Computer Engineering – 2022 (133 credits)

Hub Electives: must include all Hub areas below to fulfill degree requirements
- 1. One unit Philosophical Interpretation
- 2. One unit Aesthetic Exploration
- 3. One unit Historical Consciousness
- 4. One unit Social Inquiry
- 5. One unit Individual & Community
- 6. First unit Global Citizenship
- 7. Second unit Global Citizenship
- 8. One unit Ethical Reasoning
- Total of at least 16 credits

Notes
- Students planning to study abroad sophomore 2 should take EK 301 in sophomore 1.
- Grey box: = either semester
- Students must complete 48 credits of upper-division program coursework (not including Hub or writing).
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/.

CORE ELECTIVE Computer Engineering majors complete 2 Core Electives from the following list:
- ENG EC 401 Signals and Systems
- ENG EC 410 Introduction to Electronics
- ENG EC 440 Introduction to Operating Systems
- ENG EC 441 Introduction to Computer Networking
- ENG EC 444 Smart and Connected Systems
- ENG EC 450 Microprocessors

COMPUTER ENGINEERING ELECTIVE Computer Engineering majors complete 2 CE Elective courses from the following list:
- ENG EC 440 Introduction to Operating Systems
- ENG EC 521 CyberSecurity
- ENG EC 526 Parallel Programming for High Performance & Big Data
- ENG EC 527 High Perf Programming with Multicore & GPU's
- ENG EC 541 Computer Communications Networks
- ENG EC 544 Smart & Connected Systems
- ENG EC 547 Software Design
- ENG EC 551 Advanced Digital Design with Verilog & FPGA
- ENG EC 571 Digital VLSI Circuit Design
- ENG EC 583 Concepts of Programming Languages
- ENG EC 590 Fundamentals of Computing Systems
- ENG EC 610 Advanced Software Systems
- ENG EC 611 Software Engineering
- CAS CS 320 Introduction to Modern Geometry
- CAS CS 350 Introduction to Computer Graphics
- CAS CS 440 Introduction to Computer Graphics
- CAS CS 480 Introduction to Computer Graphics
- CAS CS 585 Image and Video Computing
- CAS MA 528 Introduction to Modern Geometry
- CAS MA 531 Modern Algebra
- CAS MA 541 Modern Algebra
- CAS MA 583 Introduction to Stochastic Processes
- CAS MA 585 Image and Video Computing
- CAS MA 587 Computer Science and Mathematics
- CAS MA 685 Image and Video Computing
- CAS MA 784 Image and Video Computing

COMPUTER ENGINEERING ELECTIVE Computer Engineering majors complete 2 CE Elective courses from the following list:
- ENG EC 440 Introduction to Operating Systems
- ENG EC 521 CyberSecurity
- ENG EC 526 Parallel Programming for High Performance & Big Data
- ENG EC 527 High Perf Programming with Multicore & GPU's
- ENG EC 541 Computer Communications Networks
- ENG EC 544 Smart & Connected Systems
- ENG EC 547 Software Design
- ENG EC 551 Advanced Digital Design with Verilog & FPGA
- ENG EC 571 Digital VLSI Circuit Design
- ENG EC 583 Concepts of Programming Languages
- ENG EC 590 Fundamentals of Computing Systems
- ENG EC 610 Advanced Software Systems
- ENG EC 611 Software Engineering
- CAS CS 320 Introduction to Modern Geometry
- CAS CS 350 Introduction to Computer Graphics
- CAS CS 440 Introduction to Computer Graphics
- CAS CS 480 Introduction to Computer Graphics
- CAS CS 585 Image and Video Computing
- CAS MA 528 Introduction to Modern Geometry
- CAS MA 531 Modern Algebra
- CAS MA 541 Modern Algebra
- CAS MA 583 Introduction to Stochastic Processes
- CAS MA 585 Image and Video Computing
- CAS MA 587 Computer Science and Mathematics
- CAS MA 685 Image and Video Computing
- CAS MA 784 Image and Video Computing

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 ENG EC 450, Directed Studies (ENG EC 451), 600-level courses, and Special Topics courses (ENG EC 500 and ENG EC 700).
Directed Studies (ENG EC 451), and Special Topics courses (ENG EC 500 and ENG EC 700) may satisfy the EE Breadth requirement by petition only.

TECHNICAL ELECTIVES (see Notes below) Computer Engineering majors complete 3 Technical Elective courses:
- ENG BE 209 and any ENG EC, BE, EK or ME course at the 300-level or above, except for 600-level courses, 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
- CAS MA 583 Introduction to Stochastic Processes
- CAS MA 587 Computer Science and Mathematics
- CAS MA 685 Image and Video Computing
- CAS MA 784 Image and Video Computing

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

(1) ENG ME 403, ENG ME 404, ENG BE 402, ENG EC 402
(2) ENG ME 303, ENG BE 436
(3) ENG ME 441, ENG ME 515
(4) ENG ME 501, ENG EC 501
(5) ENG EK 102, ENG EK 103, CAS MA 142, CAS MA 242
(6) ENG BE 401, ENG EC 401
(7) ENG ME 366, ENG EC 381, ENG EK 381, ENG BE 200
(8) ENG ME 460, ENG ME 560

4/17/18