

## Partners in Education

University of Mary and Bismarck State College



## Complete Your Bachelor's Degree Mechanical Engineering

*Make the step from an associate's degree to a bachelor's degree as smooth as possible: the University of Mary and Bismarck State College are working together to help you complete your bachelor's degree.*

Thanks to our trailblazing agreement with Bismarck State College, you can apply credits you earned at BSC toward a bachelor's degree from the University of Mary. Use the guide on the back of this flyer to plan the coursework required to complete a bachelor's degree in your program.

BSC graduates are also eligible for competitive merit-based scholarships designed to reduce the financial load of finishing a bachelor's degree.

*The University of Mary is dedicated to supporting students like you — those answering the call to serve in their communities and meet their regional workforce needs. While each student comes to us with distinct circumstances, experiences, and perspectives, our faculty, advisors, and staff will ensure that you graduate with the tools you need to succeed — in your career and in your life.*



### Questions?

We're just a phone call or email away, 701-355-8030 or [enroll@umary.edu](mailto:enroll@umary.edu)

## Degree Requirements by Course Listing

### Communications (Total 9 Credits)

BSC Course Name and Number	University of Mary Course
ENGL 110 College Composition I (3 cr)	ENG 111
ENGL 120 College Composition II (3 cr)	ENG 121
COMM 110 Fundamentals of Public Speaking (3 cr)	COM 110

### Arts and Humanities (Total 6 Credits)

BSC Course Name and Number	University of Mary Course
RELS 120 or 203 Religion/America or World Religion (3 cr)	THE 120
PHIL 210 Ethics (3 cr)	PHI 208

### Social and Behavioral Science (Total 6 Credits)

BSC Course Name and Number	University of Mary Course
SBS Elective (3 cr)	N/A
SBS Elective (3 cr)	N/A

### Math, Science, and Technology (Total 15 Credits)

BSC Course Name and Number	University of Mary Course
MATH 165 Calculus I (4 cr)	MAT 209
MAT 166 Calculus II (4 cr)	MAT 210
CHEM 121/121L General Chemistry I and Lab (5 cr)	CHE 111/L
PHYS 251/L University Physics I & Lab (5 cr)	PHY 251/L
PHYS 252/L University Physics II & Lab (5 cr)	PHY 252/L

## Mechanical Engineering

### Additional Course Requirements:

BSC Course Name and Number	University of Mary Course
ENGR 101 Graphical Comm (3 cr)	ENR 101
ENGR 201 & ENGR 202 Dynamics (6 cr)	ENR 201
ENGR 203 Mechanics of Materials (3 cr)	ENR 203/L
MATH 265 Calculus III (4 cr)	MAT 211
MATH 266 Introduction to Differential Equations (3 cr)	MAT 334 (Lower-Division Credit)
ENGR 206 Fluid Mechanics (3 cr)	ENR 306 (Lower-Division Credit)
ENGR 241 Thermodynamics (3 cr)	EME 341 (Lower-Division Credit)

### Additional BSC Degree Requirements

BSC Course Name and Number	University of Mary Course
Complete Enrichment Requirement (3 cr)	N/A
Diversity Requirement (3 cr)	Met by RELS

Maximum of 62 BSC credits can be transferred to the University of Mary.

Courses that will be applied toward the Mechanical Engineering major at the University of Mary require a minimum grade of C-.

If student is pursuing an AA degree instead of AS, different elective courses may be required at BSC to fulfill those requirements. Meet with your advisor to adapt your course plan.

Students may choose to complete electives at BSC other than those recommended above. Contact University of Mary Admissions if you have questions regarding transfer equivalencies for different courses, in order to ensure the selected courses will apply toward your University of Mary program of study.

## The Following Courses to be completed at The University of Mary

**FYE 322-** Transition Seminar (1 cr)

**ENR/MAT 200-** Computing (3 cr)

**PHY 253-** Engineering Physics III (3 cr)

**EME 298-** Manufacturing Tech Lab (1 cr)

**EME 301-** Materials Science (3 cr)

**EME 305-** Systems Dynamics (3 cr)

**EME 322-** Design of Machinery (3 cr)

**EME 323/L-** Machine Component Design & Lab (4 cr)

**EME 418-** Manufacturing Processes (4 cr)

**EME 441-** Thermodynamics II (3 cr)

**EME 474-** Heat and Mass Transfer (3 cr)

**EME 483-** Mechanical Measurements Lab (3 cr)

**EME 487-** Mech ENR Design Project (2 cr)

**ENR 206-** Fundamentals of Electrical ENR (3 cr)

**ENR 210-** Computer Aided Measure (3 cr)

**ENR 280-** ENR Design Lab I (1 cr)

**ENR 281-** ENR Design Lab II (3 cr)

**ENR 304-** Computer Aided Analysis (3 cr)

**ENR 338-** Advanced ENR Math (3 cr)

**ENR 405/L-** Control Systems/L (4 cr)

**ENR 419-** ENR Data Analysis (3 cr)

**ENR 460-** Engineering Economy (3 cr)

**ENR 470-** ENR Ethics (1 cr)

**ENR 488-** Senior Design (3 cr)

**ENR 498-** FE Exam Prep (0 cr)

**Tech Electives-** See Catalog for Options (3 cr)

**HUM 499**

Senior Competency Testing (0 cr)

**Total: 132 semester credits required for Graduation**