COMPUTER SCIENCE AND ENGINEERING (COURSE 6-3)

Department of Electrical Engineering and Computer Science (*https://catalog.mit.edu/schools/engineering/electrical-engineering-computer-science/#undergraduatestudytext*)

Bachelor of Science in Computer Science and Engineering

General Institute Requirements (GIRs)

The General Institute Requirements include a Communication Requirement that is integrated into both the HASS Requirement and the requirements of each major; see details below.

Summary of Subject Requirements	Subjects
Science Requirement	6
Humanities, Arts, and Social Sciences (HASS) Requirement [two subjects can be satisfied by 6.3260[J] and 6.4590[J] (taken as part of a track) in the Departmental Program]; at least two of these subjects must be designated as communication-intensive (CI-H) to fulfill the Communication Requirement.	8
Restricted Electives in Science and Technology (REST) Requirement [can be satisfied by 6.1910 and 6.1200[J] (if taken under joint number 18.062[J]) in the Department Program]	2
Laboratory Requirement (12 units) [satisfied by 6.1010 in the Departmental Program]	1
Total GIR Subjects Required for SB Degree	**17**

Physical Education Requirement
Swimming requirement, plus four physical education courses for eight points.

Departmental Program

Choose at least two subjects in the major that are designated as communication-intensive (CI-M) to fulfill the Communication Requirement.

Departmental Requirements		Units
Computer Science Requirements		
6.100A	Introduction to Computer Science Programming in Python	6-9
or 6.100L	Introduction to Computer Science and Programming	
6.1010	Fundamentals of Programming	12
6.1020	Software Construction	15
6.1200[J]	Mathematics for Computer Science	12
6.1210	Introduction to Algorithms	12
6.1400[J]	Computability and Complexity Theory	12
or 6.1220[J]	Design and Analysis of Algorithms	
6.1800	Computer Systems Engineering	12
6.1903	Introduction to Low-level Programming in C and Assembly	6
6.1910	Computation Structures	12
Select one of the following:		12
6.3700	Introduction to Probability	
6.3800	Introduction to Inference	
18.05	Introduction to Probability and Statistics	
18.06	Linear Algebra	
18.C06[J]	Linear Algebra and Optimization	
Elective Subjects [1]		
Select two subjects from a Computer Science track [2]		24
Select two subjects from a Computer Science, Artificial Intelligence + Decision Making, or Electrical Engineering track [2]		24
Select one subject that satisfies a degree requirement in 6-2, 6-3, 6-4, or 18		12
Units in Major		**171-174**
Unrestricted Electives		**48-60**
Units in Major That Also Satisfy the GIRs		(36-60)
Total Units Beyond the GIRs Required for SB Degree		**183-186**

The units for any subject that counts as one of the 17 GIR subjects cannot also be counted as units required beyond the GIRs.

1. *Out of the subjects taken for the Departmental Program, at least two must be from the list of Advanced Undergraduate Subjects (https://catalog.mit.edu/degree-charts/eecs-subject-groupings/#advancedundergraduate2text), and at least one must be from the list of Independent Inquiry (https://catalog.mit.edu/degree-charts/eecs-subject-groupings/#independentinquirytext) subjects.*
2. *See EECS tracks (https://catalog.mit.edu/degree-charts/electrical-engineering-computer-science-tracks/#computersciencetext).*