

**Bachelor of Science in Electrical Engineering
2020-2021**

Freshman Year

Fall Semester Hours

ENG 1003 Composition I
SCOM 1203 Oral Communications
PHYS 2034 University Physics I
ENGR 1402 Concepts of Engineering
MATH 2204 Calculus I

3
3
4
2
4

Spring Semester Hours

ENG 1013 Composition II
PHYS 2044 University Physics II
ENGR 1412 Software Applications for Engineers
ENGR 2421 Electric Circuits I Lab
ENGR 2423 Electric Circuits I
MATH 2214 Calculus II

3
4
2
1
3
4

16

17

Sophomore Year

Fall Semester Hours

EE 2322 Electrical Workshop
ENGR 2401 Applied Engineering Statistics
ENGR 2403 Statics
MATH 3254 Calculus III
CHEM 1011 General Chemistry I Lab
CHEM 1013 General Chemistry I
+++ Humanities Elective

2
1
3
4
1
3
3

Spring Semester Hours

CS 2114 Structured Programming
EE 3313 Electric Circuits II
EE 3333 Digital Electronics I
EE 3331 Digital Electronics Lab
MATH 4403 Differential Equations
ENGR 3443 Engineering Thermodynamics I

4
3
3
1
3
3

17

17

Junior Year

Fall Semester Hours

EE 3343 Engineering Fields & Waves
EE 3353 Signals and Systems
EE 3363 Semiconductor Materials and Devices
EE 3401 Electronics I Lab
EE 3403 Electronics I
ENGR 4453 Num. Methods for Engineers

3
3
3
1
3
3

Spring Semester Hours

EE 3393 Probability and Random Signals
EE 3383 Principles and Practices in Electrical Engr.
ENGR 3433 Engineering Economics
EE 4373 Electronics II
EE 4773 Electronics II Lab

3
3
3
3
3

17

15

Senior Year

Fall Semester Hours

EE 4313 Control Systems
EE 4353 Power Systems
EE 4333 Communications Theory
ENGR 4463 Senior Design I
ENGR 4401 Senior Seminar
+++Social Science Elective

3
3
3
3
1
3

Spring Semester Hours

++ EE Elective
++ EE Elective
ENGR 4482, Senior Design II
+Technical Elective
+++Fine Arts Elective

3
3
2
3
3

16

14

TOTAL HOURS: 128

General Education Curriculum for Engineering Baccalaureate Degrees

| | Semester Hours |
|---|----------------|
| Communication | 9 |
| ENG 1003, Freshman English I ENG 1013, Freshman English II SCOM 1203, Oral Communications | |
| Mathematics | 4 |
| MATH 2204, Calculus I | |
| Arts and Humanities | 6 |
| Fine Arts. Select one of the following: Humanities. Select one of the following: | |
| MUS 2503, Fine Arts Musical ENG 2003, World Literature to 1660 | |
| THEA 2503, Fine Arts Theater ENG 2013, World Literature since 1660 | |
| ART 2503, Fine Arts Visual PHIL 1103, Introduction to Philosophy | |
| Social Sciences | 11 |
| Select one of the following: | |
| HIST 2763, The United States to 1876 | |
| HIST 2773, The United States since 1876 | |
| POSC 2103, Introduction to United States Government | |
| Substitution of Higher Math (8hrs required): MATH 2214, Calculus II AND MATH 3254, Calculus III | |
| Science..... | 8 |
| CHEM 1013, General Chemistry I, and CHEM 1011, Laboratory for General Chemistry I | |
| PHYS 2034, University Physics I | |
| | <hr/> 38 |

Other rules: A course may be counted in satisfaction of only one area requirement. With the exception of English courses (ENG), no more than two selections may have the same prefix.

Additional required support courses:

| | |
|---|---------|
| MATH 4403, Differential Equations | 3 |
| PHYS 2044, University Physics II..... | 4 |
| | <hr/> 7 |

Engineering Core Courses:

| | |
|---|----------|
| ENGR 1402, Concepts of Engineering..... | 2 |
| ENGR 1412, Software Applications for Engineers..... | 2 |
| ENGR 2401, Applied Engineering Statistics..... | 1 |
| ENGR 2403, Statics..... | 3 |
| ENGR 3433, Engineering Economics..... | 3 |
| ENGR 4401 Senior Engineering Seminar..... | 1 |
| ENGR 4453, Numerical Methods for Engineers..... | 3 |
| ENGR 4463, Senior Design I..... | 3 |
| ENGR 4482, Senior Design II..... | 2 |
| | <hr/> 20 |

Electrical Engineering Major Courses:

| | |
|--|----------|
| ENGR 2423 and ENGR 2421, Electric Circuits I and Laboratory for Electric Circuits..... | 4 |
| ENGR 3443, Engineering Thermodynamics..... | 3 |
| CS 2114 Structured Programming | 4 |
| EE 2322, Electrical Workshop | 2 |
| EE 3313, Electric Circuits II..... | 3 |
| EE 3331, Digital Electronics I Lab | 1 |
| EE 3333, Digital Electronics I..... | 3 |
| EE 3343, Engineering Fields and Waves | 3 |
| EE 3353, Signals and Systems | 3 |
| EE 3363, Semiconductor Materials and Devices..... | 3 |
| EE 3393, Probability and Random Signals..... | 3 |
| EE 3383, Principles and Practices in Electrical Engineering..... | 3 |
| EE 3401, Laboratory for Electronics I..... | 1 |
| EE 3403, Electronics I..... | 3 |
| EE 4333, Communications Theory..... | 3 |
| EE 4313, Control Systems..... | 3 |
| EE 4353, Power Systems..... | 3 |
| EE 4373, Electronics II..... | 3 |
| EE 4773, Electronics II Laboratory..... | 3 |
| + Approved Technical Electives..... | 3 |
| ++ Electrical Engineering Electives..... | 6 |
| | <hr/> 63 |

Total Hours: 128

+ Upper level engineering, math, or science course. Advisor approval required.

++Upper level electrical engineering or computer science courses.

+++See General Education Requirements for Electrical Engineering.