

EDUCATIONAL NEUROSCIENCE, BS

The Educational Neuroscience B.S. Program trains future educational researchers, practitioners, and administrators within the interdisciplinary field of educational neuroscience. The primary objectives of educational neuroscience are: to explore biological mechanisms that underlie learning and cognition, to inquire how these mechanisms interact with individual and socio-cultural factors relevant to education, and to develop evidence-based practices in teaching and learning-design. Our program equips students with a comprehensive understanding of key theories and paradigms in learning and cognition, supports acquisition of research skills (e.g., computational, neuroimaging, electrophysiology), and offers extensive hands-on research experiences.

Educational Neuroscience		Hours
Major Courses		
BEP 220	Brain, Learning, and Cognition	3
BEP 305	Educational Psychology	3
BEP 310	Lab-based Research Practicum	6
BEP 330	Comput. Methods in Cogn Neuro (or BSC 481 or ST 440)	3
BER 345	Educational Statistics (or PY 211, ST 260, BSC 380, CJ 381)	3
BER 346 or PY 355	Expt Methods Ed Neuro General Experimental Psych	3
BEP 400	Tpcs Ed Neuro: Numerical Cogn	3
BEP 420	Tpcs in Ed Neuro: Sci Thinking	3
BEP 450	Tpcs Ed Neuro:Mor Psy & Et Dev	3
BEP 460	Tpcs: Language, Reading, Brain	3
BEP 480	Neuroimaging	4
BEP 490	Electrophysiology	4
Credit Hours Subtotal:		41
Ancillary Courses and UA Core		
Students must fulfill the requirement for six credit hours of written composition.		6
EN 101 English Composition I & EN 102 and English Composition II or EN 103 (or EN 104)		
MATH 125	Calculus I (MATH 112, MATH 113, or MATH 115 should be taken, IF NEEDED as prerequisite, before taking MATH 125.)	4
BSC 108	Intro Biology Non Maj I (or BSC 114/115; BSC 114/115 for pre-med)	4
BSC 109	Intro Biology Non Maj II (or BSC 116/117; BSC 116/117 for pre-med)	4
CH 101	General Chemistry	4
PH 101	General Physics I	4
PY 101	Intro To Psychology	3
ANT 100	Anthropology and Humanity	3
HD 101	Life Span Human Development	3
Additional UA Core: See advisor for appropriate UA Core requirements. These 15 hours may need to include courses in the following areas:		15
UA Core History - 3 hours		
UA Core Literature - 6 hours (satisfies current UA sequence requirement)		

UA Core Fine Arts - 3 hours		
UA Core Humanities - 3 hours		
Credit Hours Subtotal:		50
Interdisciplinary Electives and Pre-Med Courses		29
Select at least 29 hours from the following. Additional elective courses may be taken with prior advisor approval.		
BSC 215	Human Anatomy & Physiology I	
BSC 216	Human Anatomy & Physiology II	
BSC 220	Biol Evol (Fall only)	
BSC 300	Cell Biology	
BSC 315	Genetics	
BSC 424	Human Physiology	
BSC 450	Fundamentals of Biochemistry	
BSC 451	Molecular Biology	
CD 225	Intro Comm Disorders	
CD 305	Language Development	
CD 352	Neurology for SLP	
CD 420	Pediatric Disorders	
CD 422	Neurological Disorders	
CH 102	General Chemistry	
CH 118	Honors General Chemistry	
CH 231	Elem Organic Chemistry I	
CH 232	Elem Organic Chem II	
CH 237	Elem Organic Chem Lab (with CH 232; pre-med)	
ANT 405	Culture, Mind, and Behavior	
ANT 474	Neuroanthropology	
HD 205	Early and Middle Child Dev	
MATH 126	Calculus II	
PH 102	General Physics II	
PHL 260	Mind and Nature	
PHL 261	Phil. Psych. and Neuroscience	
PHL 460	Philosophy of Mind	
PHL 422	Neuroethics	
PHL 462	Neural Basis of Consciousness	
PY 313	Sensation and Perception	
PY 352	Developmental Psych	
PY 353	Bio Basis of Psych Disorders	
PY 361	Psychology Of Learning	
PY 370	History & Systems	
PY 381	Cognitive Neuroscience	
PY 413	Physiological Psych	
PY 461	Child Psychology	
PY 470	Intro Cognitive Psychlgy	
SPE 300	Survey Spe Accomd Stratg	
Credit Hours Subtotal:		29
Total Hours		120

In addition to opportunities for graduate training in educational neuroscience and related fields, this degree can lead to careers in the public sector, such as health systems administration, community development and resources, and non-governmental organizations, as

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well as in the private sector such as data analysis, cognitive diagnosis and assessments, and educational technology. This is also an excellent undergraduate degree if a student is planning to pursue medical school, law school, or business school.

Learn more about opportunities in this field at the Career Center