

Bachelor of Science in Aeronautics with a Major in Unmanned Aircraft Systems Operations

Required: 120 credits (36 of which must be numbered 300 or above) including:

I. Essential Studies Requirements (see University ES listing).

II. School of Aerospace Sciences Requirements (see College section).

III. The following curriculum:

Code	Title	Credits
Essential Studies Courses		
ENGL 110	College Composition I	3
ENGL 130	Composition II: Writing for Public Audiences	3
COMM 110	Fundamentals of Public Speaking	3
Social Science Electives		9
Fine Arts and Humanities Electives		9
ATSC 110	Meteorology I	3
ATSC 110L	Meteorology I Laboratory	1
MATH 103	College Algebra	3
or MATH 110	Mathematics in Society	
CSCI 130	Introduction to Scientific Programming	4
or CSCI 160	Computer Science I	
CSCI 290	Cyber-Security and Information Assurance	3
Other Requirements		
ATSC 231	Aviation Meteorology	4
Select one of the following:		
BADM 225	Professional Communication for Business	
COMM 200	Writing for New and Traditional Media	
ENGL 226	Introduction to Creative Writing	
ENGL 227	Literature and the Environment	
ENGL 230	Analyzing Worldview through Story	
ENGL 231	Literature and Social Issues	
ENGL 308	Intermediate Creative Nonfiction Writing	
Aviation Core Courses		
AVIT 100	Aviation Orientation	1
AVIT 103	Introduction to Air Traffic Management	2
AVIT 126	Introduction to UAS Operations	2
AVIT 208	Aviation Safety	3
AVIT 239	Autonomous Fundamentals	2
AVIT 240	UAS Enabling Concepts	3
AVIT 250	Human Factors	2
AVIT 331	UAS Flight Systems	4
AVIT 333	UAS Remote Sensing	4
AVIT 403	Aerospace Law	3
AVIT 430	Crew Resource Management	3
AVIT 450	Counter UAS Applications	3
AVIT 485	Aviation Senior Capstone	3
Total Credits		83

Track Options

Track Options include:

- Airplane, Low Altitude, UAS Commercial Applications and Operations (Small Track)
- Airplane, Medium/High Altitude, Long Endurance UAS Commercial Applications and Operations (Large Track)
- Helicopter, Low Altitude, UAS Commercial Applications and Operations (Small Track)
- Helicopter, Medium/High Altitude, Long Endurance UAS Commercial Applications and Operations (Large Track)

Code	Title	Credits
Airplane, Low Altitude, UAS Commercial Applications and Operations (Small Track)		
Note: Student must obtain an Airplane Private Pilot Certificate with Instrument Rating		
AVIT 220	Enhanced Basic Attitude Instrument Flying (Course required for students entering the aviation program with an FAA Private Pilot Certificate)	0-4
AVIT 102	Introduction to Aviation (Not required for students authorized to complete AVIT 220)	0-5
AVIT 221	Basic Attitude Instrument Flying (Not required for students authorized to complete AVIT 220)	0-3
AVIT 222	IFR Regulations and Procedures	3
AVIT 238	UAS Operator Certification	3
AVIT 323	Aerodynamics - Airplanes (Flight lab is not required)	3
AVIT 324	Aircraft Systems (Flight lab is not required)	3
AVIT 337	Survey of Unmanned Aircraft Systems	2
AVIT 419	sUAS Commercial Operations	4
Total Credits		18-30

Code	Title	Credits
Airplane, Medium/High Altitude, Long Endurance UAS Commercial Applications and Operations (Large Track)		
Note: Student must obtain an Airplane Commercial Certificate with Instrument Rating		
AVIT 220	Enhanced Basic Attitude Instrument Flying (Course required for students entering the aviation program with an FAA Private Pilot Certificate)	0-4
AVIT 102	Introduction to Aviation (Not required for students authorized to complete AVIT 220)	0-5
AVIT 221	Basic Attitude Instrument Flying (Not required for students authorized to complete AVIT 220)	0-3
AVIT 222	IFR Regulations and Procedures	3
AVIT 238	UAS Operator Certification	3
AVIT 323	Aerodynamics - Airplanes	3
AVIT 324	Aircraft Systems	3
AVIT 337	Survey of Unmanned Aircraft Systems	2
AVIT 438	UAS Operations	4
Total Credits		18-30

Code	Title	Credits
Helicopter, Low Altitude, UAS Commercial Applications and Operations (Small Track)		
Note: Student must obtain Helicopter Private Pilot Certificate with Instrument Rating		
AVIT 142	Introduction to Aviation-Helicopter	5
AVIT 143	Private Pilot-Helicopter Certification Lab	1
AVIT 238	UAS Operator Certification	3
AVIT 241	Commercial Helicopter	4
AVIT 337	Survey of Unmanned Aircraft Systems	2
AVIT 342	IFR Regulations and Procedures-Helicopter	3
AVIT 343	Instrument Rating-Helicopter Certification Lab	1
AVIT 419	sUAS Commercial Operations	4

AVIT 444	Helicopter Advanced Operations	4
Total Credits		27

Code	Title	Credits
Helicopter, Medium/High Altitude, Long Endurance UAS Commercial Applications and Operations (Large Track)		
Note: Student must obtain Helicopter Commercial Certificate with Instrument Rating		
AVIT 142	Introduction to Aviation-Helicopter	5
AVIT 143	Private Pilot-Helicopter Certification Lab	1
AVIT 238	UAS Operator Certification	3
AVIT 241	Commercial Helicopter	4
AVIT 242	Introduction to Commercial Flying-Helicopter Lab	1
AVIT 337	Survey of Unmanned Aircraft Systems	2
AVIT 342	IFR Regulations and Procedures-Helicopter	3
AVIT 343	Instrument Rating-Helicopter Certification Lab	1
AVIT 438	UAS Operations	4
AVIT 444	Helicopter Advanced Operations	4
AVIT 445	Commercial Pilot-Helicopter Certification Lab	1
Total Credits		29

Plus electives to total 120 credits.