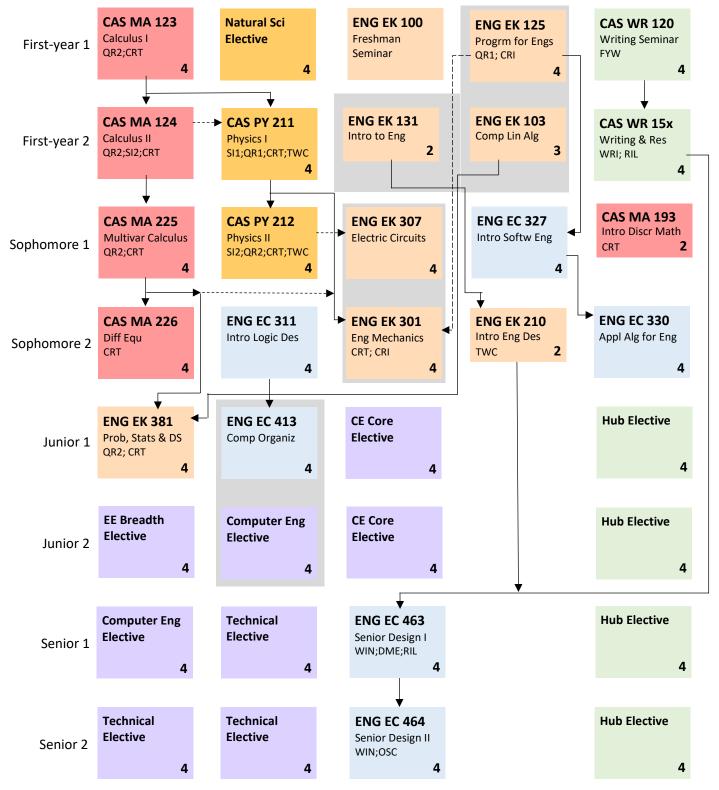
BU College of Engineering

Computer Engineering – Class of 2029 (133 units)

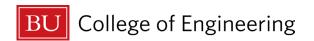


Notes

- Grey box = either semester
- Students planning to **study abroad** sophomore 2 should take EK 301 in sophomore 1.
- Students must complete 48 units of upper-division program coursework (not including Hub or writing).
- See back for Hub Requirements Legend

Hub Electives: must include all Hub requirements below to fulfill degree requirements:

- ☐ 1. Philosophical Inquiry & Life's Meanings (PLM)
- □ 2. Aesthetic Exploration (AEX)
- ☐ 3. Historical Consciousness (HCO)
- ☐ 4. Social Inquiry (SO1 or SO2)
- ☐ 5. Individual & Community (IIC)
- ☐ 6. First Global Citizenship & Intercultural Literacy (GCI)
- ☐ 7. Second Global Citizenship & Intercultural Literacy (GCI)
- ☐ 8. Ethical Reasoning (ETR)
- ☐ Total of at least 16 units



Computer Engineering (CE)

Class of 2026 – 2029 (133 units)

REQUIREMENTS

Computer Engineering (CE) majors are required to complete a minimum of 133 units as detailed on the Program Planning Sheet on the other side of this page.

HUB ELECTIVES

All students are required to complete a total of 26 Hub requirements. Eighteen of these Hub requirements are incorporated into courses required for the EE BS degree. The remaining eight Hub requirements must be satisfied through four (or more) Hub Electives that incorporate the following seven Hub areas: Philosophical Inquiry; Aesthetic Exploration; Historical Consciousness; Social Inquiry; Individual in Community; Ethical Reasoning; Global Citizenship & Intercultural Literacy (2X). Search for courses that fulfill specific combinations of Hub requirements at: https://www.bu.edu/phpbin/course-search/

NATURAL SCIENCE ELECTIVE CE majors complete one Natural Science Elective (4 units) from the following list:

CAS AS 202 Principles of Astronomy 1 CAS CH 131 Gen Chem for the Eng Sci CAS PY 321 & 322 Thermal Physics (2 units) & CAS BI 107 Biology 1 CAS PY 313 Waves and Modern Physics (Grenoble) CAS BI 108 Biology 2 CAS PY 314 Waves and Modern Physics (Grenoble) CAS PY 451 Quantum Physics 1

CAS CH 101 General Chemistry 1

CORE ELECTIVE CE majors complete two Core Electives (8 units) from the following list:

ENG EC 401 Signals and Systems ENG EC 440 Introduction to Operating Systems ENG EC 444 Smart and Connected Systems
ENG EC 410 Introduction to Electronics ENG EC 441 Introduction to Computer Networking

COMPUTER ENGINEERING ELECTIVE CE majors complete two Computer Engineering Elective courses (8 units) from the following list:

ENG EC 440 Introduction to Operating Systems **ENG EC 530 Software Engineering Principles** CAS CS 411 Software Engineering ENG EC 531 Full-Stack Software at Scale CAS CS 505 Natural language processing ENG EC 441 Intro to Computer Networking ENG EC 444 Smart & Connected Systems ENG EC 535 Introduction to Embedded Systems CAS CS 511 Formal Methods ENG EC 447 Software Design **ENG EC 541 Computer Communications Networks** CAS CS 525 Compiler Design ENG EC 544 Network Physical World ENG EC 504 Advanced Data Structures CAS CS 530 Advanced Algorithms ENG EC 512 Enterp Client-Server Softwr Sys Des ENG EC 545 Cyber Physical Systems CAS CS 535 Complexity Theory ENG EC 513 Computer Architecture ENG EC 551 Adv Digital Design w/ Verilog & FPGA CAS CS 538 Fundamentals of Cryptography **ENG EC 518 Robot Learning** ENG EC 552 Computational Synthetic Biology CAS CS 548 Cryptography ENG EC 521 Cybersecurity ENG EC 571 Digital VLSI Circuit Design CAS CS 552 Operating Systems ENG EC 526 Parallel Prog for High Perf & Big Data CAS CS 320 Concepts of Programming Languages CAS CS 558 Computer Network Security ENG EC 527 High Perf Prog w/ Multicore & GPUs CAS CS 350 Fundamentals of Computing Systems CAS CS 562 Database Applications **ENG EC 528 Cloud Computing** CAS CS 410 Advanced Software Systems CAS CS 565 Data Mining

EE BREADTH ELECTIVE CE majors complete one EE Breadth Elective course (4 units) from the following:

EC 401, EC 410, EC 455 as well as any course that appears on the EE planning sheet as an EE Core Elective except for EC 541 and EC 571.

TECHNICAL ELECTIVES (see Notes below) CE majors complete three Technical Elective courses (12 units) from the following:

Any course listed as Computer Engineering Elective

ENG BE 209 and any ENG EC, BE, EK or ME course at the 300-level or above, except for 600-level courses and EK 409, are acceptable as Technical Electives (no more than 4 units of ENG EC 451 can be used).

Approved Courses Outside Engineering that fulfill a Technical Elective:

CAS AS 414 Solar and Space Physics CAS MA 583 Introduction to Stochastic Processes No more than two of the following: CAS CS 440 Intro to Artificial Intelligence CAS PY 313 Waves and Modern Physics QST SI 480 The Business of Technology Innovation CAS CS 480 Introduction to Computer Graphics CAS PY 314 Waves and Modern Physics (Grenoble) QST SI 482 Technology and its Commercialization CAS CS 585 Image and Video Computing CAS PY 321 & 322 Thermal Physics (2 units) & HUB XC 433 D1 Art&Sci Tech Cnsltng (F24 & Sp25) CAS MA 511 Introduction to Analysis Quantum Physics (2 units) (Madrid) HUB XC 438 The Art and Sci of Tech Consulting CAS PY 451 Quantum Physics 1 CAS MA 528 Introduction to Modern Geometry CAS MA 531 Computability and Logic CAS PY 452 Quantum Physics 2 CAS MA 541 Modern Algebra 1

Hub Requirements Legend:

QR1 = Quantitative Reasoning 1 WRI = Writing, Research & Inquiry RIL = Research and Information Literacy
QR2 = Quantitative Reasoning 2 WIN = Writing-Intensive Course TWC = Teamwork/Collaboration
SI1 = Scientific Reasoning 1 OSC = Oral and/or Signed Communication CRI = Creativity/Innovation
SI2 = Scientific Reasoning 2 DME = Digital/Multimedia Expression

otos:

- a) Any requirement satisfied via AP/IB fulfills a maximum of one Hub requirement and students may need to replace missing Hub requirements.
- b) Any requirement satisfied via transfer fulfills zero Hub requirements and students may need to replace missing Hub requirements.
- c) For each of the following sets of courses, only one course can be taken for credit in each set due to the overlap of material:

CRT = Critical Thinking

- (1) ENG ME 403, ENG ME 404, ENG EC 402, ENG BE 404
- (2) ENG ME 303, ENG BE 436

FYW = First-Year Writing Seminar

- (3) ENG ME 306, ENG BE 425
- (4) ENG EK 103, CAS MA 242
- (5) ENG BE 403, ENG EC 401
- (6) ENG EK 381, CAS MA 381
- (7) ENG BE 428, ENG BE 478
- (8) CAS PY 313, CAS PY 314, CAS PY321 & 322