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		Spring Semester	
First Year			
ECE 1315 Digital System Design	4 cr	Math 1297 Calculus II	5 cr
CS programming course ^a	3 cr	Phys 2011 General Physics I	4 cr
Comp 1120 College Writing	3 cr	Chem 1151 General Chemistry I	5 cr
Math 1296 Calculus I ^b	5 cr	Liberal education course*	<u>3 cr</u>
Liberal education course*	<u>3 cr</u>		17 cr
	18 cr		
Second Year			
Engr 2015 Statics	3 cr	ME 2105 Materials Science	3 cr
ECE 2006 Electrical Circuit Analysis	4 cr	Engr 2016 Mechanics of Materials	3 cr
Math 3280 Diff Equations/Linear Algebra	4 cr	Engr 2026 Dynamics	3 cr
Phys 2012 General Physics II	4 cr	Math 3298 Calculus III	5 cr
Liberal education course*	<u>3 cr</u>	Phys 2021 Relativity, Quantum Physics	<u>4 cr</u>
	18 cr		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.

For additional information about **Pre-Aerospace Engineering**, contact:

College of Science and Engineering 140 Engineering Building 1303 Ordean Court Duluth, MN 55812-2496 218/726-7585 csesa@d.umn.edu For additional information about **Aerospace Engineering**, contact:

Institute of Technology Office of Student Affairs 105 Lind Hall 207 Church Street SE Minneapolis, MN 55455 612/624-8504 studentaff@itdean.umn.edu

^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.