

Robotics & Autonomous Systems and Bioengineering

| FIRST YEAR-FALL | HR | Notes | FIRST YEAR-SPRING | HR | Notes |
|-----------------------------|-----------|--------------|-----------------------------|-----------|--------------|
| CHEM 1310 | 4 | | ECE 2020 | 3 | |
| CS 1301 | 3 | | ENGL 1102 | 3 | |
| ECE 1100 | 1 | | MATH 1552 | 4 | |
| ENGL 1101 | 3 | | PHYS 2211 | 4 | |
| MATH 1551 | 2 | | History/Government Elective | 3 | 5 |
| MATH 1554 | 4 | | | | |
| | | | | | |
| TOTAL SEMESTER HOURS | 17 | | TOTAL SEMESTER HOURS | 17 | |

| SECOND YEAR-FALL | HR | Notes | SECOND YEAR-SPRING | HR | Notes |
|-----------------------------------|-----------|--------------|-----------------------------|-----------|--------------|
| ECE 2026 | 3 | | ECE 2031 | 2 | |
| Economics/Social Science Elective | 3 | | ECE 2035 or 2036 | 4 | |
| Humanities Elective | 3 | | ECE 2040 | 3 | |
| MATH 2552 | 4 | | MATH 2551 | 4 | |
| PHYS 2212 | 4 | | Science Elective | 3 | |
| | | | | | |
| TOTAL SEMESTER HOURS | 17 | | TOTAL SEMESTER HOURS | 16 | |

| THIRD YEAR-FALL | HR | Notes | THIRD YEAR-SPRING | HR | Notes |
|-----------------------------|-----------|--------------|-------------------------------------|-----------|--------------|
| ECE 3040 | 4 | | ECE 3005 | 1 | |
| ECE 3043 | 2 | | ECE 3025 | 3 | |
| ECE 3550 | 3 | | ECE 4550 | 4 | |
| Prob & Stat Elective | 3 | | Pick 1 of Bioengineering Foundation | 3 | |
| APPH 1040 OR 1050 | 2 | | Social Science Elective | 3 | |
| Humanities Elective | 3 | | Elective Hours | 3 | 1 |
| | | | | | |
| TOTAL SEMESTER HOURS | 17 | | TOTAL SEMESTER HOURS | 17 | |

| FOURTH YEAR-FALL | HR | Notes | FOURTH YEAR-SPRING | HR | Notes |
|---------------------------------|-----------|--------------|---------------------------------|-----------|--------------|
| Senior Design Sequence | 1 | 2 | Senior Design Sequence | 2 | 2 |
| Pick 1 of Rob Auto Sys Topics | 3 | | ECE 3000/4000 Elective | 3 | |
| ECE 3000/4000 Elective | 3 | | Elective Hours | 3 | 1 |
| Pick 1 of Bioengineering Topics | 3 | | Elective Hours | 3 | 1 |
| Elective Hours | 1 | 1 | Pick 1 of Bioengineering Topics | 3 | |
| Social Science Elective | 3 | | | | |
| | | | | | |
| TOTAL SEMESTER HOURS | 14 | | TOTAL SEMESTER HOURS | 14 | |

| | | |
|-------------------------------|------------|-----|
| Completed Hours: | | |
| Remaining Hours: | | |
| Surplus Non Usable Hours | | |
| Total Hours for Degree | 129 | 129 |

| ROB + BIO | | | |
|--|-----|-----|------------|
| | Lec | Lab | Hours |
| Institute Core Hours+Prob Stat: | x | x | 65 |
| Common Core | x | x | 26 |
| Total Thread Hours: | x | x | 25 |
| Elective Hours (includes Senior Design Sequence) | x | x | 13 |
| Total Degree Hours | | | 129 |

| EE Common Core | | | |
|---|-----------|----------|-----------|
| ECE 1100 - ECE Discovery Studio | 1 | 0 | 1 |
| ECE 2020 - Fundamentals of Digital Design | 3 | 0 | 3 |
| ECE 2026 -Intro Signal Processing | 2 | 3 | 3 |
| ECE 2031 - Digital Design Laboratory | 1 | 3 | 2 |
| ECE 2040 - Circuit Analysis | 3 | 0 | 3 |
| ECE 3005 - Professional Communications | 1 | 0 | 1 |
| ECE 3025 - Electromagnetics | 3 | 0 | 3 |
| ECE 3040 - Microelectronic Circuits | 4 | 0 | 4 |
| ECE 3043 - Microelectronics Lab | 1 | 3 | 2 |
| Choose 1 | | | |
| ECE 2035 - Programming for Hardware/Software System | 3 | 3 | 4 |
| ECE 2036 - Engineering Software Design | 3 | 3 | 4 |
| Total | 18 | 9 | 26 |

| Robotics & Autonomous Systems | | | |
|---|----------|----------|-----------|
| ECE 3550 - Feedback Control Systems | 3 | 0 | 3 |
| ECE 4550 - Control System Design | 3 | 3 | 4 |
| Pick 1 of Robotics & Autonomous Systems Topics (*) | 3 | 0 | 3 |
| ECE 3000/4000 Elective | 3 | 0 | 3 |
| | | | |
| Bioengineering | | | |
| Pick 1 of Bioengineering Foundation | 3 | 0 | 3 |
| Pick 2 of Bioengineering Topics (*) | 3 | 0 | 3 |
| ECE 3000/4000 Elective | 3 | 0 | 3 |
| | | | |
| Total (See Notes 3 and 4) | x | x | 22 |

| | | | |
|----------------------------|----------|----------|------------|
| Total Degree Hours: | x | x | 129 |
|----------------------------|----------|----------|------------|

- (1) Elective hours depend on thread picks and Senior Design Option
- (2) See degree options for senior design
- (3) Thread hours may depend on thread picks
- (4) For shared thread courses, select an additional ECE 3000/4000 elective or pick
- (5) HIST 2111/2122 or POL 1101 or INTA 1200 or PUBP 3000
- (*) ECE3084 is a shared pick (see Note 4)