Neuromotor Science MS

COLLEGE OF PUBLIC HEALTH

Learn more about the Master of Science in Neuromotor Science.

About the Program

The study of human movement, both as an outcome of health and functioning and as a means to understand the mechanisms underlying neuromotor system integration and behavior, is foundational to many health professions. The skills needed to be successful in fields of related study require fluency across the disciplines of engineering, movement science, neuroscience and rehabilitation. The need exists for rigorously trained scientists with interdisciplinary training in neurobiology and biomechanics of the sensorimotor system, with a focus on how human movement is impacted by health conditions, disease, disability and development.

Our Neuromotor Science (NMS) program trains students to advance the science of neuromotor control and biomechanics of human posture and movement in individuals across the lifespan and spectrum of health and disability levels. The MS in Neuromotor Science (MS-NMS) program is designed for individuals in the fields of engineering, exercise science, kinesiology, occupational therapy, physical therapy, rehabilitation science and the like, preparing them to:

- advance the science and understanding of neuromotor processes, including assessment and evaluation of human movement, neuromotor function and integration, and how they are impacted by age, health, functioning and disability; and
- contribute to the development of interventions to improve human movement, particularly posture and locomotor control, and function across the lifespan.

Time Limit for Degree Completion: 5 years

Campus Location: Main, Health Sciences Center

Full-Time/Part-Time Status: While full-time study is encouraged at the master's level, this research-focused degree program can be completed in 2 years with full-time study (9 credits per term) or 3 to 4 years if enrolled part-time.

MS-NMS students are initially advised by the NMS Program Director during admission and in the first term if an academic advisor has not been identified. Within two terms of matriculation, students are assigned an academic advisor from the core program faculty or an available Graduate Faculty member with expertise in the student's cognate area, as approved by the NMS Program Director. Students develop an "Individualized Development Plan of Graduate Studies," which is reviewed with their advisor every term, and by the NMS Program Director and/or the Program Advisory Committee on an annual basis.

Interdisciplinary Study: Students may use their elective coursework to pursue interdisciplinary study throughout the University. The MS-NMS program participates in the interdisciplinary program in Neuroscience at Temple University.

Areas of Specialization: All students complete the same core course requirements, but may focus their elective coursework and research experiences on preparing them for future work in areas related to their specific interests.

Job Prospects: Graduates of the MS-NMS degree program are prepared for employment in clinical research, as faculty in professional programs, or in industry positions. In addition, the MS degree provides a strong foundation for students to continue their studies at the PhD level.

Non-Matriculated Student Policy: Non-matriculated students may enroll in up to three graduate courses with permission from the NMS Program Director.

Financing Opportunities: Assistantship packages consisting of a stipend, tuition remission, and subsidized health benefits are available. Admission to the MS-NMS program does not, however, guarantee financial support. Research and Teaching Assistantships are highly competitive, with awards varying based on faculty-funded areas of research and the teaching needs of the College. Please contact the NMS Program Director for additional information.

Admission Requirements and Deadlines

Application Deadline:

Fall: March 1
Spring: November 1

All applicants to the MS in Neuromotor Science program must apply via the Centralized Application Service for Public Health (SOPHAS). The system can be accessed at https://sophas.liaisoncas.com/.

Letters of Reference:
Number Required: 3

From Whom: Letters of recommendation should be obtained from individuals who can speak to the applicant’s potential for graduate study. At least one should be from a faculty member who is familiar with the applicant’s academic abilities.

Bachelor’s Degree in Discipline/Related Discipline: All applicants must present credentials that are the equivalent of a baccalaureate degree at Temple University.

A WES course-by-course transcript evaluation is required for applicants who completed their bachelor’s degree outside of the United States. This can be requested at https://www.wes.org/ and submitted through SOPHAS.

Statement of Goals: In a one-page statement, articulate why you want to enroll in the MS-NMS program at Temple. State your career goals and research interests.

Standardized Test Scores:
GRE: Scores from a test taken within the last 5 years must be at or above the 50th percentile in the verbal and quantitative components, with a score of 4 or higher on the writing component. Official scores should be sent directly to SOPHAS using code 0151.

Applicants who earned their baccalaureate degree from an institution where the language of instruction was other than English, with the exception of those who subsequently earned a master’s degree at a U.S. institution, must report scores for a standardized test of English that meet these minimums:

- TOEFL iBT: 79 (send officially to SOPHAS using the SOPHAS-specific TOEFL code 5688)
- IELTS Academic: 6.5
- PTE Academic: 53
- Duolingo: 110

Resume: Current resume or CV required.

Interview: Students may be invited to interview with the program faculty. An interview may take place in person or through technology if cost prohibits travel to Temple.

Laptop: All incoming students in the College of Public Health are required to have a laptop. Academic programs in the college are technology intensive. They incorporate statistical and database analyses; utilize specialized tools for athletic training, kinesiology and physical therapy; stream audio and video for communication sciences; facilitate online interactive counseling for social work; and foster clinical experiences and online assessments. The laptop requirement enables the College of Public Health to improve opportunities for active learning and provide greater access to specialized software and required tools in and out of the classroom, better preparing students for the workforce. Learn more about device specifications and suggested vendors. Students can use excess financial aid (i.e., funds that are reimbursed after all tuition and fees are paid) to meet student needs, including the purchase of a laptop. Scholarships may also provide funding.

Program Requirements

General Program Requirements:
Number of Credits Required Beyond the Baccalaureate: 30

Required Courses:

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<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>HRPR 5001</td>
<td>Current and Emerging Issues in Public Health and Health Professions</td>
<td>0</td>
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<tr>
<td>NMS 9621</td>
<td>Neuromotor Science 1: Neural Factors</td>
<td>3</td>
</tr>
<tr>
<td>NMS 9622</td>
<td>Neuromotor Science: Instrumentation</td>
<td>3</td>
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<tr>
<td>NMS 9623</td>
<td>Neuromotor Science: Programming</td>
<td>3</td>
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<tr>
<td>NMS 9624</td>
<td>Neuromotor Science 2: Mechanics and Models</td>
<td>3</td>
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<tr>
<td>NMS 9627</td>
<td>Neuromotor Science 3: Cognition and Learning</td>
<td>3</td>
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<td></td>
<td>Statistics and Research Design Course</td>
<td>3</td>
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<tr>
<td>Electives</td>
<td></td>
<td>9</td>
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<tr>
<td>NMS 9654</td>
<td>Neuromotor Science: Laboratory Rotation and Seminar</td>
<td>3</td>
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<tr>
<td>Total Credit Hours</td>
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<td>30</td>
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This common College Core course is required of all incoming graduate students in the College of Public Health. It is available completely online and designed such that students can complete the modules at their own pace over the course of their degree program.

Electives are chosen from existing 5000-, 8000-, or higher-level courses to provide a cognate area based on the student’s interest in, for example, engineering, kinesiology, neuroscience, psychology, public health, rehabilitation science, or teaching in higher education. Not all courses listed in the course descriptions for this program are available to MS-NMS students. The NMS Program Director and faculty advise on and approve the selection of electives.

**Minimum Grade to be Earned for All Required Courses:** B-

**Culminating Event:** Successful completion of coursework constitutes the culminating event for the Neuromotor Science MS.

**Contacts**

**Program Web Address:**
https://www.temple.edu/academics/degree-programs/neuromotor-science-ms-hp-nms-ms

**Department Information:**
Dept. of Health and Rehabilitation Sciences  
Ritter Hall Annex, 6th Floor  
1301 Cecil B. Moore Avenue  
Philadelphia, PA 19122-6091  
deppt@temple.edu  
215-204-9066

**Submission Address for Application Materials:**
https://sophas.liaisoncas.com/

**Department Contacts:**

*Program Director:*
W. Geoffrey Wright, PhD  
wrightw@temple.edu  
215-204-9008

*Chairperson:*
Janet Prvu Bettger, ScD MS FAHA  
Professor  
janet.bettger@temple.edu