS 101	Introduction to Aviation	AVS 120	Introduction to Aeronautics	AVS 120L	Introduction to Aeronautics Lab
AVS 209	Aerodynamics	AVS 211	Aircraft Jet Engines	AVS 254	Aviation Law
AVS 287	Crew Resource Management	AVS 289	Airline Management	AVS 303	Aviation Security
AVS 310	Aircraft Performance	AVS 350	Flight Navigation	AVS 350L	Flight Navigation Lab
AVS 356	Aircraft Systems I	AVS 357	Flight Physiology	AVS 399	Internship
AVS 402	Aviation Meteorology	AVS 403	Introduction to Space	AVS 408	Aviation Safety
AVS 410	Air Traffic Management	AVS 411	Aircraft Systems II	AVS 412	Unmanned Aircraft Systems Operation
AVS 415	Airport Operations	AVS 422	Instrument and Commercial Pilot Operations	AVS 422L	Instrument and Commercial Pilot Operations Lab
AVS 435	Advanced Flight Guidance and Control Systems	AVS 435L	Advanced Flight Guidance and Control Systems Lab	AVS 472	Aviation Human Factors
AVS 499	Aviation Capstone Project				
Open Electives: 12 Credit Hours					
OE 1	Open Elective I	OE 2	Open Elective II	OE 3	Open Elective III
OE 4	Open Elective IV				





### Program Overview

The growth of the aviation industry, both in the region and internationally, has driven the demand for skilled personnel. The aim of the Bachelor of Science in Aviation is to produce graduates sought after in all sectors of the aviation industry.

The educational mission of the program is to provide students with a multidisciplinary curriculum that is fundamental yet broad and flexible. The program produces graduates equipped with the knowledge and skills to become aviation professionals, able to pursue careers in the field of aviation and affiliated industries.

The aviation courses are delivered by faculty with international expertise and professional experience in aviation. They include practical experience using our own flight training devices and various simulation platforms complemented by field visits.

Students enrolled in the program benefit from the Department of Aviation's extensive network within the Aviation sector. This includes collaborations and partnerships with key industry players such as Etihad Airways, the International Air Transport Association (IATA), the UAE Space Agency, the UAE General Civil Aviation Authority (GCAA), and several others within the UAE and abroad. Given the UAE's status as a major regional and global aviation hub, students also have the opportunity to bridge their academic activities to the "real world" through practical internships, capstone projects, and major industry conferences and events.

ADU has recently been accredited as an Authorized Training Center (ATC) from the **International Air Transport Association (IATA).** This applies to the Department of Aviation and selected courses in particular.

## Student's Testimonial

#### Adhari Al Blooshi - Bachelor of Science in Aviation Program Senior Student

Sometimes simple decisions change your whole life in a way you never thought of; sometimes you look back and realize that you are halfway there to your dream. Looking to the sky as a child waiting for airplanes to pass over my head made me smile, waving and hoping that the pilot sees my tiny hand, imagining myself on board that aircraft but being a passenger wouldn't satisfy me because my place is in the cockpit. Now as a mature person, I took my first step to become that person who I was waving to. By joining the Etihad cadet pilot program and with the help of Abu Dhabi University; one day children will wave to the person who is sitting in the cockpit and that will be me.



## Career Prospects

The Bachelor of Science in Aviation is designed to provide students with the opportunity to learn relevant aspects of aviation to pursue a career within operational sectors of the aviation industry. These include:

- Airline Flight Operations
- Airport Operations Ground Support Services
- Safety and Security Management
- Air Navigation Services including Air Traffic Management
- Operation of Unmanned Aircraft Systems (Drones)
- Operation of Space Vehicles

# Graduates of the program will be able to:

- a. Comprehend the aviation system as an integrated and multidisciplinary environment and the role of professionals working in this sector
- b. Function in multidisciplinary teams and develop leadership capabilities
- c. Identify, formulate, and solve problems encountered in the practice of performing the role of an aviation practitioner
- d. Demonstrate an understanding of the professional and ethical responsibility of licensed and non-licensed aviation personnel with regard to safety
- e. Communicate effectively by written, oral and visual means
- f. Demonstrate an understanding of the impact of the aviation industry in a global, economic, environmental, and societal context
- g. Develop research capabilities and independent information retrieval strategies
- h. Demonstrate knowledge of contemporary issues in aviation

