### Electrical/Computer Engineering Major + Optics Minor

#### First Year

**Fall (16)**
- 4 Chemistry 103: General Chemistry (F)
- 2 Engineering 101: Intro to Engineering Design (F)
- 2 Engineering 181: Graphical Communication Lab (F)
- 4 Mathematics 171: Calculus I (F,S)
- 3 English 101: Written Rhetoric
- 1 Interdisciplinary 149: First Year Prelude

**Spring (17)**
- 3 Interdisciplinary 150: Developing the Christian Mind
- 4 Engineering 106: Engineering Chemistry and Materials Science (S)
- 4 Mathematics 172: Calculus II (F,S)
- 4 Physics 133: Introductory Physics, Mechanics and Gravity (F,S)
- 0 Physics 195: Seminar (F,S)
- 4 History 151 or 152: History of the West and the World
- 1 Health and Fitness: (PER 101-112)

#### Second Year

**Fall (17)**
- 4 Engineering 202: Statics and Dynamics (F,S)
- 4 Mathematics 271: Multivariable Calculus (F,S)
- 4 Physics 235: Introductory Physics: Electricity and Magnetism (F)
- 2 Mathematics 241: Engineering Statistics (F)
- 3 Economics 151 or 221: Principles of Economics/Principles of Microeconomics (Societal Structures core)
- 0 Engineering 2xx: Internship Workshop

**Spring (17)**
- 3 IDIS 103 Oral Rhetoric for Engineers
- 4 Engineering 209: Intro to the Laws of Conservation & Thermodynamics (F,S)
- 4 Engineering 204: Intro to Circuit Analysis and Electronics with Lab (S)
- 4 Mathematics 231: Differential Equations with Linear Algebra (F,S)
- 3 Religion 121 or 131: Biblical Literature/Christian Theology
- 2 Computer Science 104: Applied C++ (S)
- 0 Engineering 294: Seminar (for students entering Calvin fall 2009 or later.)

#### Third Year

**Fall (17)**
- 4 Engineering 311: Electronic Devices and Circuits (F)
- 4 Engineering 307: Network Analysis (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 Business 357: Business Aspects for Engineers (F)

**Spring (17)**
- 3 Cross-Cultural Engagement
- 4 Engineering 304: Fundamentals of Digital Systems (S)
- 4 Engineering 332: Analog Circuits and Systems Design (S)
- 4 Physics 246: Waves, Optics, and Optical Technology (S)
- 4 Engineering 302: Engineering Electromagnetics (S)
- 1 Health and Fitness: (PER 120-159) (or during Interim)

#### Fourth Year

**Fall (16)**
- 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)
- 3 Philosophy 153: Fundamental Questions in Philosophy

**Spring (15)**
- 3 Engineering Special Topics Elective
- 4 Engineering 340: Senior Design Project (S)
- 4 Elective: Basic Science or Advanced Math
- 1 Health and Fitness: (PER 160-189) (or during interm)
- 4 Physics 346: Advanced Optics (S, alternate years)
- 2 Physics 386: Optics lab (S, alternate years)
- 0 Engineering 394: Engineering Seminar

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