

# NEUROSCIENCE, M.S.

## REQUIREMENTS

### MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (<http://guide.wisc.edu/graduate/#policiesandrequirements>), in addition to the program requirements listed below.

### MAJOR REQUIREMENTS

#### MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

#### Mode of Instruction Definitions

**Accelerated:** Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

**Evening/Weekend:** Courses meet on the UW-Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

**Face-to-Face:** Courses typically meet during weekdays on the UW-Madison Campus.

**Hybrid:** These programs combine face-to-face and online learning formats. Contact the program for more specific information.

**Online:** These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

### CURRICULAR REQUIREMENTS

#### Requirement Detail

Minimum Credit Requirement 30 credits

Minimum Residence Credit Requirement 16 credits

Minimum Graduate Coursework Requirement 15 credits must be graduate-level coursework. Details can be found in the Graduate School's Minimum Graduate Coursework (50%) Requirement Policy: <https://policy.wisc.edu/library/UW-1244> (<https://policy.wisc.edu/library/UW-1244/>)

Overall Graduate GPA Requirement 3.00 GPA required. This program follows the Graduate School's policy: <https://policy.wisc.edu/library/UW-1203> (<https://policy.wisc.edu/library/UW-1203/>).

Other Grade Requirements n/a

Assessments and Examinations Submit a manuscript suitable for publication or the equivalent of part two of the preliminary exam to their advisory committee for approval. Approval should occur once the student has presented either option at their advisory committee meeting.

Language Requirements No language requirements.

### REQUIRED COURSES

Code	Title	Credits
<b>Core Courses</b>		
NTP/NEURODPT 610	Cellular and Molecular Neuroscience	10
NTP/NEURODPT/PSYCH 611	Systems Neuroscience	
NTP 700	Professional Development for Biomedical Graduate Students	
NTP 701	Experimental Design and Statistical Methodology	

#### One Mid-level Molecular/Cellular/Developmental Neuroscience Course

BIOCHEM/PHMCOL-M/ZOOLOGY 630	Cellular Signal Transduction Mechanisms	
B M E/MED PHYS/PHMCOL-M/PHYSICS/RADIOL 619	Microscopy of Life	
NTP/NEURODPT 629	Molecular and Cellular Mechanisms of Memory	
NTP/NEUROL 735	Neurobiology of Disease	
NTP 670	Stem Cells and the Central Nervous System	
NTP 675	Special Topics	
NTP/NEURODPT/ZOOLOGY 765	Developmental Neuroscience	
PHMCOL-M 781	Molecular and Cellular Principles in Pharmacology	
ZOOLOGY 604	Computer-based Gene and Disease/Disorder Research Lab	

#### One Mid-level Systems/Behavioral Neuroscience Course

B M E 601	Special Topics in Biomedical Engineering	
CS&D 850	Hearing Science I: Basic Acoustics and Psychoacoustics	
COMP SCI/B M I/PSYCH 841	Computational Cognitive Science	
KINES 713	Neural Basis of Normal and Pathological Movement	
KINES 721	Neural Basis for Movement	
KINES 861	Principles of Motor Control and Learning	

NTP 677	Basic Sleep Mechanisms and Sleep Disorders: from Neurobiology to Sleep Medicine
NTP 675	Special Topics
NTP/ MED PHYS 651	Methods for Neuroimaging Research
PSYCH 711	Current Topics in Psychology <sup>1</sup>
PSYCH 733	Perceptual and Cognitive Sciences <sup>2</sup>
PSYCH 954	Seminar-Physiological Psychology
PSYCH 918	Seminar-General Psychology

**Seminar**

NTP 900	Neuroscience Seminar: Current Topics in Neurobiology
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Students in our program are expected to be enrolled in NTP 900 every Fall/Spring semester.

**Research Credits**

NTP 990	Research and Thesis
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Students in our program are expected to be enrolled in NTP 990 every Fall/Spring/Summer semester. When students enroll in NTP 990, they should plan to enroll for the appropriate number of credits to reach the minimum required credits each semester to have full-time student status.<sup>3</sup>

Other advanced courses or additional research credits as recommended by the advisory committee to meet the minimum credit requirement.

**Total Credits** **30+**

**1**

PSYCH 711 is a special topics course. The following topics under this course listing are approved to take and will count as a midlevel:

- Cognitive Neuroscience of Attention and Memory
- Introduction to Neural Network Modeling of Cognition

**2**

\*Two PSYCH 733 courses (8 weeks each) must be taken to meet the Mid-level Systems/Behavioral Neuroscience requirement. The following course topics are approved:

- Cognitive Neuroscience of Reading and Dyslexia
- Knotty Problems in Psycholinguistics

**3**

See "Credits Per Term Allowed" policy (<http://guide.wisc.edu/graduate/medicine-public-health-school-wide/neuroscience-phd/#policiestext>) for further information on full-time registration.