

AVIATION TECHNOLOGY (AVIAT)

AVIAT 1100

Introduction to Aviation

1 Credit Hour

Students will be introduced to different careers in the aviation industry which include being a professional pilot, aircraft mechanic, air traffic controller, airport manager, and drone operator. (1 lecture hour)

Prerequisite: MATH 0465 or MATH 0481 with a grade of C or better, or equivalent; or a qualifying score on the Mathematics Placement Test; or a qualifying ACT Math score. Course requires Reading Placement Category One.

AVIAT 1105

Aviation Procedures Training

3 Credit Hours

Introduction to aircraft operations, procedures and basic flying skills in both the classroom and simulator environment. Will introduce the components of an aircraft, pre-flight safety check, cockpit orientation, and basic flight maneuvers under visual and instrument flight conditions, as well as simulator operations. Students will spend time in a simulator, and this time may reduce required time spent on the airport campus and in the aircraft. (2 lecture hours, 2 lab hours)

Prerequisite: Completion of either AVIAT 1110 or AVIAT 1310, or concurrent enrollment in AVIAT 1110 or AVIAT 1310. MATH 0465 or MATH 0481 with a grade of C or better, or equivalent; or a qualifying score on the Mathematics Placement Test; or a qualifying ACT Math score. Course requires Reading Placement Category One.

AVIAT 1110

Private Pilot Ground School

3 Credit Hours

This course teaches private pilot aeronautical knowledge. Topics include those covered in the Federal Aviation Regulations and Airman Certification Standards for private pilots. (3 lecture hours)

Prerequisite: MATH 0465 or MATH 0481 with a grade of C or better, or equivalent; or a qualifying score on the Mathematics Placement Test; or a qualifying ACT Math score. Course requires Reading Placement Category One. Students must be at least 17 years of age.

AVIAT 1120

Instrument Ground School

3 Credit Hours

This course emphasizes instrument rating aeronautical knowledge, including topics covered in the Federal Aviation Regulations and Airman Certification Standards for the instrument rating. (3 lecture hours)

Prerequisite: MATH 0465 or MATH 0481 with a grade of C or better, or equivalent, or a qualifying score on the Mathematics Placement Test, or a qualifying ACT Math score; and AVIAT 1210 with a grade of C or better; or consent of instructor. Course requires Reading Placement Category One. Students must be at least 17 years of age.

AVIAT 1130

Air Traffic Control

3 Credit Hours

An introduction into the US Air Traffic Control system as it relates to general and professional aviation. Students will learn the role of Air Traffic Control (ATC) in both ground-based, departure and arrival scenarios, as well as practice basic communication and proper ATC phraseology. (3 lecture hours)

Prerequisite: MATH 0465 or MATH 0481 with a grade of C or better, or equivalent; or a qualifying score on the Mathematics Placement Test; or a qualifying ACT Math score. Course requires Reading Placement Category One. Students must be at least 17 years of age.

AVIAT 1140

Aviation Safety Principles

3 Credit Hours

An introduction into the aviation culture of safety and how it applies to both general and professional aviation. Government agencies and reporting processes, safety-based training courses and initiatives, and human factors such as proficiency training, hazardous attitudes and pilot fatigue will be discussed. (3 lecture hours)

Prerequisite: MATH 0465 or MATH 0481 with a grade of C or better, or equivalent; or a qualifying score on the Mathematics Placement Test; or a qualifying ACT Math score. Course requires Reading Placement Category One.

AVIAT 1210

Private Pilot Flight Instruction

3 Credit Hours

Students will conduct flight training in a single-engine land airplane to prepare for the FAA private pilot practical exam. An FAA certified flight instructor will work with the student to teach and perform all required tasks to proficiency. This course is in compliance with 14 CFR part 61 and 14 CFR part 141. (6 lab hours)

Prerequisite: Completion of AVIAT 1105 and AVIAT 1110 required. MATH 0465 or MATH 0481 with a grade of C or better, or equivalent; or a qualifying score on the Mathematics Placement Test; or a qualifying ACT Math score. Course requires Reading Placement Category One. Students must be at least 17 years of age. All students are required to have a valid FAA Third Class Medical at enrollment and for the duration of the course. Students utilizing VA Benefits are required to have a valid FAA Second Class Medical issued within the preceding 12 calendar months at enrollment and for the duration of the course. Students will need to contact the Aviation department for a permit to enroll in this course.

AVIAT 1215**Aviation Skills Lab**

1-3 Credit Hours

This course will provide the additional flight education necessary for a student to complete the skills needed to pass an FAA check ride. Students who do not earn their certificate or rating in the preceding semester can enroll in the Aviation Skills Lab to do so. Please note that a skills evaluation and recommendation by the aviation faculty is a prerequisite for enrollment in this course. A student can be concurrently enrolled in Aviation Skills Lab and any other Aviation flight course, with permission from the faculty. Additional fees required for this course. (2 to 6 lab hours)

Prerequisite: Completion of evaluation and recommendation from Aviation Management faculty. All students are required to have a valid FAA Third Class Medical at enrollment and for the duration of the course. Students utilizing VA Benefits are required to have a valid FAA Second Class Medical issued within the preceding 12 calendar months at enrollment and for the duration of the course. Students will need to contact the Aviation department for a permit to enroll in this course.

AVIAT 1220**Instrument Flight Instruction**

3 Credit Hours

Students will conduct flight training in single-engine land airplane to prepare for and take the FAA instrument rating practical exam. An FAA instrument flight instructor will work with the student to teach and perform all tasks to proficiency. This course is in compliance with 14 CFR Part 61 and 14 CFR Part 141. (6 lab hours)

Prerequisite: AVIAT 1210 with a grade of C or better, or consent of instructor. All students are required to have a valid FAA Third Class Medical at enrollment and for the duration of the course. Students utilizing VA Benefits are required to have a valid FAA Second Class Medical issued within the preceding 12 calendar months at enrollment and for the duration of the course. Students will need to contact the Aviation department for a permit to enroll in this course.

AVIAT 1300**Aviation Operations**

3 Credit Hours

Summary of the aviation industry and employment opportunities. The course highlights basic aviation history, primary flight theory, aviation weather services, and aviation regulations. The course also explores careers in flight operations, aviation maintenance, air traffic control and management positions. (3 lecture hours)

Prerequisite: AVIAT 1100 with a grade of C or better or consent of instructor.

AVIAT 1310**sUAS Part 107 Ground School**

3 Credit Hours

This course teaches the remote pilot aeronautical knowledge necessary to pass the FAA Knowledge Test. Topics include those covered in the Federal Aviation Regulations and Airman Certification Standards for remote pilots in small unmanned aircraft systems (sUAS). (3 lecture hours)

Prerequisite: MATH 0465, MATH 0481, or college equivalent with a grade of C or better; or a qualifying score on the Mathematics Placement Test; or a qualifying ACT math score. Course requires Reading Placement Category One. Students must be at least 16 years of age.

AVIAT 2110**Commercial Pilot Ground School I**

3 Credit Hours

This course covers commercial pilot aeronautical knowledge. Topics include those covered in the Federal Aviation Regulations and Airman Certification Standards for commercial pilots. (3 lecture hours)

Prerequisite: AVIAT 1120 with a grade of C or better or consent of instructor.

AVIAT 2114**Aviation Meteorology**

2 Credit Hours

An introduction into meteorological phenomena and weather data that is fundamental to aviation. The basics of weather-related flight hazards including thunderstorms, icing, wind shear, and turbulence will be discussed. Students will interpret various text and charted aviation weather products as used commonly by pilots including Aviation Routine Weather Reports (METARs), Terminal Aerodrome Forecasts (TAFs), and graphical information available from the Aviation Weather Center. (2 lecture hours)

Prerequisite: EARTH 1110 and EARTH 1116, both with a grade of C or better, or equivalent or consent of instructor.

AVIAT 2210**Commercial Pilot Flight Instruction I**

3 Credit Hours

Students will conduct flight training in a single-engine land airplane to prepare for the FAA commercial pilot practical exam. Students will fly solo or with a partner in a crew-like environment to perform all required tasks to proficiency. This course is in compliance with 14 CFR part 61, 14 CFR part 91, and 14 CFR part 141. (6 lab hours)

Prerequisite: AVIAT 1210 with a grade of C or better or consent of instructor. All students are required to have a valid FAA Third Class Medical at enrollment and for the duration of the course. Students utilizing VA Benefits are required to have a valid FAA Second Class Medical issued within the preceding 12 calendar months at enrollment and for the duration of the course. Students must be at least 18 years of age. Students will need to contact the Aviation department for a permit to enroll in this course.

AVIAT 2220**Commercial Pilot Flight Instruction II**

1 Credit Hour

Students will continue flight training in a single-engine land airplane to prepare for the FAA commercial pilot practical exam. This course is in compliance with 14 CFR part 61, 14 CFR part 91, and 14 CFR part 141. (2 lab hours)

Prerequisite: AVIAT 2210 with a grade of C or better or consent of instructor. All students are required to have a valid FAA Third Class Medical at enrollment and for the duration of the course. Students utilizing VA Benefits are required to have a valid FAA Second Class Medical issued within the preceding 12 calendar months at enrollment and for the duration of the course. Students will need to contact the Aviation department for a permit to enroll in this course.

AVIAT 2230***Multi-Engine Flight Instruction***

2 Credit Hours

Students will continue their commercial pilot development by learning how to fly multi-engine aircraft. An FAA-certificated flight instructor will teach advanced systems, performance, and weather applicable to multi-engine aircraft. A combination of ground, aircraft, and simulator training are included. This course is in compliance with 14 CFR part 61 and 14 CFR part 141. (1 lecture hour, 2 lab hours)

Prerequisite: AVIAT 2220 with a grade of C or better or consent of instructor. All students are required to have a valid FAA Third Class Medical at enrollment and for the duration of the course. Students utilizing VA Benefits are required to have a valid FAA Second Class Medical issued within the preceding 12 calendar months at enrollment and for the duration of the course. Students will need to contact the Aviation department for a permit to enroll in this course.

AVIAT 2300***Airport Management***

3 Credit Hours

Students will become familiar with the topic of airport management in the 21st century, which includes managing, governing, and ownership of airports. (3 lecture hours)

Prerequisite: AVIAT 1110 with a grade of C or better or consent of instructor.

AVIAT 2310***Airline Management***

3 Credit Hours

Students will become familiar with airline management, including organizational structure, economics, and operations. (3 lecture hours)

Prerequisite: AVIAT 1110 with a grade of C or better or consent of instructor.

AVIAT 2320***Introduction to Aircraft Dispatch***

3 Credit Hours

Introduction to aircraft dispatch tools, procedures and applications. Students will gain a more advanced understanding of airline and airport operations, including the effect that weather and aircraft loading have on aircraft performance. (3 lecture hours)

Prerequisite: AVIAT 1300 and EARTH 1116, both with a grade of C or better, or consent of instructor.

AVIAT 2400***Advanced Aircraft Systems***

3 Credit Hours

Students will learn about advanced aircraft systems to prepare them for the professional systems courses required by industry jet operators. (3 lecture hours)

Prerequisite: AVIAT 2110 with a grade of C or better, or concurrent enrollment in AVIAT 2110, or consent of instructor.

AVIAT 2500***Aviation Career Preparation***

3 Credit Hours

This course prepares students for entering the aviation industry in a professional capacity. (3 lecture hours)

Prerequisite: AVIAT 1300 with a grade of C or better or consent of instructor.

AVIAT 2865***Aviation Internship***

4 Credit Hours

Course requires participation in Aviation work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 300 clock hours. (20 lab hours)

Prerequisite: Consent of instructor and 3.0 cumulative grade point average.