

Engineering & Natural Science

Have you always been strong in math and science? Do you enjoy solving problems and puzzles? Are you technologically talented? This pathway is best for students with a strong interest in math and science who would like to learn how to apply those skills to a future profession in engineering, science, or technology. The strong analytical skills developed by majors in this pathway are highly sought after by employers.

Careers: Majors in this pathway typically lead to careers supporting exploration, business, and development in science, research, engineering, manufacturing, or technology.

Potential Majors:

- Actuarial Science (See Business, Industry, and Applied Technology Pathway)
- Applied Mathematics and Computer Science
- Atmospheric Sciences
- Biochemistry
- Biological Sciences
- Biomedical Engineering
- Biomedical Sciences
- Chemistry
- Civil Engineering
- Computer Engineering
- Computer Science
- Conservation and Environmental Science
- Electrical Engineering
- Geography
- Geosciences
- Industrial Engineering
- Materials Engineering
- Mathematical Sciences
- Mechanical Engineering
- Microbiology
- Physics
- Psychology

Semester 1: Sample Curriculum. Work with your advisor to make necessary adjustments to best fit your interests and placement levels.		
COURSES	CREDITS	NOTES
OWC-A: English 100, 101, or 102	3	Course level determined by placement. Grade of C or better required.
QL-A: Math 105, 115, 117, or OL-B: Math 231	3-4	Course level determined by placement. Grade of C or better required.
Chemistry 100, 102, or 105	4-5	Grade of C or better required.
GER Distribution course: Social Science (SS), Humanities (HU), Arts (A), Cultural Diversity (CD)	3-4	See list of suggested courses.
Ed Psy 110: Planning Your Major/Career	3	
TOTAL	13-18	Important Milestones: <ul style="list-style-type: none"> • Complete at least 15 credits. • Maintain a minimum GPA of 2.5 (2.75 for Electrical & Mechanical Engineering). • See your advisor before the end of October to discuss your progress and begin planning for second semester. • Visit the Career Planning & Resource Center in Mellen-camp 128 to begin developing a career plan.

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SUGGESTED GER OPTIONS

(!) Engineering students must take specific Natural Science courses. Do not take other courses from GER list. Complete Chem 100 in the first year, if needed based on placement exam. Biomedical Engineering majors should take Bio Sci 202 and 203. All other engineering majors should take Chem 105.

* Course has pre-requisites

Note: This is not a complete list of your GER options. For full list, visit uwm.edu/schedule

NATURAL SCIENCES

Biological Sciences 150: Foundations of Biology*

Biological Sciences 152: Foundations of Biology II*

Biological Sciences 203: Anatomy and Physiology II*

(!) Chemistry 100: Chemical Science*

(!) Chemistry 105: General Chemistry for Engineering*

Chemistry 102: General Chemistry*

Chemistry 104: General Chemistry*

Conservation and Environmental Science 210: Intro to CES

Geography 120: Our Physical Environment

Geosciences 100: Introduction to Earth

Geosciences 102: Historical Geology

Math Statistics 215: Elementary Statistics*

Physics 120: General Physics (Non-Calculus treatment)*

Physics 121: General Physics Laboratory I (Non-Calculus)*

Physics 209: Physics I (Calculus Treatment)*

Physics 210: Lab Physics I (Calculus Treatment)*

Physics 219/220: Physics I (Calculus Treatment)*

HUMANITIES

Communication 103: Public Speaking

English 310: Writing, Speaking and Technoscience*

Information Studies 120: Info Technology Ethics

Information Studies 210: Info Resources for Research

Philosophy 237: Technology, Values, and Society
Natural Science majors, see additional list for more options

SOCIAL SCIENCES

Communication 101: Intro to Interpersonal Communication

Communication 105: Business and Profession Communication

Economics 103: Principles of Microeconomics

Economics 104: Principles of Macroeconomics

Geography 105: Intro to Human Geography

Geography 110: The World: Peoples & Regions

Psychology 101: Intro to Psychology
Natural Science majors, see additional list for more options

OTHER SUGGESTED COURSES

Engineering 150 – Various Topics (NS GER, but no major credit)

Computer Science 151: Intro to Scientific Programming in Fortran*
(Spring only)

Industrial Engineering 111: Intro to Engineering*

Computer Science 250: Introductory Computer Programming