

Accepted Restricted Elective Courses

Prerequisites for these courses are satisfied by required courses in the BSMET program (or satisfied by taking other accepted restricted elective courses)

Engineering

ENGR 329 Bicycle Design and Frame-Building (3 Credits) Prerequisites: ENGR 125 and ENGR 263.
ENGR 333 Lean Principles (3 Credits) Prerequisites: ENGR 225. (Spring of even years)
ENGR 336 Heat and Power (3 Credits) Prerequisites: ENGR 312 and ENGR 321. (Spring of odd years)
ENGR 353 Exploring Entrepreneur Opportunities (3 Credits) Prerequisites: none. (Spring)
ENGR 424 Machine Elements (3 Credits) Prerequisites: ENGR 325. (Fall)
ENGR 425 Advanced Manufacturing (3 Credits) Prerequisites: ENGR 225, ENGR 305, and STAT 305. (Spring)
ENGR 455 Fluid Power Systems (3 Credits) Prerequisites: ENGR 321. (Fall)

Math

MATH 236 Differential Equations and Linear Algebra (4 Credits) Prerequisites: MATH 152 or MATH 136.
MATH 361 Numerical Analysis (4 Credits) Prerequisites: MATH 152 or MATH 136.
MATH 362 Fourier Analysis (3 Credits) Prerequisites: MATH 152 or MATH 136.
MATH 365 Mathematical Modeling (3 Credits) Prerequisites: MATH 136 or MATH 152, and one of the following: MATH 225, MATH 236, MATH 240, MATH 253, MATH 260, or STAT 200.
MATH 366 Methods of Applied Mathematics II (3 Credits) Prerequisites: MATH 360; and CSCI 110/CSCI 110L or CSCI 111 or CSCI 130 or CSCI 310.
MATH 369 Discrete Structures I (3 Credits) Prerequisites: MATH 152 or MATH 136; and CSCI 110/CSCI 110L or CSCI 111 or CSCI 130.

Computer Science

CSCI 360 Robotic Perception and Planning (3 Credits) Prerequisites: CSCI 111 or CSCI 130.

Business/Computer Information Systems

CISB 305 Solving Problems Using Spreadsheets (3 Credits) Prerequisites: none.

Statistics

STAT 301 Computational Statistics (3 Credits) Prerequisites: STAT 200 or STAT 215 or STAT 241 or CISB 241. (Request override from instructor if you have completed STAT 305)
STAT 312 Correlation and Regression (3 Credits) Prerequisites: STAT 301.
STAT 313 Sampling Techniques (3 Credits) Prerequisites: STAT 200 or STAT 215 or STAT 241 or CISB 241. (Request override from instructor if you have completed STAT 305)
STAT 425 Design and Analysis of Experiments (3 Credits) Prerequisites: STAT 301; and MATH 151 or MATH 135 or MATH 131 or MATH 121.

Biology

BIOL 209 & 209L Human Anatomy and Physiology (3 Credits Lecture + 1 Credit Lab) Prerequisites: none.
BIOL 352 & 352L Human Physiology (3 Credits Lecture + 1 Credit Lab) Prerequisites: BIOL 105 or BIOL 209.
Corequisites: BIOL 352L.
BIOL 410 & 410L Human Osteology (3 Credits) Prerequisites: BIOL 209/BIOL 209L. Corequisites: BIOL 410L.

Environmental Science

ENVS 331 & 331L Water Quality (3 Credits Lecture + 1 Credit Lab) Prerequisites: CHEM 121 or higher; and STAT 200.
Corequisites: ENVS 331L. (Request override from instructor if you have completed STAT 305)
ENVS 370 Renewable Energy (3 Credits) Prerequisites: MATH 113 or higher.

Accepted Restricted Elective Courses

May require 1 or more additional courses to satisfy prerequisites

Math

- MATH 310 Number Theory (3 Credits) Prerequisites: MATH 240.
- MATH 352 Advanced Calculus (3 Credits) Prerequisites: MATH 240.
- MATH 360 Methods of Applied Mathematics (3 Credits) Prerequisites: MATH 253, and MATH 236 or MATH 260.

Computer Science

CSCI 322 Embedded Systems (3 Credits) Prerequisites: CSCI 241; or CSCI 112 and ENGR 140

CSCI 345 Video Game Design (3 Credits) Prerequisites: CSCI 112.

CSCI 365 Data Mining (3 Credits) Prerequisites: CSCI 112; and STAT 200 or STAT 215.

Business/Computer Information Systems

CISB 410 Project Management (3 Credits) Prerequisites: CISB 210 (corequisite if the student has reached junior status).

Statistics

STAT 350 Mathematical Statistics I (3 Credits) Prerequisites: STAT 200 and MATH 253 (may be taken concurrently).
(Request override from instructor if you have completed STAT 305)

STAT 351 Mathematical Statistics II (3 Credits) Prerequisites: STAT 350.

Physics

- PHYS 230 Intermediate Dynamics (3 Credits) Prerequisites: PHYS 132/PHYS 132L, and MATH 253 (may be taken concurrently).
- PHYS 231 Modern Physics (3 Credits) Prerequisites: PHYS 132/PHYS 132L, and MATH 253 (may be taken concurrently).
- PHYS 311 Electromagnetic Theory I (3 Credits) Prerequisites: MATH 253; and PHYS 230 or PHYS 231.
- PHYS 312 Electromagnetic Theory II (3 Credits) Prerequisites: PHYS 311.
- PHYS 321 Quantum Theory I (3 Credits) Prerequisites: PHYS 231; and MATH 260 or MATH 236.
- PHYS 342 Advanced Dynamics (3 Credits) Prerequisites: PHYS 230, and MATH 260 or MATH 236.
- PHYS 362 Statistical and Thermal Physics (3 Credits) Prerequisites: CHEM 321 or PHYS 230; and MATH 253.
- PHYS 372 General Relativity (3 Credits) Prerequisites: PHYS 230 and MATH 236 or MATH 260.

Chemistry

CHEM 300 Environmental Chemistry (4 Credits) Prerequisites: CHEM 122/CHEM 122L or CHEM 132/CHEM 132L.

CHEM 301 & 301L Analytical Chemistry (3 Credits Lecture + 1 Credit Lab) Prerequisites: CHEM 132/CHEM 132L.
Corequisites: CHEM 301L.

CHEM 311 & 311L Organic Chemistry I (4 Credits Lecture + 1 Credit Lab) Prerequisites: CHEM 132/CHEM 132L.
Corequisites: CHEM 311L.

CHEM 312 & 312L Organic Chemistry II (4 Credits Lecture + 1 Credit Lab) Prerequisites: CHEM 132/CHEM 132L or permission of instructor. Corequisites: CHEM 312L.

CHEM 321 Physical Chemistry I (3 Credits) Prerequisites: CHEM 132/CHEM 132L or CHEM 151/CHEM 151L; and MATH 152; and PHYS 111/PHYS 111L or PHYS 131/PHYS 131L.

CHEM 322 Physical Chemistry II (3 Credits) Prerequisites: CHEM 132/CHEM 132L or CHEM 151/CHEM 151L; and MATH 253 (may be taken concurrently); and PHYS 111/PHYS 111L or PHYS 131/PHYS 131L.