

BRAIN AND COGNITIVE SCIENCES (COURSE 9)

Department of Brain and Cognitive Sciences (<http://catalog.mit.edu/schools/science/brain-cognitive-sciences/#undergraduatetext>)

Bachelor of Science in Brain and Cognitive Sciences

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 [three subjects can be satisfied by 9.00 and two other HASS subjects 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 6.00 and 9.01 in the Departmental Program]	2
Laboratory Requirement (12 units) [can be satisfied by a laboratory 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.

Required Subjects	Units
Tier 1	
6.00 Introduction to Computer Science and Programming ¹	12
9.00 Introduction to Psychological Science	12
9.01 Introduction to Neuroscience	12
9.40 Introduction to Neural Computation	12
9.07 Statistics for Brain and Cognitive Science	12

Tier 2

Select three of the following; up to seven may be taken: 36-84

9.04	Sensory Systems
9.09[]	Cellular and Molecular Neurobiology
9.10	Cognitive Neuroscience
9.14	Brain Structure and its Origins
9.15	Neural Circuits, Neuromodulatory, and Neuroendocrine Systems (CI-M)
9.16	Cellular and Synaptic Neurophysiology
9.18[]	Developmental Neurobiology
9.19	Computational Psycholinguistics
9.20	Animal Behavior
9.21[]	Cellular Neurophysiology and Computing
9.31	Neurobiology of Learning and Memory
9.35	Perceptual Systems
9.54	Computational Aspects of Biological Learning
9.66[]	Computational Cognitive Science
9.85	Infant and Early Childhood Cognition (CI-M)

Laboratory [Tier 2]

Select one of the following:	12
9.12	Experimental Molecular Neurobiology (CI-M)
9.17	Systems Neuroscience Laboratory (CI-M)
9.59[]	Laboratory in Psycholinguistics (CI-M)
9.63	Laboratory in Visual Cognition (CI-M)

Tier 3

Select up to four of the following:	0-48
9.24	Disorders and Diseases of the Nervous System
9.26[]	Principles and Applications of Genetic Engineering for Biotechnology and Neuroscience
9.28	Current Topics in Developmental Neurobiology (CI-M)
9.32	Genes, Circuits, and Behavior
9.42	The Brain and Its Interface with the Body
9.46	Neuroscience of Morality (CI-M)
9.71	Functional MRI Investigations of the Human Brain

Research

Select one of the following (Laboratory cannot also count for Research): 12-18

9.12	Experimental Molecular Neurobiology (CI-M)
9.17	Systems Neuroscience Laboratory (CI-M)
9.41	Research and Communication in Neuroscience and Cognitive Science (CI-M)
9.50	Research in Brain and Cognitive Sciences
9.59[J]	Laboratory in Psycholinguistics (CI-M)
9.63	Laboratory in Visual Cognition (CI-M)
9.URG	Undergraduate Research

Restricted Electives

Select zero to four subjects. 9.URG cannot count as a Restricted Elective 0-48

Units in Major 168-195

Unrestricted Electives 48-72

Units in Major That Also Satisfy the GIRs (60)

Total Units Beyond the GIRs Required for SB Degree 180-183

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 Combination of 6.0001 Introduction to Computer Science Programming in Python and 6.0002 Introduction to Computational Thinking and Data Science is also acceptable.