Electrical Engineering – Class of 2025 (131 credits)

**Freshman 1**
- CAS MA 123: Calculus I
  - 4 credits
  - QR2; CRT

**Freshman 2**
- CAS MA 124: Calculus II
  - 4 credits
  - QR2; SI2; CRT

**Sophomore 1**
- CAS MA 225: Multivar Calculus
  - 4 credits
  - QR2; CRT

**Sophomore 2**
- CAS MA 226: Diff Equ
  - 4 credits
  - CRT

**Junior 1**
- ENG EC 455: Electromag Sys I
  - 4 credits

**Junior 2**
- ENG EC 381: Prob, Stats & DS
  - 4 credits
  - QR2; CRT

**Senior 1**
- EE Core Elective
  - 4 credits

**Senior 2**
- Technical Elective
  - 4 credits

**Engineering Electives**
- ENG EC 463: Senior Design I
  - 4 credits
  - WIN; DME; RIL

- ENG EC 464: Senior Design II
  - 4 credits
  - WIN; OSC

**Hub Electives**
- Total of at least 16 credits

**Notes**
- Grey box = either semester
- = prerequisite; = corequisite
- Students planning to study abroad sophomore 2 should take EK 301 in sophomore 1.
- Students must complete 48 credits of upper-division program coursework (not including Hub or writing).
- See back for Hub Unit Legend

Hub Electives: must include all Hub areas below to fulfill degree requirements
- 1. One unit Philosophical Inquiry & Life’s Meanings (PLM)
- 2. One unit Aesthetic Exploration (AEX)
- 3. One unit Historical Consciousness (HCO)
- 4. One unit Social Inquiry (SO1 or SO2)
- 5. One unit Individual & Community (IIC)
- 6. First unit Global Citizenship & Intercultural Literacy (GCI)
- 7. Second unit Global Citizenship & Intercultural Literacy (GCI)
- 8. One unit Ethical Reasoning (ETR)
Electrical Engineering majors are required to complete a minimum of 131 credits as detailed on the Program Planning Sheet on the other side of this page.

All students are required to complete a total of 26 Hub units. Eighteen of these Hub units are included in courses required for the EE BS degree. The remaining eight Hub units must be satisfied through four (or more) Hub Electives that incorporate the following seven Hub areas: Philosophical Inquiry; Aesthetic Exploration; Historical Consciousness; Social Inquiry; Individual in Community; Ethical Reasoning; Global Citizenship & Intercultural Literacy (2X). Lists of courses that fulfill combinations of these Hub units are at: www.bu.edu/eng/current-students/ugrad/requirements/hub-electives/

Electrical Engineering majors complete three EE Core Electives chosen from the courses listed in the Systems, Electronics and Electrophysics areas. Courses must be selected from at least two of the three areas, and no more than two courses can be from any single area:

**SYSTEMS**
- ENG EC 402 Control Systems
- ENG EC 414 Machine Learning
- ENG EC 415 Software Radios
- ENG EC 501 Dynamic System Theory
- ENG EC 503 Intro to Learning from Data
- ENG EC 505 Stochastic Processes

**ELECTRONICS**
- ENG EC 412 Analog Electronics
- ENG EC 417 Electric Energy Systems
- ENG EC 571 Digital VLSI Circuit Design

**ELECTROPHYSICS**
- ENG EC 417 Electric Energy Systems
- ENG EC 456 Electromagnetic Systems II
- ENG EC 471 Physics of Semiconductor Devices
- ENG EC 543 Sustainable Power Systems
- ENG EC 555 Intro to Bio Optics
- ENG EC 556 Optical Spectroscopic Imaging
- ENG EC 560 Intro to Photonics

**COMPUTER ELECTIVES**
- ENG EC 327 Intro Software Engineering
- ENG EC 413 Computer Organization
- ENG EC 441 Introduction to Computer Networking

Electrical Engineering majors complete three Technical Elective courses (12 credits) from the following list:
- Acceptable courses include all EC courses and ENG BE 209.
- Additionally, all ENG BE, EK and ME courses at the 300-level and above, except for 600-level courses, are acceptable as Technical Electives; no more than 4 credits of ENG EC 451 can be used.

Approved Courses Outside Engineering that fulfill a Technical Elective:
- CAS AS 414 Solar and Space Physics
- CAS CS 440 Intro to Artificial Intelligence
- CAS CS 480 Introduction to Computer Graphics
- CAS CS 585 Image and Video Computing
- CAS MA 511 Introduction to Analysis
- CAS MA 528 Introduction to Modern Geometry
- CAS MA 531 Computability and Logic
- CAS MA 541 Modern Algebra 1
- CAS MA 583 Introduction to Stochastic Processes
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Introduction to Modern Geometry
- CAS MA 583 Intro