



Aviation & Aerospace Science B.S. - Professional Flight Officer Concentration

Minor (not required)

Fall 2022 Catalog Year

First Year		
Fall: 16 Credits	AES 1100 (4) Aviation Fundamentals	
	AES 1400 (3) Aviation Weather	
	AES 1500 (2) Private Pilot Flight Lab	
	Written Communication (3)	
	Quantitative Literacy (4) Algebra-based math course recommended	
Spring: 15 Credits	AES 1710 (3) Instrument Flight Sim I	
	Written Communication (3)	
	Oral Communication (3)	
	Natural & Physical Science (3)	
	Arts & Humanities (3)	
Second Year		
Fall: 15 Credits	AES 2120 (4) Instrument Fundamentals	
	AES 2500 (2) Instrument Pilot Flight Lab	
	AES 1040 (3) Intro to Unmanned Aircraft Systems OR	
	AES 2050 (3) Aviation & Aerospace History and Dev	
	Arts & Humanities (3)	
	Natural & Physical Science (3)	
Spring: 15 Credits	AES 2130 (3) Commercial Flight Operations	
	AES 3520 (2) Commercial Single-Engine Flight Lab	
	AES 2710 (3) Instrument Flight Simulation II	
	AES 2200 (4) Fundamentals of Air Traffic Control	
	Social & Behavioral Science (3) MC or GD recommended	

Third Year		
Fall: 15 Credits	AES 2220 (3) Flight Dispatch & Load Planning	
	AES 3530 (3) Aerodynamics	
	AES 3880 (3) Aviation Security	
	Historical (3) MC or GD recommended	
	Social & Behavioral Science (3)	
Spring: 15 Credits	AES 3000 (3) Aircraft Systems and Propulsion	
	AES 3710 (3) Multi-Engine Flight Simulation I	
	AES 3650 (3) Advanced Flight Technologies	
	AES 4040 (3) Aircraft Performance	
	AES 4370 (3) Advanced Navigation Systems	
Fourth Year		
Fall: 15 Credits	AES 4540 (3) FAA Instructor Certification - Ground	
	AES 4500 (2) Commercial Multi-Engine Flight Lab OR	
	AES 4510 (2) Flight Instructor Flight Lab	
	AES 4710 (4) Turboprop Flight Simulation OR	
	AES 4935 (4) Advanced Commercial Aircraft Systems	
	AES 3850 (3) Human Factors & Physiology of Flight	
	General Elective (3)	
Spring: 14 Credits	AES 4860 (3) Aviation Safety	
	AES 4930 (3) Professional Flight Standards Seminar	
	AES 4910 (3) Aviation & Aerospace Strategic Planning	
	General Elective (3)	
	General Elective (2)	

In addition to coursework, students must have the following FAA flight certificates in order to graduate: Private, Instrument, Commercial Single Engine, and *either* Certified Flight Instructor *or* Commercial Multi-Engine Add On *or* AGI and IGI