UNCREWED AERIAL SYSTEMS TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE

NMC Code 547

Engineering technology education focuses primarily on the applied aspects of science and engineering aimed at preparing graduates for practice in that portion of the technological spectrum closest to product improvement, manufacturing, construction, and engineering operational functions.

The NMC Engineering Technology degree offers students a broad-based curriculum across all areas of technical education, preparing the graduates for emerging job markets and highly technical fields.

NMC has created a unique training center that specializes in Uncrewed Aerial System (UAS) operations. More commonly called drones, uncrewed aircraft represent a sector of aviation that is experiencing exponential growth. NMC is here to provide college students, enthusiasts, and professionals the training they need to begin operating in the UAS industry. The Federal Aviation Administration (FAA) has selected NMC's UAS training program for the Uncrewed Aircraft Systems-Collegiate Training Program, or the UAS-CTI.

Areas of Emphasis:

• Earn an FAA Commercial Drone Pilot certification
• Hands-on flight training from entry level to advanced commercial-grade aircraft systems
• Learn about the aircraft systems and different camera/sensor technology
• Train for a variety of UAS of specializations, such as aerial photography, agriculture, inspections and land survey
• Learning how to be marketable to the UAS industry

Within this degree students will have the opportunity to earn the following: Part 107 Remote Pilot Certification, CSWA Certified Solidworks Associate, ISPS Connector and Conductor, and PCEP- Certified Entry-Level Python Programmer.

Requirements
major requirements

Course	Title	Credits
General Education Requirements		
ENG 111	English Composition	4
Select one of the following:		3-4
ENG 112	English Composition	
ENG 220	Technical Writing	
BUS 231	Professional Communications	
PHL 105	Critical Thinking	3
Select one of the following:		4
BIO 106	Human Biology	
ENV 117	Meteorology & Climatology	
PHY 105	Physics of the World Around Us	
PHY 121	General Physics I	
Math Competency [1]		4
GEO 115	Introduction to GIS	3
Technical Specialty Requirements		
DD 170	CADD/Computer Modeling	4
EET 102	Intro to Engineering Tech	2
EET 103	Electrical Studies I	3
MFG 104	Fluid Power	3
RAM 155	Microcontroller Programming	3
RAM 205	Microcontroller Systems	3
Uncrewed Aerial Systems (UAS) Technology		
UAS 107	Remote Pilot Ground	3
UAS 141	Remote Pilot Flight	3
UAS 211	Commercial Drone Operations	3
UAS 220	UAS Projects and Maintenance	3
UAS 241	Advanced Drone Operations	3
WSI 300	Remote Sensing and Sensors	3
Select one of the following Electives:		3
EET 204	Electrical Studies II	
SVR 111	Intro to Field Surveying	
UAS 215	Commercial UAS Photography	
UAS 290	UAS Internship	
Total Credits		**60-61**

[1] Placement into MTH 122 Trigonometry ***or*** higher, ***or*** completion of MTH 121 College Algebra

Minimum Program Requirements 60

Note: *Internship opportunities are available for additional credits*.

Course Sequence Guide

Course	Title	Credits
Year 1		
Fall		
ENG 111	English Composition	4
EET 102	Intro to Engineering Tech	2
EET 103	Electrical Studies I	3
RAM 155	Microcontroller Programming	3
UAS 141	Remote Pilot Flight	3
	Credits	**15**
Spring		
Select one of the following:		3-4
ENG 112	English Composition	
ENG 220	Technical Writing	
BUS 231	Professional Communications	
DD 170	CADD/Computer Modeling	4
RAM 205	Microcontroller Systems	3
UAS 107	Remote Pilot Ground	3
	Credits	**13-14**
Summer		
GEO 115	Introduction to GIS	3
UAS 211	Commercial Drone Operations	3
	Credits	**6**

Year 2		
Fall		
MFG 104	Fluid Power	3
MTH 121	College Algebra	4
UAS 241	Advanced Drone Operations	3
WSI 300	Remote Sensing and Sensors	3
	Credits	**13**
Spring		
PHL 105	Critical Thinking	3
Select one of the following:		3-4
BIO 106	Human Biology	
ENV 117	Meteorology & Climatology	
PHY 105	Physics of the World Around Us	
PHY 121	General Physics I	
UAS 220	UAS Projects and Maintenance	
Approved Technical Elective		3-5
	Credits	**9-12**
	Total Credits	**56-60**

The responsibility for determining the transferability of this degree and courses to another institution is the sole responsibility of the student.