

BIOMEDICAL SCIENCES - NEUROSCIENCES - M.S.

College of Sciences and Humanities
Department of Biomedical Sciences
www.kent.edu/biomedical

About This Program

You'll explore the complexities of the brain and nervous system as you build advanced knowledge through hands-on research and interdisciplinary training. With opportunities to collaborate with leading researchers and partner institutions, you'll develop the skills to pursue careers in neuroscience research, healthcare or further doctoral study. Read more...

Contact Information

- **John Johnson** | BMS@kent.edu | 330-672-3849
- Connect with an Admissions Counselor

Program Delivery

- **Delivery:**
 - In person
- **Location:**
 - Kent Campus

Examples of Possible Careers and Salaries*

Biological scientists, all other

- 2.2% slower than the average
- 44,700 number of jobs
- \$85,290 potential earnings

Biological science teachers, postsecondary

- 9.3% much faster than the average
- 64,700 number of jobs
- \$85,600 potential earnings

Natural sciences managers

- 4.8% about as fast as the average
- 71,400 number of jobs
- \$137,940 potential earnings

* Source of occupation titles and labor data comes from the U.S. Bureau of Labor Statistics' Occupational Outlook Handbook. Data comprises projected percent change in employment over the next 10 years; nation-wide employment numbers; and the yearly median wage at which half of the workers in the occupation earned more than that amount and half earned less.

For more information about graduate admissions, visit the graduate admission website. For more information on international admissions, visit the international admission website.

Admission Requirements

- Bachelor's degree from an accredited college or university
- Minimum 2.750 undergraduate GPA on a 4.000-point scale
- Strong academic background sufficient to take graduate-level coursework in the curriculum (strong background in cell biology is recommended)
- Official transcript(s)
- Résumé or curriculum vitae
- Goal statement indicating the applicant's interests in neuroscience, research experience and fit with the program
- Three letters of recommendation
- English language proficiency - all international students must provide proof of English language proficiency (unless they meet specific exceptions to waive)¹
 - Minimum 94 TOEFL iBT score
 - Minimum 7.0 IELTS score
 - Minimum 65 PTE score
 - Minimum 120 DET score

¹ International applicants who do not meet the above test scores will not be considered for admission.

Application Deadlines

- **Fall Semester**
 - Application deadline: November 15

All application materials (including applicable fee, transcripts, recommendation letters, etc.) submitted after this deadline will be considered on a space-available basis.

Program Requirements

Major Requirements

Code	Title	Credit Hours
Major Requirements		
ANTH 68637 or BSCI 60104	BIOANTHROPOLOGICAL DATA ANALYSIS I BIOLOGICAL STATISTICS	4-5
BMS 60110	CAREER AND PROFESSIONAL SKILLS FOR LIFE SCIENTISTS	2
BMS 60120	LABORATORY TECHNIQUES IN BIOMEDICAL SCIENCES	2
BMS 61000	RESPONSIBLE CONDUCT OF RESEARCH	1
BMS 61001	INTRODUCTION TO BIOMEDICAL SCIENCES	1
Graduate Electives, choose from the following:		4-8
Any Biological Sciences (BSCI) Graduate Courses (50000 level or higher)		
Any Biomedical Sciences (BMS) Graduate Courses (50000 level or higher)		
Other graduate courses as approved by thesis committee		
Neuroscience Electives, choose one track from the following:		8-11
Track One		
BMS 60462 & BMS 60729	NEUROBIOLOGY: SYSTEMS AND BEHAVIOR and CELLULAR AND MOLECULAR NEUROSCIENCE	
Track Two		
BMS 60200	FOUNDATIONS OF NEUROSCIENCE	

Choose two from the following:		
BMS 50703	NEURAL MECHANISMS OF LEARNING AND MEMORY	
BMS 60462	NEUROBIOLOGY: SYSTEMS AND BEHAVIOR	
BMS 60729	CELLULAR AND MOLECULAR NEUROSCIENCE	
BSCI 50147	DEVELOPMENTAL NEUROBIOLOGY	
BSCI 50152	MOLECULAR MECHANISMS OF DISEASE: NEUROLOGICAL DISORDERS	
BSCI 50157	NEUROBIOLOGY OF DRUG ADDICTION	
BSCI 50385	CURRENT TOPICS IN NEUROSCIENCE	
BSCI 50429	NEURAL CONTROL OF REPRODUCTIVE FUNCTION	
BSCI 50431	NEUROENDOCRINOLOGY	
BSCI 50519	HORMONES AND BEHAVIOR	
<i>Culminating Requirement</i>		
BMS 60199	THESIS I ¹	6
Minimum Total Credit Hours:		32

¹ Students selecting the thesis must continually register for BMS 60199 for maximum 6 credit hours toward the degree. Students may need to register for BMS 60299 to complete the thesis requirement; however, those credit hours do not, whatsoever, count toward the degree.

Graduation Requirements

Minimum Major GPA	Minimum Overall GPA
-	3.000

- Minimum 15 credit hours of overall credit hours must be letter graded (required and elective courses).
- No more than one-half of a graduate student's coursework may be taken in 50000-level courses.
- Grades below C are not counted toward completion of requirements for the degree.

Program Learning Outcomes

Graduates of this program will be able to:

1. Publish their research in peer-reviewed journals.
2. Demonstrate the ability to teach undergraduate students.
3. Seek employment in fields that reflect their area of training.

Full Description

The Master of Science degree in Biomedical Sciences–Neurosciences is offered in consortium with the Cleveland Clinic and Northeast Ohio Medical University (NEOMED). The program allows students to complete research projects under the guidance of a neuroscience faculty member at Kent State University and faculty from the other two institutions.

Students complete a common set of core courses that cover fundamental principles in neuroscience and professional skills development. Students also complete elective courses tailored to their chosen subdiscipline. Areas of research focus on the neurosciences include behavioral neuroscience, sensory neuroscience, developmental neuroscience and neurodegenerative diseases.