

# LEADERS CAN START ANYWHERE... AND FINISH THEIR DEGREE AT UND

When you begin your Electrical Engineering degree at Bismarck State College.

Courses are sequenced to provide guidance and to help ensure that prerequisites are met.

Catalog Year: 2022-2023

## Plan of Study: Bachelor of Science in Electrical Engineering

| Begin courses at Bismarck State College  |  |           |
|--|--|-----------|
| First Year   First Semester  |  |           |
|  | ENGL 110 – College Composition   | 3         |
|  | MATH 165 – Calculus I  | 4         |
|  | CHEM 121/121L – General Chemistry I and lab                                | 5         |
|  | Humanities course – HIST 101, 102, 103 or 104                              | 3         |
|  | Enrichment course  | 2         |
| <b>Total Credits</b>   |  | <b>17</b> |
| First Year   Second Semester   |  |           |
|  | COMM 110 – Public Speaking   | 3         |
|  | ENGL 120/125 – College Composition <u>or</u> Intro to Professional Writing | 3         |
|  | MATH 166 – Calculus II   | 4         |
|  | Fine Arts Elective   | 3         |
|  | ECON 201 – Principles of Microeconomics                                    | 3         |
| <b>Total Credits</b>   |  | <b>16</b> |
| Second Year   First Semester   |  |           |
|  | MATH 227 – Applied Linear Algebra  | 3         |
|  | MATH 265 – Calculus III  | 4         |
|  | PHYS 251/251L – University Physics I and lab                               | 5         |
|  | EE 206/206L – Circuit Analysis and lab                                     | 4         |
| <b>Total Credits</b>   |  | <b>16</b> |
| <b>Apply to UND by April 15</b>  |  |           |
| <ul style="list-style-type: none"> <li>Complete online application at <a href="https://www.und.edu/transfer">UND.edu/transfer</a></li> <li>Request transcripts to be sent to UND <u>from BSC</u>.</li> </ul>   |  |           |
| <b>Apply for scholarships at UND by March 1</b>  |  |           |
| <ul style="list-style-type: none"> <li>After admission submit application for campus-wide scholarships in UND's <a href="#">Scholarship Central</a></li> </ul>   |  |           |
| Second Year   Second Semester  |  |           |
|  | MATH 266 – Differential Equations  | 3         |
|  | PHYS 252/252L – University Physics II and lab                              | 5         |
|  | Social Science elective  | 3         |
|  | EE 313/313L – Linear Electrical Circuits and Lab (taken at UND)            | 4         |
| <b>Total Credits</b>   |  | <b>15</b> |
| <b>Take next steps to begin at UND</b>   |  |           |
| <ul style="list-style-type: none"> <li>Begin new student checklist at <a href="https://www.und.edu/admitted">UND.edu/admitted</a></li> <li>Attend UND Transfer Student Orientation at <a href="https://www.und.edu/orientation">UND.edu/orientation</a></li> </ul> |  |           |
| Third Year   First Semester  |  |           |
|  | EE 101 – Intro to Electrical Engineering                                   | 1         |
|  | EE 201/201L – Intro to Digital Electronics and lab                         | 4         |
|  | EE 316 – Electric and Magnetic Fields                                      | 3         |

|                                      |   |            |
|--------------------------------------|---|------------|
|                                      | EE 314/314L – Signals and Systems and lab   | 4          |
|                                      | EE 318 – Engineering Data Analysis  | 3          |
|                                      | EE 321/321L – Electronics I and lab   | 4          |
| <b>Total Credits</b>                 |   | <b>19</b>  |
| <b>Third Year   Second Semester</b>  |   |            |
|                                      | ENGR 460 – Engineering Economy  | 3          |
|                                      | EE 401/401L – Electric Drives and lab   | 4          |
|                                      | EE 421/421L – Electronics II and lab  | 4          |
|                                      | EE 409 – Distributed Networks   | 3          |
|                                      | EE 405/405L – Controls Systems I & Lab  | 4          |
| <b>Total Credits</b>                 |   | <b>18</b>  |
| <b>Fourth Year   First Semester</b>  |   |            |
|                                      | EE 304 – Computer Aided Measurement and Controls  | 3          |
|                                      | EE 480 – Senior Design  | 3          |
|                                      | EE Elective – Electrical Engineering Elective   | 3          |
|                                      | EE Elective – Electrical Engineering Elective   | 3          |
|                                      | Non-EE Elective – Non-Electrical Engineering elective   | 3          |
|                                      | Hum/AW – Humanities – Analyzing Worldview   | 3          |
| <b>Total Credits</b>                 |   | <b>18</b>  |
| <b>Apply to graduate from UND</b>    |   |            |
|                                      | <ul style="list-style-type: none"> <li>After registering for your last semester of courses, apply at <a href="https://www.und.edu/commencement">UND.edu/commencement</a></li> </ul> |            |
| <b>Fourth Year   Second Semester</b> |   |            |
|                                      | EE 481 – Senior Design II   | 3          |
|                                      | EE 452/452L – Embedded Systems and lab  | 4          |
|                                      | ENGR 340 – Professional Integrity in Engineering  | 3          |
|                                      | EE Elective – Electrical Engineering Elective   | 3          |
|                                      | EE Elective – Electrical Engineering Elective   | 3          |
|                                      | Non-EE Elective – Non-Electrical Engineering Elective   | 3          |
| <b>Total Credits</b>                 |   | <b>19</b>  |
| <b>TOTAL CREDITS TO GRADUATE</b>     |   | <b>138</b> |

*This information is provided as guide only. Students are strongly encouraged to meet with their major specific UND advisor.*

*An official evaluation of transfer credit will be done upon admission to the university. Transfer credits will be evaluated and applied according to the current catalog and the approved Essential Studies list at the first semester of enrollment at UND.*

*Transfer credit for courses other than those listed above will be evaluated on a course-by-course basis.*

*Students are required to fulfill UND graduation and GPA requirements to receive a degree and should consult with their UND advisor and the undergraduate catalog for details.*