*Business Division*

# **AVIATION SCIENCE** (MANAGEMENT CURRICULUM)

The Aviation Science Management Program consists of the basic degree in aviation science, and electives that allow students to focus on a management option. Directed Electives from either flight or management courses of study may be used to fulfill a student’s Open Elective requirements.

This degree program is designed to provide students with the knowledge and skills necessary to be successful in a broad range of entry-level aviation management careers including airport operations, land-side/air-side management, aircraft manufacturing, airlines, corporate flight departments, airport authorities, and state and federal aviation regulatory agencies including the Federal Aviation Administration (FAA) and the National Transportation Safety Board (NTSB).

This program can also serve as the first two years of a bachelor’s degree in Aviation Science for those students interested in transferring to a four-year institution. Students could pursue a bachelor’s degree in one of several standard aviation majors: Aviation Management, Air Traffic Control, Aviation Electronics, Aviation Maintenance, and Aviation Computer Science.

*General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.*

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| **Competency or Program Requirement** | **Course Number and Title** | Required Credits |
| Aesthetic Dimensions/Written Communications | Choose any Aesthetic Dimensions/Written Communications listed | 3 |
| Continuing Learning and Information Literacy/Ethics | CSA\*H105 Introduction to Software Applications or CSC\*H101 Introduction to Computers | 3 |
| Critical Analysis and Logical Thinking/Written Communication | ENG\*H101 Composition | 3 |
| Historical Knowledge | Choose any Historical Knowledge listed | 3 |
| Oral Communication | Choose any Oral Communication listed | 3 |
| Quantitative Reasoning | MAT\*H172 College Algebra | 3 |
| Scientific Knowledge◊ | PHY\*H122 General Physics II | 4 |
| Scientific Reasoning◊ | PHY\*H121 General Physics I | 4 |
| Social Phenomena | PSY\*H111 General Psychology I | 3 |
| Written Communication | Choose any Written Communication listed | 3  |
| Program Requirements | AVS\*H120 Foundations of Aviation | 3 |
| AVS\*H130 Air Transportation Systems | 3 |
| AVS\*H140 Aerospace Safety | 3 |
| AVS\*H150 Airport Management I | 3 |
| AVS\*H151 Airport Management II | 3 |
| MAT\*H185 Trigonometric Functions | 3 |
| BMG\*H202 Principles of Management | 3 |
| MET\*H101 Meteorology | 3 |
| Business Elective: Any Business Course | 3 |

**Total Credits: 62**

*Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.*

◊ At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

### *Program Outcomes*

*Upon successful completion of all program requirements, graduates will:*

1. Communicate clearly using both oral and written communications.
2. Demonstrate a detailed understanding of the National Airspace System Plan (NASP).
3. Understand and interpret Federal Aviation Regulations (CFR 14) applicable to airport and air transport operations.
4. Demonstrate an understanding of aviation history and aviation law and the role of each in shaping the current aviation industry.
5. Have a thorough understanding of airport management issues including financing, revenue/ expense sources, safety, security, planning, design, and management of airports in the United States.
6. Have a thorough understanding of air transportation and aerospace issues including air transportation/ aerospace history, economics of airlines and general aviation, airline management and organization, forecasting methods, pricing/demand/output determination, airline scheduling, fleet planning, and labor relations.