

REQUIREMENTS FOR THE BACHELOR OF SCIENCE
(Federal Aviation Administration Air Traffic College Training Initiative School)

COLLEGE OF CONTINUING EDUCATION

THE UNIVERSITY OF OKLAHOMA

For Students Entering the Oklahoma State System for Higher Education
Summer 2009 through Spring 2010

GENERAL REQUIREMENTS

Minimum Total Hours **125**
Minimum OU & Overall Retention Grade Point Average **2.25**
Minimum OU & Overall Retention Grade Point Average in Major **2.25**
Minimum Grade Point Average in OU Work **2.25**

Aviation —
Air Traffic
Management Track
B090 P045
Bachelor of Science

OU encourages students to complete at least 32 hours of applicable coursework each year to have the opportunity to graduate in four years.

LOWER-DIVISION REQUIREMENTS			UPPER-DIVISION REQUIREMENTS	
Subject	Hours	Courses	Business Requirements - 18 hours	Aviation Requirements - 20 hours
Communications	9-19	ENGL 1113, Principles of English Composition (Core I) ENGL 1213, Principles of English Composition (Core I), or EXPO 1213, Expository Writing (Core I) COMM 1113, Principles of Communication, or COMM 2613, Public Speaking Foreign Language , 0-10 hours, (Core I)—Students who have completed two years of high school foreign language are exempt from the general education foreign language requirement.	FIN 3303, Business Finance LS 3323, Legal Environment of Business MGT 3013, Principles of Organization and Management MGT 3513, Human Resource Management Practice MKT 3013, Principles of Marketing SCM 3523, Production/Operations Management	AVIA 3213, Airport Traffic Procedures AVIA 3313, IFR Air Traffic Procedures † AVIA 3333, Survey of Aviation Law AVIA 4015, Air Traffic Simulation † AVIA 4713, Aviation Field Project (Capstone) AVIA 3000-4000-Level Elective
		Social Science		
Humanities	12	HIST 1483 or 1493, U.S. (Core IV) One course from one of the following 3 fields (Core IV) must be upper-division: §Understanding Artistic Forms - _____ §Western Civilization and Culture - _____ §Non-Western Culture - _____		
Science & Mathematics	17	PHYS 1114, Gen. Physics for Non-Science Majors (Core II), or any approved Chemistry, Physics, or Zoology (Core II) METR 1014, Intro. To Weather and Climate (Core II) METR 2603, Severe and Unusual Weather MATH 1643, Precalculus for Business, Life, and Social Sciences MATH 1743, Calculus I for Business, Life & Social Sciences (Core I—Substitute: 1823, Calculus & Analytic Geom. I)	Upper-Division Electives - 3 hours Upper-division electives may include any 3000-4000-level course. May include specialized aviation courses.	
Basic Aviation	12	AVIA 1013, Introduction to Air Traffic Control AVIA 1213, Basic Air Traffic Control Regulations AVIA 2013, General Air Traffic Control Procedures AVIA 2613, Aviation Safety	Free Electives - 4-13 hours Thirteen hours if exempt from foreign language; four hours if foreign language must be taken. Free electives may include any specialized aviation courses. A combined maximum of five hours of physical education activity courses may be used to meet degree requirements.	
Basic Business	18	ACCT 2113, Fundamentals of Financial Accounting ACCT 2123, Fundamental Managerial Accounting ECON 1113, Principles of Economics—Macro (Core III) ECON 1123, Principles of Economics—Micro ECON 2843, Elements of Statistics, or PSY 2003, Understanding Statistics MIS 2113, Computer-Based Information Systems*		

§Courses taken to fulfill the University General Education Requirements must be chosen from the **University-Wide General Education Approved Course List**.

Aviation majors must earn a minimum grade of C in aviation courses to be considered passing and move to the next requirement.

ADDITIONAL REQUIREMENTS

Maintaining less than a 2.25 GPA will result in academic probation.
The maximum number of aviation hours accepted by transfer is twelve.
A maximum of nine hours of aviation may be accomplished through advanced standing.
A total of 40 hours of OU coursework must be completed to receive a baccalaureate degree.
A maximum of 32 hours of correspondence courses will be accepted.

A total of 55 hours of liberal arts coursework is required.
To receive the general business minor a 2.50 OU retention, overall retention, and upper-division business GPA is required.
*This course fulfills the Computer Literacy Requirement for graduation as required by the Oklahoma State Regents for Higher Education.

University-Wide General Education Requirements (minimum 40 hours)

Courses designated as Core I, II, III, IV, or Capstone are part of the General Education curriculum. Students must complete a minimum of 40 hours of General Education courses, chosen from the approved list, including at least one upper-division Gen. Ed. course outside of the student's major. Courses graded S/U or P/NP will not apply.

Core I	Symbolic and Oral Communication (9–19 hours, 3–5 courses) •English Composition—6 hours, 2 courses •Mathematics—3 hours, 1 course •Foreign Language—0–10 hours, 2 courses in the same language, (can be met by successful completion of 2 years of the same foreign language in high school) •Other (courses such as communication, logic or public speaking)
Core II	Natural Science (7 hours, 2 courses) •Courses must be taken from different disciplines in the biological and/or physical sciences; one of which must include a laboratory.
Core III	Social Science (6 hours, 2 courses) •One course must be P SC 1113, "American Federal Government"
Core IV	Humanities (12 hours, 4 courses) •Understanding Artistic Forms—3 hours, 1 course •Western Civilization and Culture—6 hours, 2 courses, including HIST 1483 or HIST 1493 •Non-Western Cultures—3 hours, 1 course

Senior Capstone Experience (3 hours, 1 course)

Suggested Semester Plan of Study

Year	FIRST SEMESTER	Hours	SECOND SEMESTER	Hours
FRESHMAN	ENGL 1113, Principles of English Composition (Core I)	3	ENGL 1213, Principles of English Composition (Core I), or	3
	MATH 1643, Precalculus for Business, Life, and Social Sciences	3	EXPO 1213, Expository Writing (Core I)	
	AVIA 1013, Introduction to Air Traffic Control *	3	MATH 1743, Calculus I for Business, Life & Social Sciences	3
	HIST 1483, United States 1492-1865, or 1493, United States 1865-Present (Core IV)	3	COMM 1113, Principles of Communication, or 2613, Public Speaking	3
	Free Elective	3	AVIA 2613, Aviation Safety	3
	ECON 1113, Principles of Economics—Macro (Core III)		3	
	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	15
SUMMER — AVIA 1213, Basic Air Traffic Control Regulations (online)			3 hours	
SOPHOMORE	METR 1014, Intro. To Weather and Climate (Core II)	4	AVIA 3213, Airport Traffic Procedures*	3
	ACCT 2113, Fundamentals of Financial Accounting	3	ACCT 2123, Fundamental Managerial Accounting	3
	ECON 2843, Elements of Statistics, or PSY 2003, Understanding Statistics	3	ECON 1123, Principles of Economics—Micro	3
	P SC 1113, American Federal Government (Core III)	3	PHYS 1114, Gen. Physics for Non-Science Majors (Core II)	4
	AVIA 2013, General Air Traffic Control Procedures*	3		
	TOTAL CREDIT HOURS	16	TOTAL CREDIT HOURS	13
JUNIOR	MIS 2113, Computer-Based Information Systems	3	METR 2603, Severe and Unusual Weather	3
	Western Civilization and Culture (Core IV)	3	MGT 3013, Principles of Organization and Management	3
	AVIA 3313, IFR Air Traffic Procedures*	3	MKT 3013, Principles of Marketing	3
	AVIA 3333, Survey of Aviation Law	3	L S 3323, Legal Environment of Business	3
	Free Elective	3	AVIA 4015, Air Traffic Simulation*	5
	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	17
SENIOR	FIN 3303, Business Finance	3	SCM 3523, Production/Operations Management	3
	MGT 3513, Human Resource Management Practice	3	AVIA 4713, Aviation Field Project (Capstone)	3
	Artistic Forms (Core IV)	3	AVIA 3000-4000-Level Elective	3
	Non-Western Culture—Upper-Division (Core IV)	3	Upper-Division Elective	3
	Free Elective	4	Free Elective	3
	TOTAL CREDIT HOURS	16	TOTAL CREDIT HOURS	15
Bachelor's degrees require a minimum of 40 hours of upper-division (3000-4000) coursework. This plan of study should not be used in lieu of academic advisement.				
*Air Traffic Control coursework must be taken in the semester offered. All 20 hours must be completed in residence at the University of Oklahoma.				

COURSES IN AVIATION (AVIA)

1013 Introduction to Air Traffic Control. The purpose of this course is to learn about the air traffic control system from both the pilot and controller's perspectives. This course is the first of six courses for the ATC minor and a prerequisite for basic air traffic control regulations. (F, Sp)

1213 Basic Air Traffic Control Regulations. Prerequisite: 1013. This course is a progressive continuation of introduction to air traffic control and a prerequisite for general air traffic control procedures. This course is more narrowly focused on study and interpretation of the FAA orders and regulations that govern the air traffic control system and the national airspace system. (F, Sp)

2013 General Air Traffic Control Procedures. Prerequisite: 1213. This course will present the study of "general control" procedures used in the terminal and en route control options as well as FAA flight service processes and procedures. This course will serve as a prerequisite for airport traffic control procedures. (F, Sp)

2613 Aviation Safety. Prerequisite: 1113 and 1222. This course will examine all aspects of accidents/incidents involving airline and general aviation flights. It examines those areas from the perspective of pilots, crew members, air traffic controllers and National Transportation Safety Board (NTSB) findings. Each accident/incident is dissected with the goal of determining what went wrong and lessons that can be learned. (F, Sp)

3213 Airport Traffic Procedures. Prerequisite: 2013. The primary focus of this course is to study visual air traffic control procedures, specifically, to learn the principles of operation and the separation methods required in the air traffic control tower environment. This course will serve as a prerequisite for IFR Air Traffic Control Procedures. (F, Sp)

3313 IFR Air Traffic Procedures. Prerequisite: 3213. Course focuses on the requirements and procedures used in the IFR air traffic control environment. The students will study all of the separation standards and rules used in radar and non-radar environments in the approach control and air route traffic control facilities. This course will serve as a prerequisite for Air Traffic Simulation. (F, Sp)

3333 Survey of Aviation Law. Prerequisite: 1113 or junior standing. Survey of legal issues in aviation. The student will review legislation, regulatory agencies, and case studies dealing with legal issues in the medium of airspace above the ground-predominantly over the United States. The student will be able to identify and comprehend the historical events and technical terms that describe national and international legal precedents that have shaped aviation law. (F, Sp)

4015 Air Traffic Simulation. Prerequisite: 3313. Lab to prepare student for on-the-job training in an FAA air traffic control facility. Course will consist of dynamic simulation exercises in an ATC computer lab as well as classroom briefings. Students will run scenarios as the controller and as a pseudo pilot. (F, Sp)

4713 Senior Capstone. Prerequisite: senior standing, permission of department, and all major upper-division courses or concurrent enrollment. This project course builds on the accumulated knowledge from all courses to date. Lectures will cover problem identification, analysis, generation of alternatives, cost/benefit studies, interviews and presentations. Student teams will analyze and make recommendations on an actual problem for an aviation related organization, such as the FAA. (F, Sp) [V]