Geospatial Science and Technology AAS Drone Technology – Concentration

Career & Technical Division

Program Description:

The Drone Technology Concentration prepares individuals for careers as Remote Unmanned Aerial System (UAS) Pilots. Students will focus on the safe and effective use of commercial drones in the National Air Space. Students will explore various types and applications for drone technology, build, program and fly sport drones, obtain the FAA UAS Remote Pilot Certificate, gain in-air UAS flight hours, learn best practices for pre and post flight procedures, obtain aerial imagery using UAS, process acquired imagery using photogrammetry software, and analyze the imagery output using a GIS.

Career Outlook:

AUVSI's *The Economic Impact of Unmaned Aircraft Systems Integration in the United State* report show the economic benefit of UAS integration. AUVSI's findings show that in the first three years of integration more than 70,000 jobs will be created in the United State with an economic impact of more than #13.6 billion. This benefit will grow through 2025 when we foresee more than 100,000 jobs created and economic impact of \$82billion.

Employment Opportunities:

- Mapping
- Search and Rescue
- Construction
- Photography
- Journalism
- Utilities
- Inspection

Salary Forecast:

(For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at www.bls.gov/ooh/.

Program Admission Requirements:

The college adheres to an open admissions policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

Common Career Opportunities and Approximate Salaries:

Career opportunities in many different areas exist; however the career field is too new to approximate salaries.

Contact Information:

Megan Click Room: 221 Phone: 304-710-3405 or 1-866-N-ROLLED (1-866-676-5533) E-mail: <u>clickm@mctc.edu</u>

Geospatial Science and Technology Major Code – CG60 • Drone Technology Concentration Code – CG61					
Name:	ID Number 942-				
Student Success Counselor:					
Faculty Advisor:					

COURSE REQUIRED

COURSE	REQUIREMENTS	SEM	HRS	GR	SUBSTITUTE/REPEAT CRS	SEM	CR
GST 100	Sport Drones		3				-
II 101/102	Fundamentals of Computers ¹		3				
GEO 150	Introduction to Geography		3				
GST 150	Intro. To Drone Technology		3				
GST 140	WEBGIS		3				
			15				
COM 125	Interpersonal Communication ²		3				
DSGN 160	Digital Photography		3				
GST 110	UAS Pilot Certification Prep.		3				
GST 160	GIS Concepts		3				
	Approved Math Elective ³		3				
			15				
GST 210	UAS Flight School ⁴		3				
GST 230	2D and 3D GIS ⁵		3				
ENL 231	Business and Technical Writing ⁶		3				
MG 102	Introduction to Entrepreneurship		3				
	Approved Elective ⁷		3				
			15				
GST 220	Image Acquisition and Data Processing ⁸		3				
GST 240	GIS WebApps ⁹		3				
GST 266	Digital Cartography ⁹		3				
GST 299	Geospatial Internship ¹⁰		3				
	Approved Elective ⁷		3				
			15				
	Hours Required for Graduation: 60						

¹IT 101 or IT 102 will meet the Fundamentals of Computers requirement.

²COM 125 has a prerequisite of REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80.

³Approved Math electives are MAT 120, 121, 130, 144, 145, 205, 210 or 215 (select one based on program track-see advisor).

⁴GST 210 has a prerequisite of GST 110 and FAA UAS Pilot Certification.

⁵GST 230 has a prerequisite of GST 160.

⁶ENL 231 has a co-requisite of ENL 095, or placement in 100-level English and REA 098 or placement in 100-level reading.

⁷Choose from the following: ART 101, ENL 115, GST 165, GST 260, GST 263, GST 280-289, IT 1XX, IT 2XX, BIOL 101, EC 102, EC 201, EC 202, EC 201, EC 2

HIST 103, HIST 104, HIST 114, HIST 115, POLS 101, PSYC 200, PSYC 215, and SOCI 210.

⁸GST 220 has a prerequisite of GST 210 and FAA UAS Pilot Certification.

⁹GST 240 and GST 266 have prerequisite of GST 230.

¹⁰Permission of Program Coordinator/Dean is required in order to enroll in GST 299.