CURRICULUM FOR BACHELOR OF SCIENCE

**COMPUTER ENGINEERING**

Spring 2015

# 120 Hours Required for Graduation

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| **FIRST YEAR** |
| **FALL SEMESTER** |  | **SPRING SEMESTER** |
| **Course #** | **Cr** | ***Course #*** | **Cr** |
| MATH 162: Calculus I | 4 | MATH 163: Calculus II | 4 |
| ECE101: Intro to ECE | 1 | ECE 231L: Intermediate Prog | 3 |
| ECE 131: Intro to Programming | 3 | PHYC161: General Physics | 3 |
| PHYC 160: General Physics | 3 | PHYC161L: Gen Physics Lab | 1 |
| *ENGL 110: Accel Composition(1)* | *3* | *ENGL 120: Composition III* | *3* |
| **Total** | **14** | **Total** | **14** |
|  |
| **SECOND YEAR** |
| **FALL SEMESTER** |  | **SPRING SEMESTER** |
| **Course #** | **Cr** | **Course #** | **Cr** |
| ECE 203L Circuit Analysis I | 3 | ECE 206L: Elect Eng Lab I | 2 |
| ECE 238L: Comp Logic Design | 4 | ECE 213: Circuit Analysis II | 3 |
| Basic Science with Lab(2) | 4 | ECE 300: Adv Engr Math(3) |  |
| *ECON 105/106: Macro/Micro Econ* | 4 | MATH 264: Calculus III | 4 |
| *ENGL 219: Tech Prof Writing* | 3 | ECE 330: Software Design | 3 |
| **Total** | **17** | **Total** | **15** |
|  |
| **THIRD YEAR** |
| **FALL SEMESTER** |  | **SPRING SEMESTER** |
| **Course #** | **Cr** | **Course #** | **Cr** |
| ECE 321: Electronics I | 4 | CompE Track Elective(4) | 3 |
| MATH 327: Discrete Structures | 3 | ECE 331: Data Struct Algorithms | 3 |
| ECE 314: Signals and Systems | 3 | ECE 344L: Microprocessors | 4 |
| ECE 340: Probabilistic Methods | 3 | ECE 340: Probabilistic Methods | 3 |
| *Core/Second Language* | *3* | *Core/Social Science* | 3 |
| **Total** | **16** | **Total** | **16** |
|  |
| **FOURTH YEAR** |
| **FALL SEMESTER** |  | **SPRING SEMESTER** |
| **Course #** | **Cr** |  | **Course #** | **Cr** |
| ECE 419: Senior Design I | 3 |  | ECE 420: Senior Design II | 3 |
| CompE Track Elective(4) | 3 |   | ECE 440: Computer Networks | 3 |
| ECE 437L: Operating Systems | 3 |   | Senior Technical Elective(5) | 3 |
| Senior Technical Elective(5) | 3 |   | *Core/Fine Arts* | 3 |
| *Core/Humanities* | 3 |   | *Core/Humanities* | 3 |
| **Total** | **15** |   | **Total** | **15** |

Note: UNM Core Curriculum Courses are shaded.

1. ENGL 111/112 sequence or ENGL 113L will meet this requirement.
2. You may choose from the following that meet the Basic Science requirement:
* CHEM 121 & CHEM 123L or CHEM 131L
* PHYC 262 & PHYC 262L
* BIOL 110 & BIOL 112L, BIOL 123 & BIOL 124L, or BIOL 201
* ASTR 270 & ASTR 270L
1. Replaces MATH 314 and 316.
2. Students can take either ECE 338 and ECE 438 or ECE 335 and ECE 435.
3. Students must take six (6) credits of approved 300+ level courses in consultation with the ECE advisor.

To comply with the ADA and Rehabilitation Act of 1973, persons having special needs and requiring auxiliary aid or service may contact the Electrical and Computer Engineering Department.

**GENERAL ENGINEERING ADMISSION**

Even if you have not completed all the course requirements for Department Admission, you may be eligible for General Engineering admission. Please speak with an academic advisor in Engineering Student Services (ESS), Centennial Engineering Center, Suite 2080 if you are interested in being admitted to General Engineering.

**DEPARTMENTAL ADMISSION CRITERIA**

To be eligible for admission into the Computer Engineering program, you must have completed at least 18 hours from the following list of courses, which must include MATH 162 and 163, with the minimum GPA of 2.50. You must also have completed at least 26 hours of courses acceptable toward a degree in Computer Engineering with a GPA of at least 2.20, including a C or better in English 101.

MATH 162 Required (4) ECE 131 (3) PHYC 161 (3)

MATH 163 Required (4) PHYC 160 (3) PHYC 161 L (1)

Basic Science with Lab (4) EECE 203 (3)

NOTE: All students must see an advisor prior to registering each semester

***The Electrical and Computer Engineering Department main office is located on the first floor of the ECE Building.***