

NAME: _____

ELECTRICAL ENGINEERING

UID: _____ A.A. A.S.E. Post-Bac

| GENERAL EDUCATION REQUIREMENTS | | | |
|---|----------|--|-------|
| Fundamental Studies | | | |
| Academic Writing (AW) | ENGL 101 | | 3 |
| Professional Writing (PW) | ENGL 39X | | 3 |
| Oral Communication (OC) | | | 3 |
| Distributive Studies | | | |
| History/Social Sciences (HS*) | | | 3 |
| History/Social Sciences (HS*) | | | 3 |
| Humanities (HU*) | | | 3 |
| Scholarship in Practice (SP*) out of mj | | | 3 |
| I-Series | | | |
| I-Series (IS*) | | | 0/3 |
| Diversity | | | |
| Understanding Plural Societies (UP*) | | | 0/3 |
| Understanding Plural Societies (UP*) OR Cultural Competency (CC*) | | | 0/3 |
| MAJOR REQUIREMENTS | | | |
| Basic Sciences | | | |
| CHEM 135-Chem Engr or 131 & 134 -Fund & Prin | | | 3/3&1 |
| PHYS 161 - General Physics I (NS) | | | 3 |
| PHYS 260 and PHYS 261 - Gen Physics II & Lab (NL) | | | 3 & 1 |
| PHYS 270 and PHYS 271 - Gen Physics III & Lab | | | 3 & 1 |
| MATH 140- Calculus I (MA/AR) | | | 4 |
| MATH 141 - Calculus II | | | 4 |
| MATH 241 - Calculus III | | | 4 |
| MATH 246 - Differential Equations | | | 3 |
| Engineering Sciences | | | |
| ENES 100 - Intro to Eng Design (SP) | | | 3 |

* May satisfy more than one requirement. See www.gened.umd.edu

**For a complete list of approved electives, please see: www.ece.umd.edu/home

| For Degree Clearance Only | |
|---------------------------|--------------------|
| Degree: B.S. ENEE | Advisor: _____ |
| Date: _____ | Credits/GPA: _____ |

| Major Requirements | | |
|---|--|-----|
| ENEE 150 – Intermed Prog Concepts* | | 3 |
| *Students must successfully complete ENEE140 OR exemption prior to enrolling. | | |
| ENEE 101 - Intro to Electrical & Comp Engr | | 3 |
| ENEE 200 - Engineering Ethics (HU/IS) | | 3 |
| ENEE 205 – Electric Circuits | | 4 |
| ENEE 222 – Elements of Discrete Signal | | 4 |
| ENEE 244 – Digital Logic Design | | 3 |
| ENEE 245 – Digital Circuits and Systems | | 2 |
| ENEE 303 – Analog & Digital Electronics | | 3 |
| ENEE 307 – Electronic Circuit Design Lab | | 2 |
| ENEE 313 – Intro Device Physics | | 3 |
| ENEE 322 – Signal & System Theory | | 3 |
| ENEE 324 – Eng Probability | | 3 |
| ENEE 350 – Computer Organization | | 3 |
| ENEE 380 – Electromagnetic Theory | | 3 |
| ENEE 381 – Electromagnetic Wave Propagation | | 3 |
| Required ENEE Technical Electives (13 credits) | | |
| Category A: Adv. Theory & Applications: | | 3 |
| Category B: Advanced Laboratory: | | 2-3 |
| Category C: Capstone Design: | | 3 |
| Category A-C: | | 3 |
| Category A-C: | | 1-3 |

A minimum of 13 credits of 300/400-level ENEE electives must be completed and at least two courses must be selected from a single area of specialization. For a complete list of approved ENEE elective, areas of specialization and minimum credit requirements for each category, please see: <http://www.ece.umd.edu/home>

| General Technical Electives** | | |
|--------------------------------------|--|---|
| MATH 4xx - Technical Math Elective** | | 3 |
| General Technical Electives** | | 3 |
| General Technical Electives** | | 3 |
| General Technical Electives** | | 3 |

| Requirements for Graduation: |
|---|
| <input type="checkbox"/> Final 30 credits must be earned at UMD |
| <input type="checkbox"/> 15 of the final 30 credits must be earned at the 300-400 level |
| <input type="checkbox"/> 12 upper level major credits must be earned at UMD |
| <input type="checkbox"/> A minimum 2.00 cumulative UM GPA, and satisfactory completion of all degree requirements, is required for graduation |
| <input type="checkbox"/> Students matriculating in Fall 2012 or after must have a 2.0 minimum GPA for all degree requirements, minor requirements, and undergraduate certificate requirements |
| <i>(Major courses are defined as: departmental courses, basic sciences, engineering sciences, specified degree tracks, technical requirements/ technical electives and Professional Writing (PW))</i> |
| <input type="checkbox"/> A minimum of 120 credits is required to earn the degree |

Electrical Engineering Four Year Academic Plan

Name: _____

UID: _____

| Year 1 | Fall | | |
|--|------------------|-----------|-------|
| Gateway requirements include: ENGL 101, CHEM 135, MATH 141, PHYS 161 and an approved Distributive Studies course. (Directly admitted freshman must successfully complete these courses and ENES 100 by 45 UM credits.) | Course | Credit | Grade |
| | CHEM 135 | 3 | |
| | ENEE 140 | 2 | |
| | ENEE 101* | 3 | |
| | MATH 140 (AR/MA) | 4 | |
| | ENGL 101 (AW) | 3 | |
| | Total | 15 | |

| Spring | | |
|----------------|-----------|-------|
| Course | Credit | Grade |
| ENEE 150 | 3 | |
| ENES 100 (SP)* | 3 | |
| MATH 141 | 4 | |
| PHYS 161 (NS) | 3 | |
| ORAL COMM (OC) | 3 | |
| Total | 16 | |

| Year 2 | Fall | | |
|--------|----------------------------|-----------|-------|
| | Course | Credit | Grade |
| | ENEE 222 | 4 | |
| | ENEE 244 | 3 | |
| | MATH 241 | 4 | |
| | PHYS 260 and PHYS 261 (NL) | 4 | |
| | ENEE 200 (HU/IS) | 3 | |
| | Total | 18 | |

| Spring | | |
|-----------------------|-----------|-------|
| Course | Credit | Grade |
| ENEE 205 | 4 | |
| ENEE 245 | 2 | |
| MATH 246 | 4 | |
| PHYS 270 and PHYS 271 | 3 & 1 | |
| Humanities (HU)** | 3 | |
| Total | 17 | |

| Year 3 | Fall | | |
|--------|----------------------------|-----------|-------|
| | Course | Credit | Grade |
| | ENEE 303 | 3 | |
| | ENEE 322 | 3 | |
| | ENEE 350 | 3 | |
| | ENEE 380 | 3 | |
| | Hist & Soc Sciences (HS)** | 3 | |
| | Total | 15 | |

| Spring | | |
|----------------------------|-----------|-------|
| Course | Credit | Grade |
| ENEE 307 | 2 | |
| ENEE 313 | 3 | |
| ENEE 324 | 3 | |
| ENEE 381 | 3 | |
| Hist & Soc Sciences (HS)** | 3 | |
| Professional Writing (PW) | 3 | |
| Total | 17 | |

| Year 4 | Fall | | |
|--------|-------------------------------|-----------|-------|
| | Course | Credit | Grade |
| | ENEE 4xx - CAT A | 3 | |
| | ENEE 4xx - CAT B | 2 | |
| | ENEE 4xx - Upper Tech Electiv | 3 | |
| | Upper-level Gen. Tech Elec | 3 | |
| | MATH 4xx Elective | 3 | |
| | Total | 14 | |

| Spring | | |
|----------------------------|-----------|-------|
| Course | Credit | Grade |
| ENEE 4xx - CAT C | 3 | |
| ENEE 4xx - Upper Tech Elec | 3 | |
| Upper-level Gen. Tech Elec | 3 | |
| Upper-level Gen. Tech Elec | 3 | |
| Scholarship in Prac (SP)** | 3 | |
| Total | 15 | |

*ENEE101 and ENES100 cannot be taken in the same semester. Students may take these courses consecutively within their first year in the order of choice.

** All students must complete two distributive studies courses that are approved I-Series courses. The Understanding Plural Societies & Cultural Competence courses may also fulfill Distributive Studies categories.