College of Science

Bachelor of Science in Neuroscience

For Student Date of Entry Under UG Catalog 2025-2026

Major in **Computational and Systems Neuroscience**

Fall Semester Freshman 2025	Credits	Spring Semester Freshman 2026	Credits
***BIOL 1105**: (Pathways Concept 4: Reasoning in the Natural Sciences): Principles of Biology	3	****BIOL 1106:** (Pathways Concept 4: Reasoning in the Natural Sciences): Principles of Biology	3
CHEM 1035: General Chemistry	3	**CHEM 1036:** General Chemistry	3
ENGL 1105: (Pathways Concept 1F: Discourse- Foundational): First Year Writing	3	**ENGL 1106**: (Pathways Concept 1F: Discourse- Foundational): First Year Writing	3
MATH 1225: (Pathways Concept 5F: Quantitative and Computational Thinking - Foundational): Calculus of a Single Variable	4	**MATH 1226:** (Pathways Concept 5F: Quantitative and Computational Thinking - Foundational): Calculus of a Single Variable	4
***NEUR 1004:** Neuroscience Orientation Seminar	1	**Pathways Concept 2: Critical Thinking in the Humanities**	3
PSYC 1004: (Pathways Concept 3: Reasoning in the Social Sciences): Introductory Psychology	3		
TOTAL	17	**TOTAL**	16
Fall Semester Sophomore 2026	**Credits**	**Spring Semester Sophomore 2027**	**Credits**
NEUR 2025: Introduction to Neuroscience	3	**NEUR 2026:** Introduction to Neuroscience	3
NEUR 2035: Introduction to Neuroscience Lab	1	**NEUR 2036:** Introduction to Neuroscience Lab	1
CS 1114: Introduction to Software Design or **CS 1064:** Introduction to Programming in Python	3	**Pathways Concept 6A: Critique and Practice in Design and the Arts (Arts)**	3
Pathways Concept 2: Critical Thinking in the Humanities	3	**Free Elective**	3
Pathways Concept 3: Reasoning in the Social Sciences	3	**Free Elective**	3
TOTAL	13	**TOTAL**	13
Fall Semester Junior 2027	**Credits**	**Spring Semester Junior 2028**	**Credits**
NEUR 3044: Cellular & Molecular Neuroscience	4	**NEUR 3084:** Cognitive Neuroscience	3
PHYS 2305: Foundations of Physics	4	**PHYS 2306:** Foundations of Physics	4
Pathway 1A: Discourse - Advanced	3	**Restricted Elective**	3
STAT 3615: (Pathways Concept 5A: Quantitative and Computational Thinking –Advanced): Biostatistics	3	**STAT 3616:** Biostatistics	3
***NEUR 3234:** Artificial Brain	3	****NEUR 3844:** Computational Neuroscience and Neural Engineering	3
TOTAL	17	**TOTAL**	16
Fall Semester Senior 2028	**Credits**	**Spring Semester Senior 2029**	**Credits**
Pathways Concept 6D: Critique and Practice in Design and the Arts (Design)	3	**NEUR 4044:** Neuroscience Senior Seminar	3
NEUR 4244: Motor Control: Build, Break, Repair	3	**Restricted Elective**	3
Restricted Elective	3	**Restricted Elective**	3
Free Elective	3	**Free Elective**	3
Pathways Concept 7: Critical Analysis of Identity and Equity in the US	3	**Free Elective**	3
TOTAL	15	**TOTAL**	15

SAMPLE Academic Plan for students graduating calendar year 2029

Minimum of 120 credit hours needed for graduation

*Fall only course

**Spring only course