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|  | **Electrical Engineering (Energy and Power Emphasis)** **2024-25 Catalog Advising Checklist** |  | Name: |  |
|  | **Semester Units: 120** | **Core Units: 92-94** |  | ID #: |  |

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| Lower Division Core (12) |  |
|  |  | ECE/ENGR 1618 - Introduction to Engineering I (2) | Advising Notes: |
|  |  | ECE/ENGR 1628 - Introduction to Engineering II (2) |  |
|  |  | CMPS 2010 - Progr. I: Programming Fundamentals (4) (grade of C- or better) |
|  |  | ECE/ENGR/PHYS 2070 - Electric Circuits (4) (grade of C- or better) |
| Upper Division Core (46) |
|  |  | ECE 3040 - Signals and Systems (4) (grade of C- or better) |
|  |  | ECE 3070 - Analog Circuits (4) |
|  |  | ECE 3200 - Digital Circuits (4) |
|  |  | ECE 3230 - Digital Communications (4) |
|  |  | ECE 3320 - Fields and Waves (4) |
|  |  | ECE 3340 - Control Systems (4) |
|  |  | ECE 3370 - Power System Fundamentals (4) |
|  |  | ENGR 3110 – Thermodynamics (4) |
|  |  | ENGR 4610 – Conventional Energy Production (3) |
|  |  | ENGR 4620 – Renewable Energy Production (3) |
|  |  | ECE 4380 – Power System Operation with Renewable Energy Resources (3) |
|  |  | ECE 4381 – Power System Operation with Renewable Energy Resources Lab (1) |
|  |  | ECE 4910 - Senior Project I (2) |
|  |  | ECE 4928 - Senior Project II (2) |
| Cognate Requirements (34-36) |
|  |  | CHEM 1000 - General Chemistry (3) |
|  |  | MATH 2310 or 2510 - Calculus I (4) (grade of C- or better) |
|  |  | MATH 2320 or 2520 - Calculus II (4) (grade of C- or better) |
|  |  | MATH 2330 or 2530/2533 or Both 2531+2532 - Calculus III (4-6) |
|  |  | MATH 2610 - Linear Algebra (4) |
|  |  | MATH 3200 - Probability Theory (4) |
|  |  | PHYS 2210 - Classical Physics I (4) (grade of C- or better) |
|  |  | PHYS 2220 - Classical Physics II (4) (grade of C- or better) |
|  |  | PHIL 3318 - Professional Ethics (3) |
| Additional Units (any university units) (0-4) |
|  |  |  |
| General Education and University Requirements (24-27) |
|  |  | First Year Seminar - Satisfied by ECE/ENGR 1618 and 1628 |
|  |  | A1 - COMM 1008 (3) (grade of C- or better) |
|  |  | A2 - ENGL 1109 (3) (grade of C- or better) |
|  |  | A3 - Waived for Electrical Engineering majors |
|  |  | A4 - Satisfied by MATH 2310 or 2510 (or higher) with grade of C- or better |
|  |  | B1/B3 - Satisfied by PHYS 2210 |
|  |  | B2/B3 - Waived for Electrical Engineering majors |
|  |  | C1 - Arts (3) |
|  |  | C2 - Humanities (3) |
|  |  | US History for American Institutions (AI) requirement (3) |
|  |  | Government for AI requirement - Recommend PLSI 1018 (3) |
|  |  | Area D - Waived for Electrical Engineering majors |
|  |  | Area F - Ethnic Studies (3) |
|  |  | SELF - Recommend course that double-counts for another GE requirement (0-3) |
|  |  | Junior Year Diversity Reflection (JYDR) (3) |
|  |  | UD Area B - Not required for NSME majors |
|  |  | UD Area C - Satisfied by PHIL 3318 |
|  |  | UD Area D - Waived for Electrical Engineering majors |
|  |  | Capstone - Satisfied by ECE 4928 |
|  |  | GWAR – Satisfied by PHIL 3318 |