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

- 1. One unit Philosophical Inquiry & Life’s Meanings (PLM)
- 2. One unit Aesthetic Exploration (AEX)
- 3. One unit Historical Consciousness (HCO)
- 4. One unit Social Inquiry (SO1 or SO2)
- 5. One unit Individual & Community (IIC)
- 6. First unit Global Citizenship & Intercultural Literacy (GCI)
- 7. Second unit Global Citizenship & Intercultural Literacy (GCI)
- 8. One unit Ethical Reasoning (ETR)

- Total of at least 16 credits
REQUIREMENTS
Computer Engineering (CE) majors are required to complete a minimum of 133 credits 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 units. Eighteen of these Hub units are included in courses required for the CE BS degree. The remaining eight Hub units 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 units at: https://www.bu.edu/phpbin/course-search/

CORE ELECTIVE
CE majors complete two Core Electives (8 credits) from the following list:
ENG EC 401 Signals and Systems
ENG EC 410 Introduction to Electronics

COMPUTER ENGINEERING ELECTIVE
CE majors complete two Computer Eng Elective courses (8 credits) from the following list:
ENG EC 440 Introduction to Operating Systems
ENG EC 441 Intro to Computer Networking
ENG EC 444 Smart & Connected Systems
ENG EC 447 Software Design
ENG EC 504 Advanced Data Structures
ENG EC 512 Enterp Client-Server Softwr Sys Des
ENG EC 513 Computer Architecture
ENG EC 521 CyberSecurity
ENG EC 526 Parallel Prog for High Perf & Big Data
ENG EC 528 Cloud Computing
ENG EC 530 Software Engineering Principles

EE BREADTH ELECTIVE
CE majors complete one EE Breadth Elective course (4 credits) from the following list:
ENG EC 401 Signals and Systems
ENG EC 402 Control Systems
ENG EC 410 Intro to Electronics
ENG EC 412 Analog Electronics
ENG EC 414 Machine Learning
ENG EC 415 Software Radios
ENG EC 417 Electric Energy Systems
ENG EC 455 Electromagnetic Systems I
ENG EC 456 Electromagnetic Systems II
ENG EC 457 Digital Signals Processing
ENG EC 458 Digital Image Processing
ENG EC 459 Speech Processing
ENG EC 460 Digital Programming
ENG EC 461 Computer Communications Networks
ENG EC 462 Digital Systems Design
ENG EC 463 Digital Signal Processing
ENG EC 464 Digital Signal Processing
ENG EC 465 Digital Signal Processing
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ENG EC 469 Digital Signal Processing
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ENG EC 473 Digital Signal Processing
ENG EC 474 Digital Signal Processing
ENG EC 475 Digital Signal Processing
ENG EC 476 Digital Signal Processing
ENG EC 477 Digital Signal Processing
ENG EC 478 Digital Signal Processing
ENG EC 479 Digital Signal Processing
ENG EC 480 Digital Signal Processing
ENG EC 481 Digital Signal Processing

TECHNICAL ELECTIVES
(see notes below) CE majors complete three Technical Elective courses (12 credits) 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, are acceptable as Technical Electives (no more than 4 credits of ENG EC 451 can be used).

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 Introduction to Computer Graphics
CAS CS 585 Image and Video Computing
CAS MA 511 Introduction to Analysis

Hub Unit Legend:
QR1 = Quantitative Reasoning 1
QR2 = Quantitative Reasoning 2
SI1 = Scientific Reasoning 1
SI2 = Scientific Reasoning 2
WRI = Writing, Research & Inquiry
WIN = Writing-Intensive Course
OSC = Oral and/or Signed Communication
DMC = Digital/Multimedia Expression

Notes:

a) Any requirement satisfied via AP/IB can earn a maximum of one Hub unit and may require students to replace the Hub units missed.
b) Any requirement satisfied via transfer earns zero Hub units and may require students to replace the Hub units missed.
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:
   (1) ENG ME 403, ENG ME 404, ENG EC 402, ENG BE 404
   (2) ENG ME 303, ENG BE 436
   (3) ENG ME 306, ENG BE 425
   (4) ENG EC 103, CAS MA 142, CAS MA 242
   (5) ENG BE 403, ENG EC 401
   (6) ENG EK 381, CAS MA 381, CAS MA 581