FRESHMAN 1
- CAS MA 123 Calculus I (4)
- CAS CH 131 Principles of General Chemistry (4)
- ENG EK 100 Freshman Seminar (0)
- ENG EK 127/128 Engineering Computation/++ (4)
- CAS WR 100 Writing Seminar (4)

FRESHMAN 2
- CAS MA 124 Calculus II (4)
- CAS PY 211 Physics I (4)
- ENG EK 131/132 Intro to ENG (2)
- ENG EK 102 Intro Linear Algebra (2)
- CAS WR 150 Writing & Research Seminar (4)

SOPHOMORE 1
- CAS MA 225 Multivariate Calculus (4)
- CAS PY 212 Physics II (4)
- ENG EK 307 Electric Circuits (4)
- ENG EK 210 Intro ENG Design (2)
- Social Science Elective (4)

SOPHOMORE 2
- CAS MA 226 Differential Equations (4)
- CAS PY 313 Waves & Modern Physics (4)
- ENG EK 301 Engineering Mechanics I (4)
- ENG EK 311 Intro Logic Design (4)
- Humanities Elective (4)

JUNIOR 1
- ENG EC 401 Signals and Systems (4)
- ENG EC 410 Introduction to Electronics (4)
- ENG EC 301 Engineering Mechanics I (4)
- ENG EC 455 Introduction to Electromagnetics (4)
- Electrophysics Elective List on Reverse (4)

JUNIOR 2
- Systems Elective ENG EC 402, EC 415, or EC 416 (4)
- Electronics Elective List on Reverse (4)
- ENG EK 381 Probability Theory in ECE (4)
- Electrophysics Elective List on Reverse (4)

SENIOR 1
- ENG EC 463 Senior Design Project I (4) [Fall Only]
- Computer Elective ENG EC 327, EC 413, or EC 441 (4)
- Technical Elective (4)
- Social Science/ Humanities Elective (4)

SENIOR 2
- ENG EC 464 Senior Design Project II (4) [Spring Only]
- Technical Elective (4)
- Technical Elective (4)
- General Education Elective (4)

Extra Courses
1. ( )
2. ( )
3. ( )
4. ( )

*Students who plan to study abroad in Sophomore 2 should take EK 301 in Sophomore 1

Prereq. =  
Coreq. =  

**General Education Requirements Checklist**
1. 1. CAS WR 100
2. 2. CAS WR 150
3. 3. 1 Course in Social Science
4. 4. 1 Course in Humanities
5. 5. 1 Course in Biomedical
6. 6. 1 Course General Education Elective
7. 7. Total of at least 24 credits

Engineering Common
Math
Natural Science
Biomedical Required
Electives

Key:

- Math
- Natural Science
- Engineering
- Common
- Biomedical Required
- Electives

Grey Box = Either Semester

Prereq. =  
Coreq. =  

ENG Credit Requirement: 48 credits/Upper Division Program courses completed at Boston University
Students majoring in Electrical Engineering are required to complete a minimum of 130 credits as detailed on the Program Planning Sheet on the other side of this form.

For a list of specific courses that satisfy the Social Science, Humanities, and the General Education Elective, please go to the College of Engineering Undergraduate Requirements website at: [http://www.bu.edu/eng/current-students/ugrad/requirements/](http://www.bu.edu/eng/current-students/ugrad/requirements/).

**Electronics Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG EC 412</td>
<td>Analog Electronics</td>
</tr>
<tr>
<td>ENG EC 417</td>
<td>Electric Energy Systems</td>
</tr>
<tr>
<td>ENG EC 450</td>
<td>Microprocessors</td>
</tr>
<tr>
<td>ENG EC 470</td>
<td>Sensors in Space</td>
</tr>
</tbody>
</table>

**Electrophysics Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG EC 417</td>
<td>Electric Energy Systems</td>
</tr>
<tr>
<td>ENG EC 456</td>
<td>Electromagnetic Systems II</td>
</tr>
<tr>
<td>ENG EC 470</td>
<td>Sensors in Space</td>
</tr>
<tr>
<td>ENG EC 471</td>
<td>Physics of Semiconductor Devices</td>
</tr>
<tr>
<td>ENG EC 456</td>
<td>Electromagnetic Energy Transmission</td>
</tr>
</tbody>
</table>

**Technical Electives**

Electrical Engineering majors complete 3 Technical Elective courses. Acceptable courses include all EC courses and ENG BE 209. Additionally, all ENG BE, EK and ME courses at the 300-level and above are acceptable as Technical Electives.

Pre-Approved Courses Outside Engineering that fulfill a Technical Elective:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS AS 414</td>
<td>Solar and Space Physics</td>
</tr>
<tr>
<td>CAS CS 440</td>
<td>Intro to Artificial Intelligence</td>
</tr>
<tr>
<td>CAS CS 480</td>
<td>Intro to Computer Graphics</td>
</tr>
<tr>
<td>CAS CS 585</td>
<td>Image and Video Computing</td>
</tr>
<tr>
<td>CAS MA 511</td>
<td>Introduction to Analysis I</td>
</tr>
<tr>
<td>CAS MA 528</td>
<td>Intro to Modern Geometry</td>
</tr>
<tr>
<td>CAS MA 531</td>
<td>Computability and Logic</td>
</tr>
<tr>
<td>CAS MA 541</td>
<td>Modern Algebra 1</td>
</tr>
<tr>
<td>CAS MA 583</td>
<td>Intro to Stochastic Processes</td>
</tr>
<tr>
<td>CAS MA 585</td>
<td>Electromagnetic Energy Transmission</td>
</tr>
<tr>
<td>CAS PY 451</td>
<td>Quantum Physics 1</td>
</tr>
<tr>
<td>CAS PY 452</td>
<td>Quantum Physics 2</td>
</tr>
<tr>
<td>SMG SI 480</td>
<td>Business of Technology Innovation</td>
</tr>
<tr>
<td>SMG SI 482</td>
<td>Technology Commercialization</td>
</tr>
</tbody>
</table>

**Degree Enhancements**

**Concentrations**

Students may choose to add a Concentration in Energy Technologies, Nanotechnology, or Technology Innovation. Students completing a Minor in Mechanical Engineering may choose to add a concentration in Aerospace Engineering. A concentration requires 4 courses which can usually be used to satisfy courses within the major. Hence, a concentration can usually be completed without additional coursework.

More information on concentrations and the specific requirements for each can be found at [http://www.bu.edu/eng/academics/programs/concentrations/](http://www.bu.edu/eng/academics/programs/concentrations/).

*Electrophysics: EC 500 F1 cannot substitute EK 481 (exc. Nanotech Concentration)*

**Minors**

Students may choose to add a minor in any one of the other departments or divisions (Materials Science & Engineering or Systems Engineering) within the College of Engineering. A minor consists of 5 courses, 2 of which may also be used to satisfy requirements for the major. Completing a Minor will add a minimum of 12 credits to the total credits for the degree. More information on minors and the specific requirements for each can at [http://www.bu.edu/eng/academics/programs/minors/](http://www.bu.edu/eng/academics/programs/minors/). Students may also pursue minors in other Colleges at Boston University. For more information, please contact the College of the minor.

**Double Majors**

Students may earn two engineering BS degrees. Double majors require a minimum of 162 credits and students must fulfill the requirements for each of the degree programs. See [http://www.bu.edu/eng/academics/special-programs/](http://www.bu.edu/eng/academics/special-programs/) for more details.

**Other Ways to Enhance Your Degree**

Students have several additional options available to them including study abroad, research, and co-op/internship opportunities. For more information on these programs, please visit the College of Engineering Undergraduate website: [http://www.bu.edu/eng/academics/](http://www.bu.edu/eng/academics/).

**Notes:**

For the following 8 sets of courses, only 1 course can be taken for credit in each set due to the overlap of material:

- (1) ENG ME 305, ENG BE 420
- (2) ENG ME 403, ENG ME 404, ENG BE 402, ENG EC 402
- (3) ENG ME 303, ENG BE 436
- (4) ENG ME 441, ENG ME 515
- (5) ENG ME 501, ENG EC 501
- (6) ENG EK 102, CAS MA 142, CAS MA 242
- (7) ENG BE 401, ENG EC 401
- (8) ENG ME 366, ENG EC 381, ENG BE 200, ENG EK 500