ENGINEERING UNDERGRADUATE REQUIREMENTS

http://www.bu.edu/eng/current-students/ugrad/requirements/

ENG EC 512   Enterprise Client-Server Softwr Sys Design
ENG EC 504   Advanced Data Structures
ENG EC 447   Software Design
ENG EC 441   Introduction to Computer Networking
ENG ME 403, ENG ME 404, ENG BE 402, ENG EC 402
ENG ME 305, ENG BE 436
ENG ME 441, ENG ME 515
ENG ME 501, ENG EC 501
ENG EK 102, CAS MA 142, CAS MA 242
ENG BE 401, ENG EC 401
ENG ME 366, ENG EC 381, ENG BE 200, ENG EK 500

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

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 majors complete 2 CE Elective courses from the following list:
ENG EC 440 Introduction to Operating Systems
ENG EC 521 CyberSecurity
ENG EC 571 Digital VLSI Circuit Design
ENG EC 527 High Perf Programming with Multicore & GPU’s
ENG EC 530 Concepts of Programming Languages
ENG EC 528 Cloud Computing
CAS CS 350 Fundamentals of Computing Systems
ENG EC 535 Introduction to Embedded Systems
CAS CS 410 Advanced Software Systems
ENG EC 541 Computer Communications Networks
CAS CS 411 Software Engineering
ENG EC 551 Advanced Digital Design with Verilog & FPGA
Any CAS CS 500-level course
(except CAS CS 591-by Petition only)

EE BREADTH ELECTIVE
Any ENG EC course 400-level or higher that is not on the above Computer Engineering Elective list, except Directed Studies (ENG EC 451), 600-level courses and Special Topics courses (ENG EC 500 and ENG EC 700).

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

Computer Engineering majors complete 3 Technical Electives courses:
CAS A 414 Solar and Space Physics
CAS MA 528 Introduction to Modern Geometry
CAS PY 451 Quantum Physics 1
CAS CS 440 Intro to Artificial Intelligence
CAS MA 531 Computability and Logic
CAS PY 452 Quantum Physics 2
CAS CS 480 Introduction to Computer Graphics
CAS MA 541 Modern Algebra 1
CAS SI 480 The Business of Technology Innovation
CAS CS 585 Image and Video Computing
CAS MA 583 Introduction to Stochastic Processes
CAS SI 482 Technology and its Commercialization
CAS MA 511 Introduction to Analysis I
CAS PY 313 Waves and Modern Physics

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 degree programs 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 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 168 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 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

8/30/17