BIOMEDICAL SCIENCES - NEUROSCIENCES - PH.D.

Contact Information
- Director: John Johnson | jjohns72@kent.edu | 330-672-3849
- Chat with an Admissions Counselor

Fully Offered
- Delivery: In person
- Location: Kent Campus

Admission Requirements
- Bachelor’s degree or higher from an accredited college or university
- Minimum 2.750 undergraduate GPA on a 4.000-point scale
- Sufficient undergraduate coursework in chemistry, math, biology, psychology, and/or neuroscience
- Academic preparation adequate to complete graduate coursework in neuroscience
- Official transcript(s)
- GRE general test scores (effective spring 2023 admissions, the GRE will no longer be required)
- Goal statement indicating the applicant’s interests in neuroscience and career aspirations
- Three letters of recommendation
- English language proficiency - all international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning one of the following:
  - Minimum 600 TOEFL PBT score (paper-based version)
  - Minimum 100 TOEFL IBT score (Internet-based version)
- Minimum 85 MELAB score
- Minimum 7.0 IELTS score
- Minimum 68 PTE score
- Minimum 120 Duolingo English test score

Admission Terms
- Fall

Description
The Ph.D. degree in Biomedical Sciences—Neurosciences is an inter-institutional program that allows students to complete research projects under the guidance of a neuroscience faculty member at Kent State University, Cleveland Clinic or Northeast Ohio Medical University (NEOMED). Students complete a common set of core courses that cover fundamental principles in neuroscience, from the cellular/molecular to the systems level. 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.

The Ph.D. degree in Biomedical Sciences—Neurosciences is offered in consortium with the Cleveland Clinic and Northeast Ohio Medical University.

Admission Requirements
- Bachelor’s degree or higher from an accredited college or university
- Minimum 2.750 undergraduate GPA on a 4.000-point scale
- Sufficient undergraduate coursework in chemistry, math, biology, psychology and/or neuroscience
- Academic preparation adequate to complete graduate coursework in neuroscience
- Official transcript(s)
- GRE general test scores (effective spring 2023 admissions, the GRE will no longer be required)
- Goal statement indicating the applicant's interests in neuroscience and career aspirations
- Three letters of recommendation
- English language proficiency - all international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning one of the following:
  - Minimum 600 TOEFL PBT score (paper-based version)
  - Minimum 100 TOEFL IBT score (Internet-based version)
- Minimum 85 MELAB score
- Minimum 7.0 IELTS score
- Minimum 68 PTE score
- Minimum 120 Duolingo English test score

For more information about graduate admissions, visit the graduate admission website. For more information on international admission, visit the Office of Global Education's admission website.

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

Program Requirements

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 70120</td>
<td>LABORATORY TECHNIQUES IN BIOMEDICAL SCIENCES (taken twice)</td>
<td>4</td>
</tr>
<tr>
<td>BMS 70462</td>
<td>NEUROBIOLOGY: SYSTEMS AND BEHAVIOR</td>
<td>4</td>
</tr>
<tr>
<td>BMS 70729</td>
<td>CELLULAR AND MOLECULAR NEUROSCIENCE</td>
<td>4</td>
</tr>
<tr>
<td>BMS 71000</td>
<td>RESPONSIBLE CONDUCT OF RESEARCH</td>
<td>1</td>
</tr>
<tr>
<td>BMS 71001</td>
<td>INTRODUCTION TO BIOMEDICAL SCIENCES</td>
<td>1</td>
</tr>
<tr>
<td>BMS 78637</td>
<td>BIOANTHROPOLOGICAL DATA ANALYSIS I</td>
<td>3-5</td>
</tr>
<tr>
<td>or BSCI 70104</td>
<td>BIOLOGICAL STATISTICS</td>
<td></td>
</tr>
<tr>
<td>or PSYC 71651</td>
<td>QUANTITATIVE STATISTICAL ANALYSIS I</td>
<td></td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-13</td>
</tr>
</tbody>
</table>

Culminating Requirement

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 80199</td>
<td>DISSERTATION</td>
<td>30</td>
</tr>
</tbody>
</table>

Minimum Total Credit Hours for Post-Baccalaureate Students:

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
</tr>
</tbody>
</table>

Minimum Total Credit Hours for Post-Master's Students:

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
</tr>
</tbody>
</table>

1 Elective courses and research must be approved by the student's guidance committee.

2 Upon completion of course requirements and candidacy exam, doctoral students must register for BMS 80199 for two semesters for a total of 30 credit hours. Thereafter, it is expected that a doctoral candidate will continuously register for BMS 80299 each semester until all requirements for the degree have been met. As soon after completion of candidacy examination as possible, the dissertation committee will be established, consisting of the guidance committee and an outside discipline member—a graduate faculty member from another department at Kent State University or another program of the School of Biomedical Sciences. Students will submit to this committee their prospectus for the dissertation. The format of the prospectus will parallel that utilized for NIH grant proposals (without biographical, budget and facilities information). The dissertation committee may elect to examine the candidate on the proposal and may accept it as submitted or reject it with specific reasons and recommendations for reformulation.
Graduation Requirement

Post-baccalaureate students must complete a minimum 60 credit hours, and post-master’s students a minimum 30 credit hours, of coursework prior to dissertation.