AVIATION TECHNOLOGY: THEORY (ATT)

ATT1100 AERONAUTICAL SCIENCE (3.00 Credits)
An introduction to the theory of flight, this course is required for all aviation programs. It includes elementary aerodynamics, the major components of airplanes and their functions, the pertinent Federal Aviation Administration (FAA) regulations and basic airspace, aircraft performance and basic navigation, an introduction to meteorology and weather services and human factors. Successful completion of ATT100 and ASC1100 will prepare students for the FAA Private Pilot (airplane) Computerized Knowledge Exam. Professional Pilot Technology and Aviation Operations program majors must take this course concurrently with ASC1100. Prerequisite: College Placement Testing (CPT) scores must place student into college-level courses for English, reading and math; or have instructor's permission.
Total Contact Hrs: 48.00
Lecture Hrs: 48.00
Complete all the courses in the following option:
- Corequisite: ASC1100

ATT2110 COMMERCIAL FLIGHT THEORY (3.00 Credits)
Provides the aeronautical information needed to satisfactorily complete the FAA Commercial Pilot Knowledge Exam. Subject matter is tailored to the needs of the advanced pilot. It includes aerodynamics, airplane performance and systems, navigation, physiological factors, Federal Aviation Regulations and weather. It is recommended to complete the instrument rating before taking this course. Prerequisite: FAA Private Pilot Certificate or instructor's permission.
Total Contact Hrs: 48.00
Lecture Hrs: 48.00
Complete all the courses in the following option:
- Option 1 - Prerequisite: ASC1100 (minimum grade: C) and ATT1100 (minimum grade: C)

ATT2120 INSTRUMENT FLIGHT THEORY (3.00 Credits)
Prepares student for FAA Instrument Rating (Airplane) Exam. Physiological factors involved with instrument flying, the functioning of basic flight instruments and their use in controlling aircraft under instrument conditions, electronic aids and their use, communications, the airways system, IFR charts, regulations and procedures as related to instrument flight. Prerequisite: private pilot's license or instructor's permission or
Total Contact Hrs: 48.00
Lecture Hrs: 48.00
Complete all the courses in the following option:
- Option 1 - Prerequisite: ASC1100 (minimum grade: C) and ATT1100 (minimum grade: C), Corequisite: ASC1210 (minimum grade: C) and ASC2110 (minimum grade: C)

ATT2820 INTRODUCTION TO AIR TRAFFIC CONTROL (3.00 Credits)
This course covers the fundamental topics used as an air traffic controller in today's system. Topics covered will include the National Airspace System, information systems for aviation, airport markings, different airspace classes, separation standards, radar services, aircraft identification and various other topics required by the FAA in their Basic Training Course.
Total Contact Hrs: 48.00
Lecture Hrs: 48.00
Complete all the courses in the following option:
- Option 1 - Corequisite: ASC1100 (minimum grade: C) and ATT1100 (minimum grade: C)

ATT2821C ATC RADAR PROCEDURES WITH LAB (4.00 Credits)
This course covers fundamental requirements for non-radar and terminal radar controllers. It builds on knowledge obtained from ATT2820 and ATT2822c. Topics taught will address non-radar procedures used by many FAA facilities. Additional topics will cover basic terminal approach control radar. In doing so this course will teach the student the procedures they would need to work non-radar and terminal radar. Topics taught will include but limited to, radar systems, non-radar procedures, spacing techniques, clearances, separation and more. The lab portion will utilize the FAA Academy procedures and airspace.
Total Contact Hrs: 72.00
Lecture Hrs: 48.00
Lab Hrs: 24.00
Fees: LABORATORY FEE $201.00
Complete all the courses in the following option:
- Option 1 - Prerequisite: ASC1100 (minimum grade: B) and ATT1100 (minimum grade: B) and ATT2820 (minimum grade: B) and ATT2822C (minimum grade: B)

ATT2822C VFR TOWER OPERATIONS WITH LAB (4.00 Credits)
This course covers general topics associated with the positions used in a VFR air traffic control tower. The course also covers the responsibilities of the four major position in a VFR control tower. As part of the knowledge each student will will demonstrate the information taught in both the classroom and the tower simulator. This will help better prepare students for the Federal Aviation Administration Academy.
Total Contact Hrs: 72.00
Lecture Hrs: 48.00
Lab Hrs: 24.00
Fees: LABORATORY FEE $201.00
Complete all the courses in the following option:

- Option 1 - Prerequisite: ASC1100 (minimum grade: B) and ATT1100 (minimum grade: B) and ATT2820 (minimum grade: B)

ATT2824C ATC ENROUTE OPERATIONS WITH LAB (4.00 Credits)
This course covers the J07110.65 Air Traffic Control Manual Chapters 5, 6, 7, 8, 9, 10, 11, 12, and 13, J07350.7 Location Identifiers, IFR Enroute Low and High Altitude Charts. These orders cover the fundamental rules and procedures required in the Enroute environment commonly referred to as the CENTER. This course will teach the requirements needed to an enroute facility that utilizes air/ground communications and other devices to provide ATC services to aircraft operating along the Federal Airways and Jet Route Systems. The lab portion will mirror a sector in operation at Aero Center. The student will be required to demonstrate practical application of the rules and procedure in use at this center sector.
Total Contact Hrs: 72.00
Lecture Hrs: 48.00
Lab Hrs: 24.00
Fees: LABORATORY FEE $201.00
Complete all the courses in the following option:

- Option 1 - Prerequisite: ASC1100 (minimum grade: B) and ATT1100 (minimum grade: B) and ATT2820 (minimum grade: B) and ATT2821C (minimum grade: B)

ATT2890 ATC CAPSTONE PROJECT (1.00 Credits)
This course covers the practical application of JO7110.65 Air Traffic Control Manual. The course will evaluate what the student has learned and retained throughout the CTI program. The student will be required to successfully complete a 100 question exam covering the CTI prerequisite courses and demonstrate the practical applications in Center Radar Simulation, Terminal Radar Simulation, and Tower Simulation. Students successfully completing the exam and practical will take the Certified Tower Operator's Exam administered by an FAA examiner the last week of class.
Total Contact Hrs: 16.00
Lab Hrs: 16.00
Complete all the courses in one of the following options:

- Option 1 - Prerequisite: ASC1100 (minimum grade: B) and ASC1210 (minimum grade: B) and ASC1610 (minimum grade: B) and ASC2472 (minimum grade: B) and ATT1100 (minimum grade: B) and ATT1810 (minimum grade: B) and ATT2820 (minimum grade: B) and ATT2821C (minimum grade: B) and ATT2822C (minimum grade: B)
- Option 2 - Prerequisite: ASC1100 (minimum grade: B) and ASC1210 (minimum grade: B) and ASC1550 (minimum grade: B) and ASC2870 (minimum grade: B) and ATT1100 (minimum grade: B) and ATT1810 (minimum grade: B) and ATT2820 (minimum grade: B) and ATT2821C (minimum grade: B) and ATT2822C (minimum grade: B)