AVIATION SCIENCE (AS DEGREE S0910)

Technology and Health Division Degree S0910

This curriculum meets the requirements of the Federal Aviation Administration Air Traffic Collegiate Training Initiative (AT-CTI). Under an educational partnership agreement with the FAA, this CTI program prepares students for broad-based aviation careers. Students completing this CTI program may be recommended by the college for hiring by the FAA as air traffic controllers. There are no prerequisites or enrollment limitations.

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 152 | Air Transportation | 3 |
| AERO 200 | Aviation Safety and Human Factors | 3 |
| AERO 250 | Navigation | 3 |
| AERO 252 | Instrument Ground School | 3 |
| AIRT 151 | Aircraft Recognition and Performance | 3 |
| AIRT 201 | Terminal Air Traffic Control | 3 |
| AIRT 203 | Enroute Air Traffic Control | 3 |
| AIRT 251 | Air Traffic Control Team Skills | 1.5 |
| Total Units | | 32.5 |

Recommended Electives

| Course Prefix | Course Name | Units |
|---------------|--------------------------------|-------|
| AERO 150 | Commercial Pilot Ground School | 3 |
| AERO 202 | Aircraft and Engines | 3 |
| BUSM 60 | Human Relations in Business | 3 |

Program Learning Outcomes

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

- Be familiar with how the National Airspace System has evolved into today's complex airspace environment; understand current air traffic control separation standards and procedures for both terminal and en route operations; apply those separation standards, procedures, and techniques in a computer simulated environment while being aware of emerging air traffic control technologies and automation.
- Recognize, identify, and remember a wide variety of aircraft including the manufacturer, Federal Aviation Administration identification code, aircraft performance characteristics, and how those characteristics are applied to meet en route and terminal separation standards in a computer driven simulated environment.
- Understand the importance of teamwork among co-workers, the various stages of team development, coping and performing techniques and how to apply them in a scenario-based working environment; recognize a variety of personality types and team

behaviors toward becoming a skilled team player as applied to today's intense air traffic control working environment.

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