| Current | | Revised | |
|---|---------|--|---------|
| DEGREE: BACHELOR OF ELECTRICAL ENGINEERING | | DEGREE: BACHELOR OF ELECTRICAL ENGINEERING | |
| MAJOR: ELECTRICAL ENGINEERING | | MAJOR: ELECTRICAL ENGINEERING | |
| | | | |
| CURRICULUM | CREDITS | CURRICULUM Parenthesized figures indicate year and semester in which the course should be | CREDITS |
| Superior figures indicate year (1 = freshman, 2 = sophomore, 3 = junior, 4 = senior, and semester ($F = fall$, $S = spring$) in which the course should be taken. |) | taken. $(1 = freshman, 2 = sophomore, 3 = junior, 4 = senior)$ and semester (F= fall, S = spring) | |
| UNIVERSITY REQUIREMENTS | | UNIVERSITY REQUIREMENTS | |
| ENGL 110 Critical Reading and Writing (minimum grade C-) | 3(1F) | ENGL 110 Critical Reading and Writing (minimum grade C-) | 3(1F) |
| First Year Experience (FYE) | 0-4 | First Year Experience (FYE) | 0-4 |
| Breadth Requirements | 3 | Discovery Learning Experience (DLE) | 3 |
| Discovery Learning Experience (DLE) | 12 | Breadth Requirements | 12 |
| Multi-cultural Courses | 3 | Multi-cultural Course(s) | 3 |
| Major Requirements | | Major Requirements | |
| Breadth Requirements | 21 | Breadth Requirements | 21 |
| | | | |
| College of Engineering Breadth Requirements The College of Engineering requires 21 total Breadth Requirement credits (essentially 9 credits in addition to the University Breadth Requirement.) • If chosen carefully, up to 3 credits from each of the University Breadth Requirement categories may be used to simultaneously satisfy the College of Engineering Breadth Requirements for this major. • Of the 21 credits, 6 credits must be at the Upper Level (usually 300-level or higher) as designated on the College of Engineering Breadth Requirement list. • Of the 21 credits, 3 credits may be used to satisfy the University Multicultural Requirement (recommended for timely progress toward degree completion.) • All Breadth Requirement coursework must be passed with a minimum grade of C | | College of Engineering Breadth Requirements The College of Engineering requires 21 total Breadth Requirement credits (essentially 9 credits in addition to the University Breadth Requirement.) • If chosen carefully, up to 3 credits from each of the University Breadth Requirement categories may be used to simultaneously satisfy the College of Engineering Breadth Requirements for this major. • Of the 21 credits, 6 credits must be at the Upper Level (usually 300-level or higher) as designated on the College of Engineering Breadth Requirement list. • Of the 21 credits, 3 credits may be used to satisfy the University Multicultural Requirement (recommended for timely progress toward degree completion.) • All Breadth Requirement coursework must be passed with a minimum grade of C | |
| One of the following four courses must be taken: | 3(3F) | One of the following four courses must be taken: | 3(3F) |
| ENGL 301 Expository Writing | | ENGL 301 Expository Writing | |
| ENGL 312 Written Communications in Business | | ENGL 312 Written Communications in Business | |
| ENGL 410 Technical Writing | | ENGL 410 Technical Writing | |
| ENGL 413 Topics in Professional Writing | | ENGL 413 Topics in Professional Writing | |
| EGGG 101 Introduction to Engineering (FYE) | 2(1F) | EGGG 101 Introduction to Engineering | 2(1F) |
| MATH 241 Analytic Geometry and Calculus A | 4(1F) | MATH 241 Analytic Geometry and Calculus A | 4(1F) |
| MATH 242 Analytic Geometry and Calculus B | 4(1S) | MATH 242 Analytic Geometry and Calculus B | 4(1S) |
| MATH 243 Analytic Geometry and Calculus C | 4(2F) | MATH 243 Analytic Geometry and Calculus C | 4(2F) |
| MATH 341 Differential Equations with Linear Algebra I | 3(2S) | MATH 341 Differential Equations with Linear Algebra I | 3(2S) |
| MATH 342 Differential Equations with Linear Algebra II | 3(3F) | MATH 342 Differential Equations with Linear Algebra II | 3(3F) |
| CHEM 103 General Chemistry | 4(1F) | CHEM 103 General Chemistry | 4(1F) |
| PHYS 207 Fundamentals of Physics I | 4(1S) | PHYS 207 Fundamentals of Physics I | 4(1S) |
| PHYS 208 Fundamentals of Physics II | 4(2F) | PHYS 208 Fundamentals of Physics II | 4(2F) |
| CISC 106 General Computer Science for Engineers | 3(1F) | CISC 106 General Computer Science for Engineers | 3(1F) |
| CISC 181 Introduction to Computer Science II | 3(1S) | CISC 181 Introduction to Computer Science II | 3(1S) |
| CISC 220 Data Structures | 3(2F) | CISC 220 Data Structures | 3(2F) |
| CPEG 202 Introduction to Digital Systems | 3(1S) | CPEG 202 Introduction to Digital Systems | 3(1S) |
| CPEG 222 Microprocessor Based Systems | 4(2S) | CPEG 222 Microprocessor Based Systems | 4(2S) |
| ELEG 205 Analog Circuits I | 4(2F) | ELEG 205 Analog Circuits I | 4(2F) |
| ELEG 305 Signals and Systems | 3(2S) | ELEG 305 Signals and Systems | 3(2S) |
| ELEG 309 Electronic Circuit Analysis I | 4(2S) | ELEG 309 Electronic Circuit Analysis I | 4(2S) |
| ELEG 310 Random Signals and Noise | 3(3S) | ELEG 310 Random Signals and Noise | 3(3S) |
| ELEG 320 Field Theory I | 4(3F) | ELEG 320 Field Theory I | 4(3F) |
| ELEG 340 Solid State Electronics | 3(3F) | ELEG 340 Solid State Electronics | 3(3F) |

| Three of the following five foundation elective courses must be taken: 3S, 4F | 9 | Three of the following five foundation elective courses must be taken: $3S, 4F$ | 9 |
|--|---------|--|---------|
| ELEG 306 Digital Signal Processing | | ELEG 306 Digital Signal Processing | |
| ELEG 312 Electronic Circuit Analysis II | | ELEG 312 Electronic Circuit Analysis II | |
| ELEG 403 Communication Systems Engineering | | ELEG 403 Communication Systems Engineering | |
| ELEG 413 Field Theory II | | ELEG 413 Field Theory II | |
| ELEG 418 Digital Control Systems | | ELEG 418 Digital Control Systems | |
| Design Requirement (DLE) | 6(4F&S) | Design Requirement (DLE) | 6(4F&S) |
| In addition to the content of the normal program, every student must take at least six credits in ELEG course designated as "design." Regularly offered ELEG design courses include ELEG 498 offered in the fall and ELEG 499 offered in the spring. | | In addition to the content of the normal program, every student must take at least six credits in ELEG course designated as "design." Regularly offered ELEG design courses include ELEG 498 offered in the fall and ELEG 499 offered in the spring. | |
| Technical Electives | 15 | Technical Electives | 15 |
| In addition to the design requirement, each student, in consultation with their advisor, must select a program of technical electives satisfying the following: (1) With some exceptions, technical electives consist of 300-level or above engineering, mathematics, natural sciences, and computer science courses. With the permission of the student's advisor, certain 200-level courses, such as PHYS 211, are permitted. (2) At least 15 technical elective credits must be taken. (3) Of the 15 technical elective credits, at least 9 must be in CPEG or ELEG courses. (4) Of the 9 credits in ELEG or CPEG, at least 6 must be in 400-level or above ELEG or CPEG courses. | | In addition to the design requirement, each student, in consultation with their advisor, must select a program of technical electives satisfying the following: (1) With some exceptions, technical electives consist of 300-level or above engineering, mathematics, natural sciences, and computer science courses. With the permission of the student's advisor, certain 200-level courses, such as PHYS 211, are permitted. (2) At least 15 technical elective credits must be taken. (3) Of the 15 technical elective credits, at least 9 must be in CPEG or ELEG courses. (4) Of the 9 credits in ELEG or CPEG, at least 6 must be in 400-level or above ELEG or CPEG courses. | |
| CREDITS TO TOTAL A MINIMUM OF | 125 | CREDITS TO TOTAL A MINIMUM OF | 126 |

2(4S)

ELEG 491 Ethics and Impacts of Engineering

3(4S)

ELEG 491 Ethics and Impacts of Engineering