

# B.S. AVIATION SCIENCE - AVIATION MANAGEMENT

## OVERVIEW

The Aviation Science-Aviation Management degree provides a comprehensive background in aviation studies, management and business to prepare students for airport management, airport consulting, aviation insurance, airline operations and more. Our program provides the management training in aviation in conjunction with the business operations training to be successful in the field of aviation management.

The program offers junior- and senior-level coursework, and also offers internships with several aviation organizations that cover a broad range of employers.

Aviation Management students build leadership and professional experience through real-world experience, exciting class projects and internships.

The Aviation Science-Aviation Management degree with Maintenance Concentration provides a comprehensive background in aviation studies, management and business needed to prepare students for management positions with airline maintenance operations, aerospace industry companies, corporate maintenance management and more. Our program provides the management training in aviation in conjunction with the business operations training to be successful in the field of aviation management.

The program offers junior and senior-level coursework. Aviation Management-Maintenance Concentration students typically enroll with having obtained their FAA Airframe and Powerplant ratings.

## Program Level Student Learning Outcomes

The student will be able to:

- Explain the laws, regulations, and legal issues affecting the aviation industry.
- Identify the issues affecting aviation safety and safety management.
- Communicate proficiency in writing and oral presentations.
- Evaluate the implications of an ethical dilemma from a variety of ethical frameworks.
- Demonstrate how technology can support business decision-making.
- Identify how the differences in business environment between countries may impact business decisions.

### Technical Specialization (42 hours required):

The following courses are recommended for articulation upon receipt of licensure and compliance with these specific conditions:

#### 1. The requesting student has earned:

- A Commercial Pilot License and Instrument Rating, issued by the Federal Aviation Administration (FAA) and taught under Federal Aviation Regulation (FAR) Part 141 rules from an institution of higher learning (IHL).
- The IHL has an authorized FAA Air Agency Certificate for both air and ground courses under Part 141 provisions.
- The requesting student's Commercial and Instrument certificates must be attached to this form.

- With receipt of the qualified certificates and conditions listed above, TAMUCT will grant up to 42 credit hours of the lower-level aviation requirements upon enrollment into the Professional Pilot or Aviation Management degree programs.
- If attending the Aviation Management – Maintenance Concentration, attach both the FAA issued Airframe and Powerplant license and TAMUCT will grant up to 33 credit hours of the lower-level requirements, if taken at an approved FAA Part 147 school.

2. If a student's Instrument and Commercial pilot's licenses were obtained outside a partnering IHL and under the provisions of FAR Part 61 standards, TAMUCT may grant up to 42 credit hours of the lower-level aviation requirements upon passing an online equivalency test of the FAA written exam for each license (See #5).

3. If a student possesses an Airline Transport Rating (ATP), TAMUCT will grant up to 42 credit hours of the lower-level aviation requirements upon enrolling into the Professional Pilot or Aviation Management degree programs.

4. All collegiate Aviation Ground courses taught under FAR Part 141 approval from any IHL or Fixed Base Operator (FBO) will be accepted towards the required 42 credit hours for lower-level aviation requirements for TAMUCT Professional Pilot degree.

5. If a student who has licensure through Instrument and Commercial Pilot ratings under FAR Part 61/141 conditions wishes to receive non-standard credit for all attendant collegiate ground courses based upon the FAA licensure alone, they can take a FAA written equivalent exam, administered under an online testing program for Private Pilot, Instrument and Commercial Pilot. Passing is 70%. All three tests must have a passing grade before the core 42 credit hour Aviation Ground courses will be applied to the Technical Specialization.

6. Aviation Management - Maintenance Concentration students desiring up to 33 credit hours for their Airframe and Powerplant rating, must show recency of experience not to exceed five years absence from the field.

7. In accordance with the provisions of CFR § 65.35 and CFR § 65.39 knowledge requirements, and FAA Joint Order 3120-4R and Order 8000.90C, for persons holding a Control Tower Operator (CTO) license, or an Air Traffic Control Specialty (ATCS) rating, TAMUCT will grant up to 33 credit hours of lower-level aviation science requirements for the Aviation Management degree. Must show recency of experience, not to exceed five years absence from the field.

8. In each of the above actions, the student must meet minimum enrollment standards for the General Education Academic Core before such actions are applied and credited to the student's degree plan.

## Bachelor of Science Aviation Science - Aviation Management Program Requirements

Refer to the General Education Core Requirements (<https://catalog.tamuct.edu/undergraduate-information/general-education-core-requirements/>) page for more information on the CORE REQ coursework. The Field of Study (FOS) courses are listed in the footnotes (if applicable). At least 120 credit hours are required for the degree.

\*Below is a suggested course sequence plan of the degree's required courses. Please see an advisor to create an individual plan for graduation.

Code	Title	Credit Hours
<b>First Year</b>		
Fall		
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>		3

ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>	3
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>	3
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>	3
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>	3
Spring	
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>	3
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>	3
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>	3
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>	3
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>	3
<b>Second Year</b>	
Fall	
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>	3
CORE REQ Communications (010)	3
CORE REQ Mathematics (020)	3
CORE REQ Life and Physical Sciences (030)	3
CORE REQ Creative Arts (050)	3
Spring	
CORE REQ Communications (010)	3
CORE REQ Life and Physical Sciences (030)	3
CORE REQ Language, Philosophy, and Culture (040)	3
CORE REQ Social and Behavioral Sciences (080)	3
ACCT 2301 Principles of Financial Accounting (CORE REQ 090)	3
<b>Third Year</b>	
Fall	
CORE REQ American History (060)	3
CORE REQ Government/Political Science (070)	3
ACCT 2302 Principles of Managerial Accounting (CORE REQ 090)	3
ECON 2301 Principles of Macroeconomics	3
AVSC 4333 General Aviation and Corporate Business Aviation <sup>2</sup>	3
Spring	
CORE REQ American History (060)	3
CORE REQ Government/Political Science (070)	3
ECON 2302 Principles of Microeconomics	3
COSC 1301 Introduction to Computing or CIS 3300 Computer Technology and Impact	3
BUSI 3311 Business Statistics	3
<b>Fourth Year</b>	
Fall	
BUSI 3301 Professionalism and Communication in Business	3
MKTG 3301 Marketing	3
MGMT 3350 Management and Organizational Behavior <sup>5</sup>	3
AVSC 4396 Capstone – Aviation Management (Emergency Preparedness)	3
AVSC Upper Level Elective - Faculty Approved <sup>3</sup>	3

Spring		
MGMT 3302	Personnel and Human Resource Management	3
MGMT 4306	Employer and Labor Relations	3
AVSC Upper Level Elective - Faculty Approved <sup>3</sup>		3
AVSC Upper Level Elective - Faculty Approved <sup>3</sup>		3
AVSC Upper Level Elective - Faculty Approved <sup>3</sup>		3
<b>Total Credit Hours</b>		<b>120</b>

- <sup>1</sup> Refer to Technical Specialization Credit page for more information.
- <sup>2</sup> These courses may be taken during the summer.
- <sup>3</sup> AVSC Upper Level Electives are to be approved by a faculty advisor.
- <sup>4</sup> The Federal Aviation Administration's test standard for all aviation-related courses is a minimum passing grade of 70%. All Aviation Science (AVSC) courses reflect that standard; a course grade below 70% is a course failure. This policy does not apply to management, marketing, and business courses taught through the College of Business Administration (COBA), from which several classes originate. Those classes have a passing grade of 60%.
- <sup>5</sup> AVSC 3350 or AVSC 3321 may be substituted for MGMT 3350. See Advisor for approval.

### Bachelor of Science Aviation Science - Aviation Management Maintenance Program Requirements

Refer to the General Education Core Requirements page for more information on the CORE REQ coursework. The Field of Study (FOS) courses are listed in the footnotes (if applicable). At least 120 credit hours are required for the degree.

\*Below is a suggested course sequence plan of the degree's required courses. Please see an advisor to create an individual plan for graduation.

Code	Title	Credit Hours
<b>First Year</b>		
Fall		
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>		3
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>		3
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>		3
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>		3
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>		3
Spring		
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>		3
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>		3
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>		3
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>		3
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>		3
<b>Second Year</b>		
Fall		
ACSI, AVIM, AERM, AIRP Elective <sup>1</sup>		3
CORE REQ Communications (010)		3
CORE REQ Mathematics (020)		3
CORE REQ Life and Physical Sciences (030)		3
CORE REQ Creative Arts (050)		3
Spring		

CORE REQ Communications (010)	3
CORE REQ Life and Physical Sciences (030)	3
CORE REQ Language, Philosophy, and Culture (040)	3
CORE REQ Social and Behavioral Sciences (080)	3
ACCT 2301 Principles of Financial Accounting (CORE REQ 090)	3

### Third Year

Fall	
CORE REQ American History (060)	3
CORE REQ Government/Political Science (070)	3
ACCT 2302 Principles of Managerial Accounting (CORE REQ 090)	3
ECON 2301 Principles of Macroeconomics	3
AVSC 4333 General Aviation and Corporate Business Aviation <sup>2</sup>	3

Spring	
CORE REQ American History (060)	3
CORE REQ Government/Political Science (070)	3
ECON 2302 Principles of Microeconomics	3
COSC 1301 Introduction to Computing or CIS 3300 Computer Technology and Impact	3
BUSI 3311 Business Statistics	3

### Fourth Year

Fall	
BUSI 3301 Professionalism and Communication in Business	3
MGMT 3350 Management and Organizational Behavior	3
AVSC 4396 Capstone – Aviation Management (Emergency Preparedness)	3
AVSC 3350 Technical and Professional Communications for Aviation Maintenance Managers (Technical & Professional Communications)	3
AVSC 3310 Managing Maintenance Organizations and People (Managing Organizations and People)	3

Spring	
MGMT 3302 Personnel and Human Resource Management	3
MKTG 3301 Marketing	3
MGMT 4306 Employer and Labor Relations	3
AVSC 4360 Aviation Maintenance Management – Global Perspective (Aviation Maintenance Management-Global Perspective)	3

AVSC 3300	Maintenance Department Personal and Team Leadership (Personal and Team Leadership)	3
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**Total Credit Hours 120**

<sup>1</sup> Must hold an FAA issued Airframe and Powerplant rating to be eligible. Refer to the Technical Specialization Credit page for more information.

<sup>2</sup> These courses may be taken during the summer.

<sup>3</sup> The Federal Aviation Administration's test standard for all aviation-related courses is a minimum passing grade of 70%. All Aviation Science (AVSC) courses reflect that standard; a course grade below 70% is a course failure. This policy does not apply to management, marketing, and business courses taught through the College of Business Administration (COBA), from which several classes originate. Those classes have a passing grade of 60%.