Focus Areas:
Architecture,
Engineering,
Mathematics,
Engineering Technology,
Actuary Science

MATHEMATICS & ENGINEERING

Department Chair: Mark Whisler
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Potential Careers:

- **Data Analyst**
- **Civil Engineer**
- **Chemical Engineer**
- **Electrical or Mechanical Engineer**
- **Actuary**
- **Architect**

Program/General Education Learning Outcomes:

1. Recognize the mathematical concepts that are applicable to a scenario.
2. Apply technology in analysis.
3. Accurately interpret, validate, and communicate the result.

DEGREES & CERTIFICATES

Associate of Science .... A.S. - 62 hours

Mathematics and Engineering

Associate of Science
62 Hours

Required General Education Courses   **33 cr**

Communication Requirement   *9*
     CM101 English Composition I (3 cr)
     CM102 English Composition II (3 cr)
     CM115 Public Speaking (3 cr) **or**
       CM240 Interpersonal Communications (3 cr)

Humanities Requirement (2 areas required)   *6*
     Art   Humanities
     Music   Literature
     Theatre   Philosophy
     Foreign Language   History

Mathematics Requirement   *3*
     Mathematics General Education Course

Natural Science Requirement (2 areas required)   *9*
     SC131 Chemistry I (5 cr)
     *Biological Science (4 cr)

     (Physical Science majors should consult their advisor about a substitution of a physical science)

Social/Behavioral Science Requirement   *6*
     EC101 Principles of Macroeconomics *(3 cr)*
     (1 additional area required)   *(3 cr)*
       Anthropology   Geography
       Psychology   Political Science
       Sociology

Required Mathematics and Engineering Courses   **13 cr**

Choose 13 hours from the following:

MA112	Trigonometry	3
MA120	Analytic Geometry and Calculus I	5
MA121	Analytic Geometry and Calculus II	5
SC142	University Physics I	5
SC143	University Physics II	5

Elective Courses   **10 cr**

Math

MA114	Elementary Statistics	3
MA122	Analytic Geometry and Calculus III	5
MA123	Differential Equations	4
MA220	Cooperative Education Internship	1-2

Science

SC104	Geology	4
SC107	Meteorology	4
SC132	Chemistry II	5
SC140	College Physics I	5
SC141	College Physics II	5
SC142	University Physics I	5
SC143	University Physics II	5
SC151	Principles of Biology II	5

Business

BE100	Introduction to Business	3
BE153	Personal Finance	3
BE160	Business Accounting	3

Additional Electives

CM121	Introduction to Literature	3
CS108	Computer Applications	3
CS155	Networking and Computer Technology	3

Open Electives   **6 cr**