## Table 5-1. Electrical Engineering Curriculum

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year; Semester | Course (Department, Number, Title) List all courses in the program by term starting with the first term of the first year and ending with the last term of the final year | | Indicate Whether Course is Required, Elective or a Selected Elective by an R, an E or an SE. 1 | Subject Area (Credit Hours) | | | | Last Two Terms the Course was Offered; Year and, Semester, or Quarter | Maximum Section Enrollment for the Last Two Terms the Course was Offered 2 |
| Math & Basic Science | Engineering Topics Check if Contains Significant Design () | General Education | Other |
| 1;1 | Math 150 Calculus I | | R | 4 |  |  |  | Spring 2015 Fall 2014 | 54 109 |
|  | Composition | | SE |  |  | 3 |  | Spring 2015 Fall 2014 | Variable |
|  | Life Science BIOL 100 or BIOL 101 | | R | 3 |  |  |  | Spring 2015 Fall 2014 | 393, 223 500, 233 |
|  | Humanities | | SE |  |  | 6 |  | Spring 2015 Fall 2014 | Variable |
| 1;2 | Social & Behavioral Science | | SE |  |  | 3 |  | Spring 2015 Fall 2014 | Variable |
|  | Math 151 Calculus II | | R | 4 |  |  |  | Spring 2015 Fall 2014 | 47 50 |
|  | Physics 195, 195L Principles of Physics with Laboratory | | R | 4 |  |  |  | Spring 2015 Fall 2014 | 327, 27 453, 26 |
|  | Oral Communications | | SE |  |  | 3 |  | Spring 2015 Fall 2014 | Variable |
|  | Intermediate Composition | | SE |  |  | 3 |  | Spring 2015 Fall 2014 | Variable |
| 2;1 | CompE 270 Digital Systems | | R |  | 3 () |  |  | Spring 2015 Fall 2014 | 53 63 |
|  | American Institutions | | SE |  |  | 3 |  | Spring 2015 Fall 2014 | Variable |
|  | Physics 196, 196L Principles of Physics with Laboratory | | R | 4 |  |  |  | Spring 2015 Fall 2014 | 407, 26 421, 25 |
| Table 5-1. Electrical Engineering Curriculum (continued) | | | | | | | | | |
| Year; Semester | Course (Department, Number, Title) List all courses in the program by term starting with the first term of the first year and ending with the last term of the final year | | Indicate Whether Course is Required, Elective or a Selected Elective by an R, an E or an SE. 1 | Subject Area (Credit Hours) | | | | Last Two Terms the Course was Offered; Year and, Semester, or Quarter | Maximum Section Enrollment for the Last Two Terms the Course was Offered 2 |
| Math & Basic Science | Engineering Topics Check if Contains Significant Design () | General Education | Other |
| 2;1 (cont'd) | Math 254 Introduction to Linear Algebra | | R | 3 |  |  |  | Spring 2015 Fall 2014 | 132 142 |
|  | CompE 160 Introduction to Computer Programming | | R |  | 3 |  |  | Spring 2015 Fall 2014 | 36 62 |
| 2;2 | EE 210 Circuit Analysis I | | R |  | 3 |  |  | Spring 2015 Fall 2014 | 62 64 |
|  | CompE 271 Computer Organization | | R |  | 3 () |  |  | Spring 2015 Fall 2014 | 92 79 |
|  | AE 280 Methods of Analysis | | R | 3 |  |  |  | Spring 2015 Fall 2014 | 128 82 |
|  | Math 252 Calculus III | | R | 4 |  |  |  | Spring 2015 Fall 2014 | 51 85 |
|  | Humanities | | SE |  |  | 3 |  | Spring 2015 Fall 2014 | Variable |
| 3;1 | EE 300 Computational & Statistical Methods for Electrical Engineers | | R | 3 |  |  |  | Spring 2015 Fall 2014 | 89 67 |
|  | EE 310 Circuit Analysis II | | R |  | 3 |  |  | Spring 2015 Fall 2014 | 90 97 |
|  | EE 330 Fund of Engineering Electronics | | R |  | 3 |  |  | Spring 2015 Fall 2014 | 106 74 |
|  | EE 330L Engineering Electronics Lab | | R |  | 1 |  |  | Spring 2015 Fall 2014 | 15 16 |
|  | CompE 375 Embedded Systems Prog. | | R |  | 3 () |  |  | Spring 2015 Fall 2014 | 28 26 |
|  | Explorations: Humanities | | SE |  |  | 3 |  | Spring 2015 Fall 2014 | Variable |
| Table 5-1. Electrical Engineering Curriculum (continued) | | | | | | | | | |
| Year; Semester | Course (Department, Number, Title) List all courses in the program by term starting with the first term of the first year and ending with the last term of the final year | | Indicate Whether Course is Required, Elective or a Selected Elective by an R, an E or an SE. 1 | Subject Area (Credit Hours) | | | | Last Two Terms the Course was Offered; Year and, Semester, or Quarter | Maximum Section Enrollment for the Last Two Terms the Course was Offered 2 |
| Math & Basic Science | Engineering Topics Check if Contains Significant Design () | General Education | Other |
| 3;2 | EE 340 Electric and Magnetic Fields | | R |  | 3 |  |  | Spring 2015 Fall 2014 | 73 56 |
|  | EE 380 Electrical Energy Conversion | | R |  | 3 |  |  | Spring 2015 Fall 2014 | 48 51 |
|  | EE 410 Signal and Systems | | R |  | 3 () |  |  | Spring 2015 Fall 2014 | 61 67 |
|  | EE 430 Analysis and Design of Electronic Circuits | | R |  | 3 () |  |  | Spring 2015 Fall 2014 | 44 56 |
|  | Explorations: Social & Behavioral Science | | SE |  |  | 3 |  | Spring 2015 Fall 2014 | Variable |
| 4;1 | EE 420 Feedback Control Systems | | R |  | 3 () |  |  | Spring 2015 Fall 2014 | 35 83 |
|  | EE 434 Electronic Materials and Devices | | R |  | 3 |  |  | Fall 2014 Fall 2013 | 67 75 |
|  | EE 440 Electromagnetic Waves | | R |  | 3 |  |  | Spring 2015 Fall 2014 | 39 25 |
|  | Professional Electives 3 | | E |  | 3 () |  |  | Spring 2015 Fall 2014 | Variable |
|  | Professional Elective Labs 5 | | E |  | 2 |  |  | Spring 2015 Fall 2014 | Variable |
|  | American Institutions | | SE |  |  | 3 |  | Spring 2015 Fall 2014 | Variable |
| 4;2 | EE 490 Senior Design Project | | R |  | 4 () |  |  | Spring 2015 Fall 2014 | 46 31 |
|  | Professional Electives 4 | | E |  | 9 |  |  | Spring 2015 Fall 2014 | Variable |
| Table 5-1. Electrical Engineering Curriculum (continued) | | | | | | | | | |
| Year; Semester | Course (Department, Number, Title) List all courses in the program by term starting with the first term of the first year and ending with the last term of the final year | | Indicate Whether Course is Required, Elective or a Selected Elective by an R, an E or an SE. 1 | Subject Area (Credit Hours) | | | | Last Two Terms the Course was Offered; Year and, Semester, or Quarter | Maximum Section Enrollment for the Last Two Terms the Course was Offered 2 |
| Math & Basic Science | Engineering Topics Check if Contains Significant Design () | General Education | Other |
| 4;2  (cont'd) | Professional Elective Labs 5 | | E |  | 1 |  |  | Spring 2015 Fall 2014 | Variable |
|  | Explorations: Humanities | | SE |  |  | 3 |  | Spring 2015 Fall 2014 | Variable |
| TOTALS-ABET BASIC-LEVEL REQUIREMENTS | | | | 32 | 62 | 36 |  |  |  |
| OVERALL TOTAL CREDIT HOURS FOR COMPLETION OF THE PROGRAM = 130 | | | |  |  |  |  |  |  |
| Must satisfy one set | Minimum semester credit hours | | | 32 | 48 |  |  |  |  |
| Minimum percentage | | | 25.0% | 37.5% |  |  |  |  |
|  |  |  | |  |  |  |  |  |  |
| 1. | **Required** courses are required of all students in the program, **elective** courses (often referred to as open or free electives) are optional for students, and selected elective courses are those for which students must take one or more courses from a specified group. | | | | | | | | |
| 2. | For courses that include multiple elements (lecture, laboratory, recitation, etc.), indicate the maximum enrollment in each element. For selected elective courses, indicate the maximum enrollment for each option. | | | | | | | | |
| 3. | Professional Electives offered in Fall 2014: CompE 470 Digital Circuits, CompE 560 Computer & Data Networks, CompE 572 VLSI Circuit Design, EE 458 Analog & Pulse Communication Systems, EE 480 Power System Analysis, EE 499 Special Study, EE 530 Analog Integrated Circuit Design, EE 540 Microwave Devices & Systems. | | | | | | | | |
| 4. | Professional Electives offered in Spring 2015: CompE 475 Microprocessors, CompE 560 Computer & Data Networks, CompE 565 Multimedia Communication Systems, EE 484 Power Electronics, EE 499 Special Study, EE 503 Biomedical Instrumentation, EE 540 Microwave Devices & Systems, EE 556 Digital Signal Processing, EE 581 Power System Dynamics, EE 596 Advanced EE Topics. | | | | | | | | |
| 5. | Professional Elective Labs offered in Fall 2014 and Spring 2015: CompE 470L Digital Logic Lab, EE 380L Electrical Energy Conversion Lab, EE 430L Electronic Circuits Lab, EE 458L Communication & DSP Lab, EE 540L Microwave Design & Measurement Lab. | | | | | | | | |