

Pre-Aerospace Engineering and Mechanics

This is a pre-professional program which prepares students for application to the Institute of Technology, UM Twin Cities. Aerospace engineering and mechanics students prepare for careers in a variety of fields including oceanography, meteorology, environmental engineering, transportation systems, and bioengineering. In addition, many students choose to continue their studies in graduate school or professional school.

Typical Program of Study:

Fall Semester

First Year

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|------------------------------------|-------------|
| ECE 1315 Digital System Design | 4 cr |
| CS programming course ^a | 3 cr |
| Comp 1120 College Writing | 3 cr |
| Math 1296 Calculus I ^b | 5 cr |
| Liberal education course* | <u>3 cr</u> |
| | 18 cr |

Second Year

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|---|-------------|
| Engr 2015 Statics | 3 cr |
| ECE 2006 Electrical Circuit Analysis | 4 cr |
| Math 3280 Diff Equations/Linear Algebra | 4 cr |
| Phys 2012 General Physics II | 4 cr |
| Liberal education course* | <u>3 cr</u> |
| | 18 cr |

Spring Semester

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|-------------------------------|-------------|
| Math 1297 Calculus II | 5 cr |
| Phys 2011 General Physics I | 4 cr |
| Chem 1151 General Chemistry I | 5 cr |
| Liberal education course* | <u>3 cr</u> |
| | 17 cr |

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|---------------------------------------|-------------|
| ME 2105 Materials Science | 3 cr |
| Engr 2016 Mechanics of Materials | 3 cr |
| Engr 2026 Dynamics | 3 cr |
| Math 3298 Calculus III | 5 cr |
| Phys 2021 Relativity, Quantum Physics | <u>4 cr</u> |
| | 18 cr |

^a **Choose one of the following CS programming courses:** CS 1131 Introduction to Programming in FORTRAN, CS 1211 Introduction to Programming in C, CS 1511 Computer Science I, CS 1581 Honors: Computer Science, or CS 2121 Introduction to Programming in Java.

^b First math course is determined by math placement exam. This schedule presupposes placement into Math 1296.

***Note:** A biology course with lab is required to fulfill the UM Twin Cities liberal education program. Either Biol 1011 General Biology I (5 cr) **or** Biol 1001 Biology and Society (4 cr) will satisfy this requirement.

For additional information about
Pre-Aerospace Engineering, contact:

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