

# SEAS MSEBE BIOSCIENCE COURSE (EMBS)

Code	Title	Course Units
BBCB 5100	Data Analysis and Scientific Inference	1
BBCB 5850	Wistar Institute Cancer Biology Course: Signaling Pathways in Cancer	1
BBCB 6220	Physical Principles of Mechano-Enzymes	1
BBCB 6260	Mass Spectrometry and Proteomics	0.5
BE 5260	Immunology for Bioengineers	1
BE 5270	Immune Engineering	1
BE 5300	Theoretical and Computational Neuroscience	1
BE 5400	Principles of Molecular and Cellular Bioengineering	1
BE 5530	Principles, Methods, and Applications of Tissue Engineering	1
BE 5550	Nanoscale Systems Biology	1
BE 5580	Principles of Biological Fabrication	1
BE 5610	Musculoskeletal Biology and Bioengineering	1
BE 5650	Developmental Engineering of Tissues	1
BE 5660	Networked Neuroscience	1
BE 5690	Principles and Engineering of Cell Signaling	1
BE 5760	The Cell as a Machine	1
BE 5780	Principles of Drug Delivery and Controlled Release Systems	1
BIOL 5010	Advanced Cell Biology	1
BIOL 5110	Neural Systems and Behavior	1
BIOL 5116	Neural Circuits for Survival	1
BIOL 5210	Molecular Biology and Genetics	1
BIOL 5220	Human Evolutionary Genomics	1
BIOL 5231	Genome Science and Genomic Medicine	1
BIOL 5234	Epigenetics	1
BIOL 5262	Biological Foundations for Bioengineering and Biotechnology: Genomics and Omics Technologies	1
BIOL 5810	Drug Discovery and Development	1
BIOL 5825	Biochemistry and Molecular Genetics Superlab	1
BIOM 5100	Case Studies in Translational Research (CSTR) (Open to MD/PhD and VMD/PhD students only)	1
BIOM 5350	Introduction to Bioinformatics	1
BIOM 6000	Cell Biology	1
BMIN 5010	Introduction to Biomedical and Health Informatics	1
BSTA 7510	Statistical Methods for Neuroimaging	1
CAMB 5110	Principles of Development	1
CAMB 5220	Human Evolutionary Genomics	1
CAMB 5320	Human Physiology	1
CAMB 5500	Genetic Principles	1
CAMB 5970	Neural Development, Regeneration and Repair	1
CAMB 6090	Vaccines and Immune Therapeutics	1
CAMB 6100	Molecular Basis of Genetic Therapies	1
CAMB 6330	Advanced Seminar in Gene Therapy	1
CAMB 6920	Advanced Topics in Cell Biology and Physiology II: Cell Signaling and Metabolism	1
CAMB 6970	Biology of Stem Cells	1
CAMB 7520	Genomics	1
CBE 5170	Principles of Genome Engineering	1
CBE 5400	Principles of Molecular and Cellular Bioengineering	1
CBE 5540	Engineering Biotechnology	1
CBE 5550	Nanoscale Systems Biology	1
CHEM 5510	Biological Chemistry I	1
CHEM 5670	Bio-inorganic Chemistry	1
CIS 5350	Introduction to Bioinformatics	1
ESE 5660	Networked Neuroscience	1
GCB 7520	Genomics	1
IMUN 6090	Vaccines and Immune Therapeutics	1
MEAM 5550	Nanoscale Systems Biology	1
MPHY 6030	Image-Based Anatomy	1
MPHY 6070	Radiation Biology	1
MSE 5180	Structure and Function of Biological Materials	1
MTR 5350	Introduction to Bioinformatics	1
NGG 5500	Current Alzheimer's Disease and Related Dementia Concepts	1
NGG 5730	Systems Neuroscience	1
NGG 5750	Neurobiology of Learning and Memory	1
NGG 5880	Topics in Translational Neuroscience	1
NGG 5940	Theoretical and Computational Neuroscience	1
NGG 6180	Recovery After Neural Injury	1
NRSC 5585	Theoretical and Computational Neuroscience	1
PHRM 5320	Human Physiology	1
PHRM 5700	Principles of Cardiovascular Biology: Vascular biology, medicine and engineering	1
PHRM 6230	Fundamentals of Pharmacology	1
PHYS 5585	Theoretical and Computational Neuroscience	1
PSYC 5390	Theoretical and Computational Neuroscience	1
PSYC 5470	Foundations of Social, Cognitive, and Affective Neuroscience	1
PSYC 5490	Exploring Cognition	1
PSYC 6090	Systems Neuroscience	1