DRONE TECHNOLOGY AND APPLICATIONS

Certificate of Achievement
Career/Technical (Major Code: 01671)

The Drone Technology and Applications Certificate program will prepare students to become remote pilots or entrepreneurs in fields that currently deploy small Unmanned Aircraft Systems (sUAS). These fields include (but are not limited to) environmental science and management, real estate, journalism, search and rescue, precision agriculture, disaster response and management, fire science, maintenance and operations, law enforcement, photography and videography, mapping and surveying, remote sensing, and cultural resource management. This program will provide students with skills in sUAS operations as well as the knowledge necessary to plan, create, and develop an sUAS based business.

Program Student Learning Outcomes

- Student will analyze FAA regulations governing safe and responsible operation, licensing and registration requirements of small Unmanned Aerial Systems (sUAS).
- Student will assess and analyze a variety of problems that can be potentially solved using a UAS, and identify appropriate solutions.
- Student will process and analyze data gathered from a UAS.
- Student will describe the functions and limitations of various UAS hardware components (e.g. battery, gimbal, GPS module, flight controller, frame, sensor), and identify the appropriate components for particular applications.
- Student will discuss the social, ethical, economic, and legal implications of UAS operations on individuals, organizations, and society in general.
- Student will research and evaluate the financial, marketing, legal, and management needs that are essential to successfully launching and operating a new venture in UAS.

Code	Title	Units
Core Courses:		
GEOG/AERO 107	REMOTE PILOT GROUND SCHOOL	1
GEOG/AERO/FTMA 108/ART 188	INTRODUCTION TO DRONE TECHNOLOGY AND APPLICATIONS	3
GEOG 145	INTRODUCTION TO MAPPING AND GEOGRAPHIC INFORMATION SYSTEMS (GIS)	3
GEOG/PHS 154	INTRODUCTION TO REMOTE SENSING	3
BUS 120	INTRODUCTION TO BUSINESS	3
Choose one elective course from the list below:		3
GEOG/PHS 155	INTRODUCTION TO IMAGE ANALYSIS	
ART 192	INTRODUCTION TO DIGITAL IMAGING	
ART 205	BEGINNING DIGITAL PHOTOGRAPHY	
FTMA 100	EDITING I	
FTMA 102/ ART 131	INTRODUCTION TO MOTION PICTURE PRODUCTION	
Total Units		**16**