ELECTRICAL ENGINEERING WITH COMPUTING (COURSE 6-5)

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

Bachelor of Science in Electrical Engineering with Computing

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; 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 [satisfied by 18.C06[J] and 6.1910, 6.2000, 6.3700, or 18.05 in the Departmental Program]	2
Laboratory Requirement (12 units) [can be satisfied by 6.3100 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.

Students must satisfy at least one program requirement or elective with a subject from the Project-Based Laboratory (PLAB) list [1]		
Fundamentals		
6.100A	Introduction to Computer Science Programming in Python	6
or 6.100L	Introduction to Computer Science and Programming	
6.120A	Discrete Mathematics and Proof for Computer Science	6-12
or 6.1200[J]	Mathematics for Computer Science	
6.1210	Introduction to Algorithms	12
6.1903	Introduction to Low-level Programming in C and Assembly	6
18.C06[J]	Linear Algebra and Optimization [2]	12
Select one of the following:		12
6.3700	Introduction to Probability	
6.3800	Introduction to Inference	
18.05	Introduction to Probability and Statistics	
System Design Centers		
6.1910	Computation Structures	12
6.2000	Electrical Circuits: Modeling and Design of Physical Systems	12
6.3100	Dynamical System Modeling and Control Design	12
System Design Lab		
6.9000	Engineering for Impact	12
Select four subjects, including two subjects each in two different tracks [3]		48-51
Select two Course 6 subjects that satisfy a degree requirement in 6-3, 6-4, or 6-5		24
Units in Major		**174-186**
Unrestricted Electives		**48**
Units in Major That Also Satisfy the GIRs		(36)
Total Units Beyond the GIRs Required for SB Degree		**186-195**

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. *See EECS Subject Groupings (https://catalog.mit.edu/degree-charts/eecs-subject-groupings) for acceptable subjects.*
2. *18.06 is also an acceptable option.*
3. *See EECS Tracks (https://catalog.mit.edu/degree-charts/electrical-engineering-computer-science-tracks) for options.*