Miami Dade College

Course Description
ASC1560 | Introduction to Unmanned Aerial Vehicles and Systems (UAVs) |3.00 credits

This course introduces the fundamentals of unmanned aerial vehicles and systems, covering UAV types, components, principles of flight, regulations, and safe operational practices. Students will explore industry applications and gain foundational knowledge for further study in UAV technology.

Course Competencies:
Competency 1: The student will demonstrate foundational knowledge by:
1. Identifying major UAV types and components
2. Explaining principles of UAV flight
3. Describing regulatory requirements for UAV operations
4. Summarizing industry applications of UAVs

Competency 2: The student will apply technical concepts by:
1. Comparing different UAV system architectures
2. Illustrating safe operational practices
3. Evaluating UAV suitability for various missions

Competency 3: The student will develop analytical skills by:
1. Assessing the impact of UAVs in key industries
2. Interpreting technical documentation and manuals
3. Analyzing recent advancements in UAV technology

Competency 4: The student will communicate technical information by:
1. Presenting findings on UAV applications
2. Reporting on regulatory changes affecting UAVs
3. Discussing safety protocols with peers

Learning Outcomes
- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information

Updated: Spring 2026