| University of Mary | | | UND | | | | | | |
|--|---|-------------------------------------|--------------|-----|---|--|--|--|--|
| Electrical Engineering requirements | | | | | | | | | |
| Must be taken at UND | | | EE 101 | 1 | Introduction to Electrical Engineering | | | | |
| EEL 201 | 3 | Introduction to Digital Electronics | EE 201/201L | 4 | Introduction to Digital Circuits | | | | |
| EEL 206/206L | 4 | Circuit Analysis and lab | EE 206/L | 3 | Circuit Analysis | | | | |
| Must be taken at UND | | | EE 304 | 3 | Computer Aided Measurement and Controls | | | | |
| EE 313/313L | 4 | Linear Electric Circuits and lab | EE 313/313L | 4 | Linear Electric Circuits and lab | | | | |
| EEL 314/314L | 4 | Signals and Systems and lab | EE 314/314L | 4 | Signal and Systems and lab | | | | |
| EEL 316 | 3 | Electric & Magnetic Fields | EE 316 | 3 | Electric and Magnetic Fields | | | | |
| EEL 318 | 3 | Engineering Data Analysis | EE 318 | 3 | Engineering Data Analysis | | | | |
| EEL 321/321L | 4 | Electronics I and lab | EE 321/321L | 4 | Electronics I and lab | | | | |
| Must be taken at UND | | | EE 401/401L | 4 | Electric Drives and lab | | | | |
| EEL 405/405L | 4 | Control Systems I and lab | EE 405/405L | 4 | Control Systems I and lab | | | | |
| Must be taken at UND | | | EE 409 | 3 | Distributed Networks | | | | |
| Must be taken at UND | | | EE 421/421L | 4 | Electronics II and lab | | | | |
| EEL 452/452L | 4 | Embedded systems and lab | EE 452/452L | 4 | Embedded Systems and lab | | | | |
| Must be taken at UND | | | EE 480 | 3 | Senior Design I | | | | |
| Must be taken at UND | | | EE 481 | 3 | Senior Design II | | | | |
| EE elective requirements (12 total credits required)* | | | | | | | | | |
| EEL 462 | 3 | Systems Programming | EE 451 | 3 | Computer Hard Organization | | | | |
| EEL 461 | 3 | Advanced Programming | EE elective | 3 | EE Elective credit | | | | |
| Must be taken at UND | | | EE electives | 6 | EE elective credits | | | | |
| Non-EE elective requirements (6 total credits required)* | | | | | | | | | |
| ENR 201 | 3 | Statics | ENGR 201 | 3 | Statics | | | | |
| ENR 202 | 3 | Dynamics | ENGR 202 | 3 | Dynamics | | | | |
| ENR 203 | 3 | Mechanics of Materials | ENGR 203 | 3 | Mechanics of Materials | | | | |
| | | | ME 306 | 3 | Fluid Mechanics | | | | |
| EME 341 | 3 | Thermodynamics | ME 341 | 3 | Thermodynamics | | | | |
| College of Engineering and Mines Requirements | | | | | | | | | |
| PHI 308 | 3 | Ethics | ENGR 340 | 3 | Professional Integrity in Engineering | | | | |
| Must be taken at UND | | | ENGR 460 | | Engineering Economy | | | | |
| Required courses for EE within other departments | | | | | | | | | |
| CHE 111 | 4 | General Inorganic Chemistry I | CHEM 121/L | 3/1 | General Chemistry I | | | | |
| MAT 209 | 4 | Calculus with Analytic Geometry I | MATH 165 | 3/1 | Calculus I | | | | |
| MAT 210 | 4 | Calculus with Analytic Geometry II | MATH 166 | 4 | Calculus II | | | | |
| | | | MATH 207 | 2 | Linear Algebra | | | | |

| MAT 211 | 4 | Calculus with Analytic Geometry III | MATH 265 | 4 | Calculus III |
|--------------|---|-------------------------------------|----------|---|---------------------------------|
| MAT 334 | 3 | Differential Equations | MATH 266 | 3 | Intro to Differential Equations |
| | | Engineering Physics I: Classical | | | |
| PHY 251/251L | 4 | Mechanics and lab | PHYS 251 | 4 | University Physics I |
| | | Engineering Physics II: | | | |
| PHY 252/252L | 4 | Electromagnetism and Optics and lab | PHYS 252 | 4 | University Physics II |

Students transferring to UND with a completed 4-year accredited baccalaureate degree will have all Essential Studies requirements waived.

^{*}Students are encouraged to work with their academic advisor to choose technical electives that fit with their individual learning plan.