



## PROGRAM OF STUDY



### Unmanned Aircraft Systems Certificate of Specialization

The program curriculum allows students to explore the entirety of unmanned aircraft systems. Courses highlight specific characteristics of different aircraft, how they are built and fundamentals of control and propulsion systems. Students will explore how unmanned aircraft systems integrate into the larger aviation systems, including safety policies, regulations and automation procedures. The program can be tailored to meet the needs of individual students without any prior unmanned aircraft systems operating experience.

Upon completion of the program students will be prepared to become commercial Unmanned Aircraft Systems pilots, technicians and programmers in various industry sectors in a broad range of applications.

#### **Program Outcomes:**

Students who complete the Unmanned Aircraft Systems Certificate of Specialization will be capable of deploying and piloting unmanned aircraft systems, managing flight control systems, collecting and analyzing telemetry data, programming autonomous flight missions and securely communicate with a variety of different aircraft flying different types of missions.

#### **Career Opportunities in Unmanned Aircraft Systems**

There is rapid, exponential growth in job opportunities in a wide variety of commercial markets for unmanned aircraft systems pilots, technicians and programmers. Opportunities exist in fields such as:

- Aerial/Field Mapping (GIS)
- Agriculture/Crop scouting, Irrigation and Fertilization
- Computer Information Science
- Disaster and Emergency Management
- Environmental Research
- Law Enforcement/Fire Services
- Photogrammetry (i.e., crime scene investigation/preservation)
- Parcel Delivery
- Photography/Videography

#### **Required Courses**

The following courses are required to complete the Certificate of Specialization in Unmanned Aircraft Systems

<b>Courses</b>	<b>Title</b>	<b>Units</b>
APT A131	Introduction to Unmanned Aircraft Systems	3.0
APT A151	Unmanned Aircraft Systems Lab	1.0
CIS A160	Introduction to UAS Automation	4.0
CIS A177	Business Intelligence and Data Mining	3.0
CIS A263	Introduction to the Internet of Things	3.0
<b>Subtotal</b>		<b>14.0</b>
<b>Total Units</b>		<b>14</b>