### Electrical & Computer Engineering Concentration Model Program

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<th>Fall (16)</th>
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| 4 | Chemistry 103 | General Chemistry (F&S)  
1 | Engineering 101 | Intro to Engineering Design (F)  
1 | Engineering 181 | Graphical Communication Lab (F)  
4 | Mathematics 171 | Calculus I (F,S)  
3 | English 101 | Written Rhetoric  
1 | Interdisciplinary 149 | First Year Seminar  
3 | Interdisciplinary 150 | Developing the Christian Mind  

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| 3 | Engineering 205 | Material Science (S)  
4 | Mathematics 172 | Calculus II (F,S)  
4 | Physics 133 | Introductory Physics, Mechanics and Gravity (S)  
3-4 | History Core | (See catalog)  
1 | Health and Fitness | (See catalog)  

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4 | Mathematics 270/271 | Multivariable Calculus - Math 270 is (F only) Math 271 is (F,S)  
4 | Physics 235 | Introductory Physics: Electricity and Magnetism (F)  
3 | Computer Science 104 | Applied Computing (F) (CS 106 or 108 may be substituted but both are 4 credit hours)  
3 | Religion 121 or 131 | Biblical Literature/Christian Theology  
0 | Engineering 295 | Internship Workshop  
1 | Engineering 184 | Sustainability Challenges (F) (Required for students seeking a Sustainability Designation)  
3 | Free Elective | (consider taking IDIS 103 here in place of IDIS 102 or an Off-campus interim)  

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4 | Mathematics 231 | Differential Equations with Linear Algebra (F,S)  
3 | Economics 151 or 221 | Principles of Economics/Principles of Microeconomics  
2 | Statistics 241 | Engineering Statistics (S)  
0 | Engineering 294 | Seminar  

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| 4 | Engineering 311 | Electronic Devices and Circuits (F)  
4 | Engineering 307 | Electrical Signals and Systems (F)  
4 | Computer Science 112 | Intro to Data Structures with C++ (F,S)  
3 | The Arts | See Core Curriculum section of catalog for options  
2 | Interdisciplinary 102 | Oral Rhetoric for Engineers (F,S)  
3 | Interim of your choice | Ideal slot for meeting the Cross-Cultural Engagement requirement  

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| 4 | Engineering 304 | Fundamentals of Digital Systems (S)  
4 | Engineering 332 | Analog Circuits and Systems Design (S)  
4 | Elective: Basic Science or Math or Engineering Elective or Tech. Elective |  
1 | Health and Fitness | (See catalog) (or during Interim)  
3 | Philosophy 153 | Fundamental Questions in Philosophy  
1 | Engineering 384 | Sustainability Analysis (S) (Required for students seeking Sustainability Designation)  

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| 4 | Engineering 325 | Computer Architecture and Digital Systems Design (F)  
2 | Engineering 339 | Senior Design Project (F)  
3 | Literature | See Core Curriculum section of catalog for options  
4 | Engineering Elective (Minimum of 3 credits -- see catalog for restrictions) |  
2 | Business 357 | Business Aspects for Engineers (F)  
3 | Engineering Special Topics Elective |  

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| 4 | Engineering 302 | Engineering Electromagnetics (S)  
4 | Engineering 340 | Senior Design Project (S)  
4 | Elective: Basic Science or Advanced Math |  
1 | Health and Fitness | (See catalog) (or during interim)  
3 | Free Elective |  
0 | Engineering 394 | Engineering Seminar  

### Other Requirements
- 0-8 Foreign Language (2 years of high school or one year of college)

Revised October 2018