### Electrical Engineering – 2019

**Undergraduate Program Planning Sheet**

**NAME:** ___________________________  **U.I.D.:** ___________  **DATE:** ___________

#### 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)
- **Either Semester**

#### FRESHMAN 2
- **CAS MA 124** Calculus II (4)
- **CAS PY 211** Physics I (4)
- **ENG EK 307** Electric Circuits (4)
- **ENG EK 310** Intro to Engineering Design (2)
- **Social Science Elective** (4)

#### SOPHOMORE 1
- **CAS MA 225** Multivariate Calculus (4)
- **CAS PY 212** Physics II (4)
- **ENG EK 301** Engineering Mechanics I (4)
- **Humanities Elective** (4)
- **Natural Science Elective**
- **CAS PY 313**

#### SOPHOMORE 2
- **CAS MA 226** Differential Equations (4)
- **ENG EC 401** Signals and Systems (4)
- **ENG EC 410** Introduction to Electronics (4)
- **ENG EC 411** Introduction to Logic Design (4)
- **ENG EC 455** Introduction to Electromagnetics (4)

#### JUNIOR 1
- **ENG EC 463** Senior Design Project I (4) [Fall Only]
- **ENG EC 464** Senior Design Project II (4) [Spring Only]
- **Computer Elective**
- **Technical Elective**
- **Technical Elective**

#### JUNIOR 2
- **Systems Elective**
- **Electronics Elective**
- **Technical Elective**
- **Technical Elective**
- **Social Science/ Humanities** (4)

#### SENIOR 1
- **ENG EC 363** Senior Design Project I (4) [Fall Only]
- **Computer Elective**
- **Electives**
- **Electives**
- **Electives**
- **General Education Elective** (4)

#### SENIOR 2
- **ENG EC 364** Senior Design Project II (4) [Spring Only]
- **Technical Elective**
- **Technical Elective**
- **Technical Elective**
- **General Education Elective** (4)

### General Education Requirements

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

**Prereq.**  →  **Coreq.**  →

- **GRADUATION REQUIREMENT**: 130 credits
- **ENG Credit Requirement**: 48 credits/Upper Division Program courses completed at Boston University

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

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.

General Education Courses
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/.

TECHNICAL ELECTIVES (see Notes below)

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:

- CAS AS 414 Solar and Space Physics
- CAS CS 440 Intro to Artificial Intelligence
- CAS CS 480 Intro to Computer Graphics
- CAS CS 585 Image and Video Computing
- CAS MA 511 Introduction to Analysis I

- CAS MA 528 Introduction to Modern Geometry
- CAS MA 531 Computability and Logic
- CAS MA 541 Modern Algebra I
- CAS MA 583 Intro to Stochastic Processes
- SMG SI 480 Business of Technology Innovation
- SMG SI 482 Technology Commercialization

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/.

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, 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 be found at 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/ 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/.

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 KI 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 KI 500

3/28/14