

2022 ELECTRICAL ENGINEERING: Power and Renewable Energy Track
COLLEGE OF ENGINEERING & COMPUTER SCIENCE

DEGREE REQUIREMENT CHECKSHEET
UNIVERSITY OF CENTRAL FLORIDA

| GENERAL EDUCATION PROGRAM | | | | LOWER AND JUNIOR LEVEL REQUIRED COURSES | SH | Grd | Trans Equiv |
|---|-----------|------------|--------------------|---|-----------|-----|-------------|
| * Indicates "C-" minimum required by the Gordon Rule | | | | EGS 1006C Introduction to the Engineering Profession | 1 | # | |
| ** Indicates minimum "C" or better grade | | | | EGN 1007C Engineering Concepts and Methods | 1 | # | |
| COMMUNICATION (9 SEM HRS) | SH | Grd | Trans Equiv | STA 3032 Probability & Statistics for Engineers | GEP | | |
| ENC 1101 | 3 | * | | PHY 3101 General Physics Using Calculus III | 3 | | |
| ENC 1102 | 3 | * | | EEL 3926L Junior Design | 1 | | |
| SPC 1603C | 3 | | | EGN 3211 Engineering Analysis & Computation | 3 | ** | |
| CULTURAL & HISTORICAL (9 SEM HRS) | | | | EEL 3004C Linear Circuits I | 3 | ** | |
| Select 2: AMH 2010, EUH 2000, EUH 2001, HUM 2211, HUM 2230, WOH 2012, WOH 2022 | 6 | * | | EEL 3123C Linear Circuits II | 3 | ** | |
| Approved Cultural Foundations course: | 3 | | | EEE 3307C Electronics I | 4 | | |
| SOCIAL FOUNDATION - (6 SEM HRS) | | | | EEE 3342C Digital Systems | 3 | ** | |
| ANT 2000/ PSY 2012/ SYG 2000 | 3 | | | EEL 3801C Computer Organization | 4 | ** | |
| ECO 2013 <u>or</u> ECO 2023 | 3 | | | EEL 3657 Linear Control Systems | 3 | | |
| SCIENCE - 6 SH | | | | JUNIOR LEVEL ELECTIVE COURSES (CHOOSE 2) | | | |
| GEO 1200 <u>or</u> GEO 2370 (either GEO is preferred) <u>or</u> BSC 1050C <u>or</u> BSC 1005C <u>or</u> GLY 1030 | 3 | | | EEL 3470 Electromagnetic Fields | 3 | | |
| PHY 2048C General Physics Using Calculus I | 4 | | | EEL 3552C Signal Analysis & Communication | 4 | | |
| MATHEMATICAL - 6 SH | | | | EEE 3350 Semiconductor Devices | 3 | | |
| MAC 2311C | 4 | ** | | EEL 3290 Global Energy Issues | 3 | | |
| STA 3032 Probability & Statistics for Engineers | 3 | | | SENIOR LEVEL REQUIRED COURSES | | | |
| GPA Gen Ed Prog = | 36 | | | EEL 4216 Fundamentals of Electric Power Systems | 3 | | |
| ENGINEERING CORE** | | | | EEL 4742C Embedded Systems | 3 | | |
| MAC 2311C Calculus with Analytic Geometry I | GEP | ** | | RECOMMENDED SENIOR LEVEL ELECTIVE COURSES | | | |
| MAC 2312 Calculus with Analytic Geometry II | 4 | ** | | (CHOOSE MINIMUM 3 FROM LIST) | | | |
| MAC 2313 Calculus with Analytic Geometry III | 4 | ** | | EEL 4612C Introduction to Modern & Robust Control | 4 | | |
| MAP 2302 Ordinary Differential Equations I | 3 | ** | | EEL 4750 Digital Signal Processing Fundamentals | 3 | | |
| CHS 1440 Principles of Chemistry (or CHM 2045C) | 4 | ** | | EEL 4294 Introduction to Smart Grids | 3 | | |
| PHY 2048 & PHY 2048L General Physics Using Calculus I & Lab | GEP | ** | | EEL 4205 Electric Machinery | 3 | | |
| PHY 2049 & PHY 2049L General Physics Using Calculus II & Lab | 4 | ** | | EEL 5185 Systems Identification | 3 | | |
| SUBTOTAL SEM HRS | 19 | | | EEL 5268 Communications and Networking for Smart Grid | 3 | | |
| | | | | EEL 5291 Distributed Control and Optimization for Smart Grid | 3 | | |
| | | | | EEL 5173 Linear Systems Theory | 3 | | |
| | | | | EEL 5255 Advanced Power Systems Analysis | 3 | | |
| | | | | EEL 5245 Power Electronics I | 3 | | |
| | | | | REQUIRED | | | |
| | | | | <i>Technical Electives (EEE or EEL 4XXX or 5XXX)</i> | 15 | ~ | |
| | | | | EEL 4914 Senior Design I | 3 | | |
| | | | | EEL 4915L Senior Design II | 3 | | |
| | | | | SUBTOTAL SEM HRS | 71 | | |
| | | | | GPA Engr Option = (2.250 minimum) | | | |
| ** A Grade of C (2.00) or higher required | | | | ADVISOR COMMENTS: | | | |
| * Transfer students please see your faculty advisor before registering for these classes. | | | | ~BS-MS students should choose (3 SH) 5000 level courses as electives. | | | |