

UNMANNED AERIAL SYSTEMS - BASIC TECHNICAL CERTIFICATE (BTC)

Explore More About This Program: <https://cwi.edu/program/unmanned-aerial-systems>

Certificate Quick Facts

- **Instructional School:** Industry, Engineering, and Trades
- **Department:** Engineering
- **Program Code:** UAS.BTC
- **Program Type:** Career and Technical Education
- **Available Fully Online:** No
- **Eligible for Federal Financial Aid:** Yes

NOTE: Courses required for this program *may* have an additional fee; more information can be found on the [Special Course Fees](#) web page.

Certificate Requirements

| Course | Course Title | Min Credits |
|--------------------------------------|-------------------------------------|-------------|
| Major Requirements | | |
| GIS 126 | Fundamentals of GIS | 3 |
| GIS 230 | Remote Sensing/GIS Integration | 3 |
| UAS 110 | Digital Imagery Fundamentals | 3 |
| UAS 115 | Privacy and Security | 3 |
| UAS 125 | Flight Theory - Ground School | 3 |
| UAS 130 | Flight Lab I | 5 |
| UAS 136 | Flight Lab II | 5 |
| UAS 140 | Mission Planning and Implementation | 3 |
| Minimum Credit Hours Required | | 28 |

Certificate Plan: Fall Start

The course sequence listed below is strongly recommended in order to complete your program requirements. Many Career and Technical Education (CTE) courses have prerequisites and/or corequisites that have been accounted for within this course sequence plan. Please register for each semester as shown using the Student Planning tool in myCWI. Consult your advisor for any questions regarding this course sequence plan.

| First Year | | Credit Hours |
|--------------------------------------|-------------------------------------|--------------|
| Fall | | |
| GIS 126 | Fundamentals of GIS | 3 |
| UAS 110 | Digital Imagery Fundamentals | 3 |
| UAS 125 | Flight Theory - Ground School | 3 |
| UAS 130 | Flight Lab I | 5 |
| Total Semester Credit Hours | | 14 |
| Spring | | |
| GIS 230 | Remote Sensing/GIS Integration | 3 |
| UAS 115 | Privacy and Security | 3 |
| UAS 136 | Flight Lab II | 5 |
| UAS 140 | Mission Planning and Implementation | 3 |
| Total Semester Credit Hours | | 14 |
| Minimum Credit Hours Required | | 28 |

- Possess an excellent understanding of Federal Aviation Administration (FAA) rules and regulations.
- Perform flight operations with regards to airspace, weather, and safety.
- Perform unmanned aerial systems (UAS) mission planning and implementation.
- Understand, analyze, and interpret GIS data as it relates to UAS.
- Work effectively on multi-disciplinary and diverse teams.
- Communicate effectively with others using written and oral communication skills.
- Assess UAS security and privacy issues and implement solutions.
- Capture and process digital imagery.
- Discern hazardous situations and apply aeronautical decision making.
- Apply pertinent knowledge in identifying and solving aeronautical problems.

Program Learning Outcomes

Upon successful completion of this program, students will be able to: