Computer Engineering – 2019
Undergraduate Program Planning Sheet

NAME: ____________________________ U.I.D. # U DATE: ____________________________

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

FRESHMAN 2
- CAS MA 124 Calculus II (4)
- CAS PY 211 Physics I (4)
- ENG EK 127/128 Engineering Computation/++ (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 EC 327 Intro to Software Engineering (4)

SOPHOMORE 2
- CAS MA 226 Differential Equations (4)
- ENG EC 311 Introduction to Logic Design (4)
- ENG EK 301* Engineering Mechanics I (4)
- ENG EC 320 Applied Algorithm for Engineers (4)

JUNIOR 1
- ENG EK 381 Probability Theory in ECE (4)
- ENG EC 413 Computer Organization (4)
- Track Elective ENG EC 401, EC 410, or EC 440 (4)
- CAS MA 193 Intro to Discrete Math (2)

JUNIOR 2
- EE Breadth Elective Any ECE course 400 level or above not a CE Elective (4)
- Computer Engineering Elective (4)
- ENG EC 450 Microprocessors (4)
- Humanities Elective (4)

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

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

Key:
- Math
- Natural Science
- Engineering Common
- General Education
- Biomedical (Required)
- Electives
- Grey Box = Either Semester

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. =
**REQUIREMENTS**

Students majoring in Computer Engineering are required to complete a minimum of 132 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/](http://www.bu.edu/eng/current-students/ugrad/requirements/).

**TRACK ELECTIVE**

Computer Engineering majors complete 1 Track Elective from the following list:

- ENG EC 401 Signals and Systems
- ENG EC 410 Introduction to Electronics
- ENG EC 440 Introduction to Operating Systems

**COMPUTER ENGINEERING ELECTIVE**

Computer Engineering majors complete 2 CE Elective courses from the following list:

- ENG EC 440 Introduction to Operating Systems
- ENG EC 441 Introduction to Computer Networking
- ENG EC 447 Software Design
- ENG EC 504 Advanced Data Structures
- ENG EC 512 Enterprise Client-Server Software Systems
- ENG EC 513 Computer Architecture
- ENG EC 527 High-Performance Computing with Multicore & GPU’s
- ENG EC 528 Cloud Computing
- ENG EC 535 Introduction to Embedded Systems
- ENG EC 541 Computer Communications Networks
- ENG EC 551 Advanced Digital Design with Verilog & FPGA
- ENG EC 571 Digital VLSI Circuit Design
- ENG EC 581 Fundamentals of Computing Systems
- ENG EC 582 Cloud Computing
- ENG EC 583 Introduction to Embedded Systems
- ENG EC 584 Networking the Physical World

**EE BREADTH ELECTIVE**

Computer Engineering majors complete 1 EE Breadth Elective course:

- Any ENG EC course 400-level or higher that is not on the above Computer Engineering Elective list, except Directed Studies (ENG EC 451), Special Topics Courses (ENG EC 500), and all ENG EC 700-level courses may satisfy the EE Breadth requirement by petition only.

**DOUBLE MAJORS**

Students may earn two engineering BS degrees. Double majors require a minimum of 168 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

**05/12/17**