**B.S. in Engineering**

**Concentration: Electrical Power**

Will Seek Accreditation by the Accreditation Board for Engineering and Technology

(EAC of ABET) following graduation in May 2017

**Major Program Guide For: B.S. in Engineering (Concentration: Electrical Power, Cullowhee)**

**Suggested Course Sequence (2015-16 Catalog)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Freshman Year** | | | | | | | |
| **Fall** | | | | **Spring** | | | |
| **Course Prefix or Liberal**  **Studies Requirement** | **Course**  **Number** | **Course Title** | **Cr**  **Hrs** | **Course Prefix or Liberal**  **Studies Requirement** | **Course**  **Number** | **Course Title** | **Cr**  **Hrs** |
| **ENGL** | 101 | Or ENGR 199 | 3 | **ENGR** | 132 | Engineering Graphics | 3 |
| **CHEM** | 139 | General Chemistry I (C5) | 4 | **Perspective** |  |  | 3 |
| **MATH** | 153 | Calculus I (C2) | 4 | **MATH** | 255 | Calculus II | 4 |
| **Wellness (C4)** |  |  | 3 | **PHYS** | 230 | General Physics I (C5) | 4 |
| **COMM** | 201 | Communications (C3) | 3 | **ENGR** | 199 | Or ENGL 101 | 3 |
|  |  | *Semester Total:* | *17* |  |  | *Semester Total:* | *17* |
|  | | | | | | | |
| **Sophomore Year** | | | | | | | |
| **Fall** | | | | **Spring** | | | |
| **Course Prefix or Liberal**  **Studies Requirement** | **Course**  **Number** | **Course Title** | **Cr**  **Hrs** | **Course Prefix or Liberal**  **Studies Requirement** | **Course**  **Number** | **Course Title** | **Cr**  **Hrs** |
| **EE** | 221 | Logic Systems Design I | 3 | **EE** | 200 | Computer Utilization | 3 |
| **ENGR** | 201 | Engineering Mechanics: Statics | 3 | **Perspective** |  |  | 3 |
| **EE** | 201 | Network Theory I | 3 | **ENGR** | 200 | Engr. Principles II | 3 |
| **MATH** | 320 | Ord. Diff. Equations | 3 | **EE** | 212 | Logic & Networks Lab | 1 |
| **PHYS** | 231 | General Physics II | 4 | **MATH** | 256 | Calculus III | 4 |
| **EE** | 211 | Inst. & Networks Lab | 1 | **EE** | 202 | Network Theory II | 3 |
|  |  | *Semester Total:* | *17* |  |  | *Semester Total:* | *17* |
|  | | | | | | | |
| **Junior Year** | | | | | | | |
| **Fall** | | | | **Spring** | | | |
| **Course Prefix or Liberal**  **Studies Requirement** | **Course**  **Number** | **Course Title** | **Cr**  **Hrs** | **Course Prefix or Liberal**  **Studies Requirement** | **Course**  **Number** | **Course Title** | **Cr**  **Hrs** |
| **EE** | 331 | Electronic Devices & Circuits | 3 | **ENGR** | 350 | Eng/Prac/Prin. III | 3 |
| **Perspective** |  |  | 3 | **ENGR** | 211 | Materials Science | 3 |
| **ME** | 301 | Engineering Mechanics: Dynamics | 3 | **ENGL** | 202 | Composition II | 3 |
| **EE** | 311 | Systems & Electronics Lab | 1 | **ENGR** | 402 | System Dynamics & Control | 3 |
| **ENGR** | 411 | Engineering Numerical Analysis | 3 | **ME** | 211 | ME Lab I | 1 |
| **MATH** | 370 | Probability and Statistics | 3 | **Perspective** |  |  | 3 |
|  |  | *Semester Total:* | *16* |  |  | *Semester Total:* | *16* |
|  | | | | | | | |
| **Senior Year** | | | | | | | |
| **Fall** | | | | **Spring** | | | |
| **Course Prefix or Liberal**  **Studies Requirement** | **Course**  **Number** | **Course Title** | **Cr**  **Hrs** | **Course Prefix or Liberal**  **Studies Requirement** | **Course**  **Number** | **Course Title** | **Cr**  **Hrs** |
| **ENGR** | 400 | Engineering Capstone I | 3 | **ENGR** | 450 | Engineering Capstone II | 3 |
| **EE** | 471 | Power Electronics | 3 | **EE** | 452 | Electric machines and drives | 3 |
| **EE** | 451 | Electric Power Systems | 3 | **EE** | 472 | Advanced power electronics | 2 |
| **Perspective** |  |  | 3 | **Upper Level Perspective** |  |  | 3 |
|  |  |  |  | **Tech Elective** |  | EE 453 or others | 3 |
|  |  | *Semester Total:* | *12* |  |  | *Semester Total:* | *14* |
|  | | | | | | | |

**NOTES:**

* *Total for Degree: 126 Credit Hours*
* Students may finish earlier if they attend summer school at WCU or another approved institution
* Upper Level Perspective (ULP): An approved Upper Level Liberal Studies Perspectives course is required in one of the Liberal Studies Perspectives categories.

*Information in the Course Catalog (catalog.wcu.edu) for the year in which you were admitted prevails, if there is a conflict with the Suggested Course Sequence.*