## Table 5-1. Electrical Engineering Curriculum

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| --- | --- | --- | --- | --- | --- |
| 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 2015Fall 2014 | 54109 |
|   | Composition | SE |   |   | 3 |   | Spring 2015Fall 2014 | Variable |
|   | Life Science BIOL 100 or BIOL 101 | R | 3 |   |   |   | Spring 2015Fall 2014 | 393, 223500, 233 |
|   | Humanities | SE |   |   | 6 |   | Spring 2015Fall 2014 | Variable |
| 1;2 | Social & Behavioral Science | SE |   |   | 3 |   | Spring 2015Fall 2014 | Variable |
|   | Math 151 Calculus II | R | 4 |   |   |   | Spring 2015Fall 2014 | 4750 |
|   | Physics 195, 195L Principles of Physics with Laboratory | R | 4 |   |   |   | Spring 2015Fall 2014 | 327, 27453, 26 |
|   | Oral Communications | SE |   |   | 3 |   | Spring 2015Fall 2014 | Variable |
|   | Intermediate Composition | SE |   |   | 3 |   | Spring 2015Fall 2014 | Variable |
| 2;1 | CompE 270 Digital Systems | R |   | 3 () |   |   | Spring 2015Fall 2014 | 5363 |
|   | American Institutions | SE |   |   | 3 |   | Spring 2015Fall 2014 | Variable |
|   | Physics 196, 196L Principles of Physics with Laboratory | R | 4 |   |   |   | Spring 2015Fall 2014 | 407, 26421, 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 2015Fall 2014 | 132142 |
|   | CompE 160 Introduction to Computer Programming | R |   | 3 |   |   | Spring 2015Fall 2014 | 3662 |
| 2;2 | EE 210 Circuit Analysis I | R |   | 3 |   |   | Spring 2015Fall 2014 | 6264 |
|   | CompE 271 Computer Organization | R |   | 3 () |   |   | Spring 2015Fall 2014 | 9279 |
|   | AE 280 Methods of Analysis | R | 3 |   |   |   | Spring 2015Fall 2014 | 12882 |
|   | Math 252 Calculus III | R | 4 |   |   |   | Spring 2015Fall 2014 | 5185 |
|   | Humanities | SE |   |   | 3 |   | Spring 2015Fall 2014 | Variable |
| 3;1 | EE 300 Computational & Statistical Methods for Electrical Engineers | R | 3 |   |   |   | Spring 2015Fall 2014 | 8967 |
|   | EE 310 Circuit Analysis II | R |   | 3 |   |   | Spring 2015Fall 2014 | 9097 |
|   | EE 330 Fund of Engineering Electronics | R |   | 3 |   |   | Spring 2015Fall 2014 | 10674 |
|   | EE 330L Engineering Electronics Lab | R |   | 1 |   |   | Spring 2015Fall 2014 | 1516 |
|   | CompE 375 Embedded Systems Prog. | R |   | 3 () |   |   | Spring 2015Fall 2014 | 2826 |
|   | Explorations: Humanities | SE  |   |   | 3 |   | Spring 2015Fall 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 2015Fall 2014 | 7356 |
|   | EE 380 Electrical Energy Conversion | R |   | 3 |   |   | Spring 2015Fall 2014 | 4851 |
|   | EE 410 Signal and Systems | R |   | 3 () |   |   | Spring 2015Fall 2014 | 6167 |
|   | EE 430 Analysis and Design of Electronic Circuits | R |   | 3 () |   |   | Spring 2015Fall 2014 | 4456 |
|   | Explorations: Social & Behavioral Science | SE |   |   | 3 |   | Spring 2015Fall 2014 | Variable |
| 4;1 | EE 420 Feedback Control Systems | R |   | 3 () |   |   | Spring 2015Fall 2014 | 3583 |
|   | EE 434 Electronic Materials and Devices | R |   | 3 |   |   | Fall 2014Fall 2013 | 6775 |
|   | EE 440 Electromagnetic Waves | R |   | 3 |   |   | Spring 2015Fall 2014 | 3925 |
|   | Professional Electives 3 | E |   | 3 () |   |   | Spring 2015Fall 2014 | Variable |
|   | Professional Elective Labs 5 | E |   | 2 |   |   | Spring 2015Fall 2014 | Variable |
|   | American Institutions | SE |   |   | 3 |   | Spring 2015Fall 2014 | Variable |
| 4;2 | EE 490 Senior Design Project | R |   | 4 () |   |   | Spring 2015Fall 2014 | 4631 |
|   | Professional Electives 4 | E |   | 9 |   |   | Spring 2015Fall 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 2015Fall 2014 | Variable |
|   | Explorations: Humanities | SE |   |   | 3 |   | Spring 2015Fall 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. |