

Specialized Academic Opportunities

Certificate Programs (available in conjunction with an undergraduate degree)

Aircraft Dispatcher Certification

For the student interested in airline flight operations management, Embry-Riddle offers a program to prepare the student for Aircraft Dispatcher certification testing. Upon successful completion of the required curriculum and the FAA Aircraft Dispatcher Knowledge Test, the student will be eligible to take the FAA Dispatcher Practical Test with instructor authorization.

Certificated aircraft dispatchers are employed by airlines to manage the ground-based tasks vital to successful airline operations. Dispatchers share responsibility with the pilot in command for preflight planning and preparation of the dispatch release, monitoring the progress of the flight, issuing safety-of-flight information to the crew, and canceling or re-dispatching the flight.

To carry out these tasks properly, dispatchers must be knowledgeable in aircraft performance capabilities, meteorology, operating regulations, air traffic control, and instrument flight procedures. They must also exhibit strong aeronautical decision-making skills incorporating the priorities of safety, passenger comfort, and economic considerations.

For more information: Aircraft Dispatcher Certificate

Emergency Response Meteorologist Certification

The Emergency Response Meteorologist (ERM) Certificate* prepares graduates for employment as an ERM or Incident Meteorologist. This certification is *only* available to students who complete a B.S. in Applied Meteorology. It gives students additional knowledge and skill to provide decision support services more effectively to meteorology customers. This additional training will prepare graduates to work in emergency operations centers for national or local government agencies and help guide decisions related to meteorology.

Students in this certification program learn about the U.S. incident command structure, gaining official National Incident Management System (NIMS) certification issued by the Federal Emergency Management Agency (FEMA), and Intermediate and Advanced Incident Command Certification through local emergency management personnel.

Students will also achieve familiarity with geographic information systems (GIS) as essential for mapping geophysical datasets and visualizing emergency plans and incident response operations. Then, the capstone experience (WX 458) gives students the opportunity to configure and operate various hazard models used in emergency management scenarios to predict the impacts of floods, hurricanes, earthquakes, wildfire behavior, and the spread of hazardous materials.

For more information: Emergency Response Meteorologist Certificate

GIS and Remote Sensing Certificate

The GIS and remote sensing certificate prepares students for employment in GIS and remote sensing-related careers. Due to its versatile use in many industries, the GIS certificate is open to all disciplines that use geospatial data to manage workflows, processes, policies, and high-level decision-making.

Students in this certification program will learn the most common GIS and remote sensing workflows to generate, process and apply geospatial data via in-depth, hands-on experiences using state-of-the-art GIS software. Emphasis is placed on the practical aspects of working with a GIS using easy-to-understand, step-by-step tutorials and instructor demonstrations.

Students who successfully complete the GIS and remote sensing certificate will have the necessary skills to compete and work in the field of GIS and remote sensing in both the public and private sectors. Moreover, GIS and remote sensing skills earned through this certificate are useful in supporting capstone projects, master theses and can provide students with a robust foundation to engage in a research career.

For more information: GIS and Remote Sensing Certificate