

# NEUROSCIENCE

biochemistry, biomedical engineering, biostatistics, pharmacology, physiology, anatomy and computer science.

## Overview

The Department of Neuroscience investigates the nervous system using a variety of approaches, including molecular biologic, biophysical, biochemical, neurophysiological, and anatomical strategies.

## Program Requirements

Code	Title	Credits
<b>Neuroscience</b>		
ME.440.800	Research in Neuroscience	0
ME.440.801	Readings in Neuroscience (Journal Club)	1
	or ME.440.810 Readings In Systems Neuroscience	
ME.440.802	Current Topics in Neuroscience (Research Seminar)	1
	or AS.080.630/Bodian Seminar Series	
ME.440.811	Neuroscience Cognition I	4.5
ME.440.812	Neuroscience Cognition II	4.5
ME.440.819	Rigor, Reproducibility, and Responsibility in Science	2
ME.440.820	Circuits and Brain Disorders	2
ME.440.724	Neuroscience Career Skills	1
ME.440.823	Grant Writing Skills	1
ME.440.730	Submitting Your First Paper	0.5
ME.440.803	Teaching in Neuroscience	0
<b>Other Courses and Elective Opportunities <sup>1</sup></b>		
ME.440.705	Cellular and Molecular Basis of Neural Development II	1.5
ME.440.707	Molecular Mechanisms in Synaptic Transmission	2
ME.440.709	Neuropharmacology	1.5
ME.440.711	Cellular and Molecular Basis of Neural Development I: Neuronal Differentiation	1.5
ME.440.715	Trends in the Neurobiology of Aging	.5
ME.440.808	Physiology of Sensory Transduction	1.5
ME.440.814	Research in Neuroscience (BCMB)	0
ME.440.824	Cell Physiology of Visual and Olfactory Transductions	1
ME.440.818	Bioenergetics, Neuroplasticity and Brain Health	1
ME.440.817	Psychedelics	0
ME.440.818	Bioenergetics, Neuroplasticity and Brain Health	1
ME.440.822	Computational Principles of Biological Vision	3
ME.440.804	Directed Readings in Neuroscience	0

<sup>1</sup> In addition to the listed core courses, each student will complete statistics and quantitative methods courses. Each student also selects advanced electives offered by members of the Neuroscience Training Program or other departments at the Medical School. Students in the Neuroscience Training Program are required to complete six elective courses by the end of their second year. These may be a combination of small seminar-style elective courses in neuroscience, listed below, and advanced courses in other fields relevant to their research interests, such as molecular biology, genetics, immunology,