COMMERCIAL FLIGHT (AS DEGREE S0912)

Technology and Health Division
Degree S0912
The Commercial Flight curriculum prepares students for careers as aircraft pilots as well as related ground occupations in aviation. Students have the opportunity for optional flight training with commensurate college credit. The pilot license is not required for graduation but it is desirable for career advancement.

This program prepares students for military and civilian aviation careers through transfer programs to bachelor's degree aviation curricula throughout the nation. With concurrent flight training, students may achieve the commercial pilot certificate and instrument rating simultaneously with the A.S. degree.

Aeronautics Website (http://www.mtsac.edu/aeronautics/)

This degree requires the completion of General Education coursework plus the following:

Required Courses

Course Prefix	Course Name	Units
Core Courses		
AERO 100	Primary Pilot Ground School	4
AERO 102	Aviation Weather	3
AERO 104	Federal Aviation Regulations	3
AERO 150	Commercial Pilot Ground School	3
AERO 152	Air Transportation	3
AERO 200	Aviation Safety and Human Factors	3
AERO 202	Aircraft and Engines	3
AERO 250	Navigation	3
AERO 252	Instrument Ground School	3
Total Units		**28**

Recommended Electives

Course Prefix	Course Name	Units
AIRT 151	Aircraft Recognition and Performance	3

Note: The Commercial Flight faculty recommend that students complement their studies with selected elective courses chosen from the list above. Students should meet with a professor of commercial flight to help them determine which electives would best suit their career plans.

Aeronautics Website (http://www.mtsac.edu/aeronautics/)

Program Learning Outcomes

Upon successful completion of this program, a student will be able to:

- Recognize and comprehend terms and vocabulary associated with piloting and air traffic control; early federal legislation that was influential in shaping the aviation industry; the function of government in regulating the aviation industry; airline economics and demand; and career planning skills and resources.
- Recognize and comprehend physiology limitations humans experience in flight; comprehend the skills, techniques, and procedures of advanced crew resource management (ACRM), and applying ACRM principles in problem-solving scenarios; analyze aircraft accident case-studies and identify key factors leading to aircraft accidents.
- Identify and determine the characteristics of North American continental and worldwide weather systems; encode and decode hourly surface weather observations and pilot reports; encode and decode aviation weather forecasts and meteorological advisories; and summarize aviation weather conditions and forecasts using a variety of charts, observations, and forecasts with the goal of demonstrating good decision-making and problem-solving skills.
- Comprehend the skills, techniques, and procedures for safely operating aircraft in primary, instrument, and commercial flight operations. Students will be able to explain the principles of flight and aerodynamics as they relate to airplanes, helicopters, and other high-performance aircraft; analyze aircraft performance data necessary for takeoff and landing and evaluate problem-solving scenarios for "go" and "no-go" decisions; analyze and apply weight and balance principles in problem-solving scenarios.

Review Student Learning Outcomes (SLOs) (http://www.mtsac.edu/instruction/outcomes/sloinfo.html) for this program.