

Appendix: Comparison of NSCS Program with Programs of Peer Institutions

	University of Arizona	Michigan State (ABOR peer)	Texas A&M (ABOR peer)	Villanova Univ.	Univ. Illinois-Urbana Champagne (ABOR peer)	Univ. Illinois-Urbana Champagne (ABOR peer)	Univ. Iowa (ABOR peer)	Univ. Maryland College Park (ABOR peer)	University of Southern California (USC)
Major Program	Neuroscience & Cognitive Science	Neuroscience	Behavioral and Cognitive Neuroscience	Cognitive and Behavioral Neuroscience	Neuroscience	Brain & Cognitive Neuroscience	Neuroscience	Program in Neuroscience and Cognitive science	Cognitive Science Program
- Depts offering the major	- School of Mind, Brain, and Behavior Dept. of Neuroscienc, Program in Cognitive Science	- Department of Physiology	- Department of Psychological and Brain Sciences	- Department of Psychological and Brain Sciences	- School of Molecular & Cellular Biology -	- Department of Psychology -	- Department of Biology, Department of Psychological and Brain Sciences & Iowa Neuroscience Institute	- Spans 24 Depts/Units (2 tracks: Behavioral and Cognitive Track; Molecular, Cellular & Physiological Track)	- Spans many departments including psychology, neuroscience, philosophy, linguistics, computer science, and anthropology
Pre-requisites (basic science/math requirements)	21-23 credits - General Chemistry I, Biology I + lab, Physics I + lab, Math/Calculus I, Statistics, Philosophy +12 credits focus specific	39-41 credits - Calculus, Statistics, General Chemistry I & II + 1 lab, Organic Chemistry I & II, Physics I & II, Psychology, Biology I & II + 1 lab	35 credits - Biology I & II, Chemistry I & II, Math/Calculus I & II, Physics I & II, Statistics	32-33 credits - General Chemistry I & II + 2 labs, Biology I & II, Genetics, Math/Calculus I & II, Statistics	30-31 credits - Calculus I & Calculus II or Statistics, General Chemistry I & II + 2 labs, Organic Chemistry I + 1 lab, Physics I & II	11 credits - Intro to Brain and Cognitive Science, Intro to Programming for BCS, Statistics	23-26 credits - General Chemistry I & II, Physics I & II, Math/Calculus, Biochemistry I (optional Biochem II)	34 credits - Gateway Courses: Math, Statistics, Mol/Cell Biol., Gen and Organic Chem, Physics, Intro Psychology, Intro Neuroscience	32 credits - Biology I, General Chemistry I & II, Organic Chemistry I & II, Physics I & II, Calculus I

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Core Courses	20-22 credits (8 courses) - Core Neuroscience (14-15 cr.) - Focus specific Neuroscience (6 cr.)	28-33 credits (8 courses) - Core Neuroscience (17 cr.) Physiology (4-8 cr.), Biochemistry (4 cr.), Genetics or Cell Biology (3-4 cr.)	10 credits (4 courses) - Essential Neuroscience (3 cr.), Introductory Psychology (3 cr.), Psychology as a Major (1 cr.) Intro to Behavioral and Cognitive Neuroscience (3 cr.)	21 credits (7 courses) - Psychology, research methods, biopsychology, cognitive psychology, cell and behavioral neuroscience, cognitive neuroscience, seminar or Thesis research	38 credits (13 courses) - Introductory Neuroscience (11 cr.), Core Neuroscience (13 cr.), Advanced Neuroscience (14 cr.)	16-17 credits (5 courses) - Multidisciplinary breadth courses (6-7 cr.), intermediate course (3 cr.), intermediate elective (3 cr.), laboratory course (4 cr.)	29 credits (8 courses) - Introductory courses (biology, behavioral neuroscience, 8 cr.), Core Neuroscience courses (17 cr.), Laboratory course of choice (4 cr.)	25 credits - Intro course covers molecular/cellular/systems/cog sci, cellular and molecular neuroscience course, neurophysiology lab course (15 credits minimum, with at least 3 courses from one track, lab course required), additional coursework in statistics, physics, chem also necessary	(No. of credits not known) - Numerous courses offered across four cognitive science emphases that each contain three tracks

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Electives/emphases	15 credits (5 courses) - All credits must be taken from one of seven emphases. (1) Cognition, (2) Development and Aging, (3) Language and communication science, (4) Neurobiology, (5) Philosophy of mind, (6) Computation, (7) Thematic	3 credits (1 course) - Nine course options spanning topics covering neurobiology of disease, nervous system development, pharmacology, synaptic transmission and techniques	44 credits total: 15 credits of psychology and cognitive neuroscience courses in psychology department 29 credits of concentration electives from a list of Biology, Neuroscience, Chemistry, and Psychology courses	12 credits (4 courses) - Choose from any four topics: 1- Behavioral and Psychological Sciences (7 courses) 2- Biological and Life Sciences (11 courses) 3- Cognitive Science (5 courses) 4- Special topics and research (5 courses)	15 credits (5 courses) - cellular physiology, systems physiology, computational biology, neuropharmacology, developmental biology, genetics	12 credits (4 courses) - brain and cognition, psychophysiology, learning & memory, neurobiology of aging, etc.	12 credits (4 courses) - endocrinology, genetics, cell biology, animal behavior, psychology of learning, sensation and perception, emotion, etc	16-20 credits - Behavioral & Cog Sci track or Molecular, Cellular & Physiological Track Electives selected from biology, psychology, chem, kinesiology depts and include development, mammalian physiology, motor control, genetics, neuroethology, cog sci develop, memory and cognition	(No. of credits not known) - Cognitive Science Emphases: Psychology (Tracks: learning, memory, and reasoning, social and developmental processes, neuroscience), Philosophy (Tracks: of Mind; of Language), Language (Tracks: Processing, Development), Computer Science (track is same)

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Lab Courses	VIP-CURE courses: Brain Communication Networks and Auditory Neuroscience Research Experience (debut, fall 2025) . This course is not required.	Neuroscience lab required (2 credits)	Lab not required but elective available (300 level research methods in psychology, 4 credits lecture and lab) Lab portion of 400 level Mammalian Functional Neuroanatomy elective (4 credits lecture and lab)	Lab not required but elective available (Intro to Cognitive Science lower division core course, 4 credits, lecture and lab) Mammalian neuroanatomy lab elective (4)	Neuroanatomy lab required (no. of credits not known)	Cognitive Neuroscience Lab required (4 credits, 400 level)	One lab course required from the following (4 credits): Animal behavior. Neurogenetics, Neurobiology, Cognitive neuroscience, or Computational neuroscience	One lab course required (no. of credits unknown) offered through various depts): ex. NEUR405 Neuroscience Laboratory and through other tracks: Cell Biology & Physiology, Molecular Genetics, Mammalian Systems Physiology Lab; BC Track: Motor Control and Learning, Research Methods in Psychology Lab, Behavioral Neurobiology Lab, or Data Science for Psych and Neur Majors Lab	Lab requirement information not available

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Lab Research Course Credit	Research Lab Enrollment Offered and Counts Towards Elective Credits	Information not available	Research Lab Enrollment Offered and Counts Towards Concertation Electives (no maximum listed)	Research Lab Enrollment Offered (no maximum listed, cannot fill electives credits)	200-level lab research strongly recommended	Information not available	Information not available	Research Lab Enrollment Offered and Counts Towards Elective Credits	Research Lab Enrollment Offered and Counts Towards Elective Credits