

Air Traffic Control (ATC)

Courses

ATC A143 ATC Regulations 3 Credits

Introduces Federal Aviation Regulations governing the Air Traffic Control System and the role of air traffic control specialists within the federal system.

ATC A144 ATC Flight Procedures 3 Credits

Presents types of navigation aids and their operational characteristics. Introduces navigation tools and references, and their utilization.

Special Note: One hour in Flight Training Device required.

ATC A147 Pilot/Controller Techniques 3 Credits

Examines methods of airport operations, and aeronautical lighting and visual aids, including markings and signs. Includes discussion of techniques used by pilots and controllers including all aspects of radio communication.

Prerequisites: ATC A143.

ATC A241 Control Tower Operations 3 Credits

Explains operating techniques of ATC airport facilities in visual and instrument conditions. Includes operations of airport lighting systems, proper phraseology, separation requirements, control techniques and emergency actions.

Prerequisites: ATC A143 and ATC A147.

ATC A241L Control Tower Operations Lab 1 Credit

Employs hands-on time in the control tower simulator. Emphasizes real-life ATC situations to develop techniques for the manipulation of air traffic during taxi, takeoff, and landing.

Prerequisites: ATC A241 or concurrent enrollment.

ATC A242 ATC Terminal Radar Procedures 3 Credits

Explores RADAR theory fundamentals and systems operation in air traffic control. Examines procedures of instrument traffic control in the terminal radar environment.

Prerequisites: ATC A143 and ATC A144 and ATP A235.

ATC A242L ATC Terminal Radar Procedures Lab 1 Credit

Employs hands-on time in radar laboratory simulators to develop techniques for the separation, vectoring and speed control of air traffic in a terminal radar environment.

Prerequisites: ATC A242 or concurrent enrollment.

ATC A243 ATC Enroute Procedures 3 Credits

Explores procedures of instrument traffic control in RADAR and non-RADAR environments. Emphasizes longitudinal, vertical, and lateral separation of air traffic.

Prerequisites: ATC A242.

ATC A243L ATC Enroute Procedures Lab 1 Credit

Explores techniques of longitudinal, vertical, and lateral separation of air traffic using lab scenarios designed to develop routine problem solving processes to adapt the student controller to real-life ATC situations.

Prerequisites: ATC A243 or concurrent enrollment.

ATC A250 Comprehensive Air Traffic Control Overview 2 Credits

Integrates concepts from all previous air traffic control classes, and examines the relationship between course material and occupational application. Contrasts academic and vocational use of knowledge, and prepares students to apply knowledge in the vocational setting.

Prerequisites: ATC A241 with a minimum grade of C and ATC A242 with a minimum grade of C and ATC A243 with a minimum grade of C and ATP A235 with a minimum grade of C.

ATC A325 Tools for Weather Briefing 3 Credits

Covers the operation and assessment of observation from three major weather sensors (Doppler RADAR, Weather Satellites, and Automated Surface Observation System), as well as analysis of weather charts and messages. Focuses on determining the state of the atmosphere, formulating trends, and their cause and effect. Qualifying air traffic control majors may receive Weather Observer Certification upon successful completion of Federal Aviation Administration knowledge exams.

Prerequisites: ATP A235.

ATC A355 Integrated Radar Techniques 3 Credits

Contrasts different radar specialties, including tracon, en route, and military. Examines relationship between facilities and focuses on potential problems where responsibilities overlap. Compares military and civilian traffic techniques, and dynamics of adapting to changing flow control standards.

Prerequisites: ATC A242 with a minimum grade of C and ATC A242L with a minimum grade of C and ATC A243 with a minimum grade of C and ATC A243L with a minimum grade of C.

ATC A440 Facility Operation and Administration 3 Credits

Emphasizes effective operation and administration of air traffic service facilities and conflict resolution between the FAA and labor unions. Evaluates current issues and events, and their potential impact on the National Airspace System.

Registration Restrictions: Sophomore standing or above

Prerequisites: BA A361 and BA A461.