

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 navigational tools and references, and their utilization, charts, VFR flight planning, and aircraft operating characteristics.

Special Note: One hour in flight training device required.

ATC A147 Air Traffic Communications 3 Credits

Examines communication techniques and standards required in air traffic control communications. Examines airport signage, aircraft identification, basic aviation numerology, and elements of various clearances.

ATC A239 Fundamentals of Nonradar Separation 3 Credits

Explores procedures of instrument traffic control in the nonradar environment, with an emphasis on the transition to the radar environment. Emphasizes longitudinal, vertical and lateral separation of air traffic, as well as general control and strip board management.

Prerequisites: (ATC A144 with a minimum grade of C or ATP A116 with a minimum grade of C) and (ATC A143 with a minimum grade of C or ATP A200 with a minimum grade of C) and ATC A147 with a minimum grade of C.

Corequisites: ATC A239L.

ATC A239L Fundamentals of Nonradar Laboratory 1 Credit

Explores the application of procedures of instrument traffic control in the nonradar environment, with an emphasis on the transition to the radar environment. Emphasizes longitudinal, vertical and lateral separation of air traffic, as well as general control and strip board management.

Corequisites: ATC A239.

ATC A242 ATC Terminal Radar Procedures 3 Credits

Explores terminal radar operations and examines procedures of instrument traffic control in the terminal radar environment.

Prerequisites: ATC A143 with a minimum grade of C or ATP A116 with a minimum grade of C.

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 with a minimum grade of C 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 A144 with a minimum grade of C or ATP A116 with a minimum grade of C.

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 with a minimum grade of C 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 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 and ATC A341 with a minimum grade of C.

ATC A251 Flight Dispatcher Overview 3 Credits

Provides an overview of the flight dispatcher profession and prepares students for the transition from the academic to the work environment. Includes the study of meteorology, flight planning, and Federal Aviation Regulations (FAR) used by dispatchers.

Prerequisites: ATA A233 with a minimum grade of C and ATP A100 with a minimum grade of C and ATC A325 with a minimum grade of C and (ATC A143 with a minimum grade of C or ATP A200 with a minimum grade of C) and (ATC A144 with a minimum grade of C or ATP A116 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 (ASOS)), as well as analysis of weather charts and messages. Focuses on determining the state of the atmosphere, formulating trends, and their cause and effect.

Special Note: Qualifying air traffic control majors may receive Weather Observer Certification upon successful completion of Federal Aviation Administration knowledge exams.

Prerequisites: ATP A235 with a minimum grade of C.

ATC A341 Control Tower Operations 3 Credits

Explains the separation standards of airport facilities in visual and instrument conditions. Includes operations of airport lighting systems, proper phraseology, separation requirements, control techniques and emergency actions. Includes detailed analysis of airport pattern sequencing, nonradar separation, and application of wake turbulence issues.

Prerequisites: (ATC A143 with a minimum grade of C or ATP A200 with a minimum grade of C) and (ATC A144 with a minimum grade of C or ATP A116 with a minimum grade of C) and ATC A147 with a minimum grade of C.

Corequisites: ATC A341L.

ATC A341L Control Tower Operations Lab 1 Credit

Applies separation techniques at airport facilities in visual and instrument conditions. Includes application of proper phraseology, separation requirements, control techniques and emergency actions. Includes detailed analysis of airport pattern sequencing, nonradar separation, and application of wake turbulence issues.

Corequisites: ATC A341.

ATC A351 Flight Dispatcher Operations 3 Credits

Prepares students for the practical application of previously acquired knowledge necessary to perform flight dispatcher functions. Focuses on the effects of weight and balance, performance, and flight characteristics in normal and abnormal flight.

Prerequisites: ATC A251 with a minimum grade of C.

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

Describes effective operation and administration of air traffic service facilities, as well as conflict resolution between the FAA and labor unions. Evaluates current issues and their potential impact on the National Airspace System (NAS).

Registration Restrictions: Sophomore, junior or senior standing

Prerequisites: ATP A100 with a minimum grade of C.