For Information on the B.S./M.S. Dual Degree (4+1) Program please refer to:

https://cas.gsu.edu/program/neuroscience-bs-ms/
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I. ADMISSION REQUIREMENTS AND PROCEDURES
   a. Applicants must have a baccalaureate degree in a neuroscience-relevant field at the time that they matriculate into the program.
   b. Applicants must submit transcripts of their past academic performance at each institution attended.
   c. Applicants must submit three letters of recommendation/reference.
   d. Applicants must submit a statement of their academic/research interests and career goals.
   e. Applicants must identify Neuroscience Institute faculty (core or associate) with whom they wish to conduct research. Applicants will be admitted into the program only if a graduate faculty member is identified who will support the applicant’s research.
   f. International applicants must also demonstrate proficiency in English; this can be satisfied by reporting scores from TOEFL or IELTS tests or earning a degree from an English-speaking academic program.
   g. Deadlines for completion of all application materials and other correspondence concerning admission are:
      i. For entry in Fall Semester: April 1st
      ii. For entry in Spring Semester: October 1st
   h. All application materials should be submitted directly to the Graduate School (https://graduate.gsu.edu/) using the online application process (https://gradapply.gsu.edu/apply/); note that there is a $50 USD application fee.

II. STUDENT SUPPORT
Financial support is not guaranteed. Individual faculty members may support students working on specific research projects with funds from research grants. In addition, teaching assistantships may be available in other departments as well as through the Office of Student Success. Students requiring financial assistance are urged to apply as far in advance as possible.

III. DEGREE REQUIREMENTS
The Master of Science (MS) degree in the Neuroscience Institute is offered with a Thesis or Non-Thesis option. Admitted students are initially enrolled in the Non-Thesis option. Any student who wishes to pursue the Thesis option will be admitted to the thesis track upon approval and successful defense of a Thesis proposal. Changes to status can be made online with the College of Arts and Sciences Graduate Services Office (https://cas.gsu.edu/academics-admissions/required-milestones/).
For both the Thesis and Non-Thesis options, a minimum of 36 hours of graduate coursework is required for the Master of Science degree in Neuroscience. To satisfy the minimum requirements for the degree, the student must successfully complete:

a. A minimum of 27 hours of graduate classroom coursework, which must include:
   i. Neuroscience core course (NEUR 6010 or NEUR 8000; 4 credits)
   ii. Core elective courses (select 2 of following: NEUR 8010, 8020, 8031, 8420; 3 hours each, 6 hours total)
   iii. Quantitative course (either NEUR 8040, NEUR 8380, or NEUR 6050; 3-4 hours)
   iv. Responsible Conduct in Research course (NEUR 8600; 1 hour)
   v. Neuroscience electives (minimum of 12-13 hours, 6 of which must be 8000-level Topics, Concepts, and/or Seminar courses; the remaining may be taken at the 6000-level)

b. A minimum of 9 semester hours of research credit. This requirement may be satisfied by enrolling in NEUR 8800 (Master’s Research) or NEUR 8810 (Directed Laboratory Study).

c. Successful completion and approval of:
   i. A laboratory- or literature-based research paper (Non-Thesis option) or

The expected timeline for completion of the MS degree based on requirements is 2 years for the non-thesis option and 2-2.5 years for the thesis option.

IV. ACADEMIC PERFORMANCE
Students must maintain an overall grade point average of 3.0 to remain in good standing and to avoid being placed on academic probation. A student on academic probation must regain a 3.0 grade point average within the next 18 credit hours to remain in the program. Research performance plays an important role in evaluation of student progress: two negative evaluations (U: unsatisfactory) in research credits will be grounds for dismissal from the program.

V. ADVISEMENT
Students should obtain advising from their faculty mentor and committee members, the Associate Director of Graduate Studies and from the College of Arts and Sciences Graduate Services Office advisor.
VI. NON-THESIS RESEARCH PAPER REQUIREMENTS (non-thesis option only)

All students pursuing the Non-Thesis option for the MS degree in Neuroscience are required to successfully complete a laboratory- or literature-based research paper. This paper will be prepared under the guidance of the student’s faculty mentor (a core or associate member of the Neuroscience Institute) and another member of the student’s Master’s Non-Thesis Committee. This committee will consist of the faculty mentor and one other faculty member who must be a core or associate member of the Neuroscience Institute. Notice of formation of the Master’s Non-Thesis Committee must be filed with, and approved by, the Associate Director of Graduate Studies (Master’s Non-Thesis Committee Selection form). The student’s faculty mentor is expected to review and make editorial/organizational suggestions on the first draft. The edited version is then distributed to the other member of the Master’s Non-Thesis Committee for evaluation and approval (using the Master’s Non-Thesis Capstone Project Approval form: https://cas.gsu.edu/academics-admissions/required-milestones/). Final approval of the written product must occur prior to the graduation audit.

Non-Thesis Research Paper options (choose one of the following):

a. Laboratory-Based Research Paper: The purpose of this paper is to provide the student with the opportunity to incorporate their research results generated in the faculty mentor’s laboratory into a written document. This document will be evaluated on the clarity of expression as well as scientific content. The report should be a minimum of 20 double-spaced pages (excluding appendices and references) and must include the following information:
   i. Introduction - literature-based background to the research project
   ii. Specific Aim(s) of the research project
   iii. Methodology used in the research project
   iv. Results of the research project
   v. Discussion of the research project that includes the significance and limitations of the research project as well as any alternative approaches or changes in research design needed to answer the research question.
   vi. References following conventional biomedical journal formats and including titles for all references.
   vii. Appendices: tables and figures (these may also be incorporated in the text)

b. Literature-Based Research Paper: The purpose of this paper is to critically analyze a topic from the current literature that is selected in conjunction with the student’s faculty mentor and should involve regular meetings with the
mentor. This document will be evaluated on the clarity of expression as well as scientific content. The report should be a minimum of 20 double-spaced pages (excluding references, tables figures) and must include the following information:

i. Introduction – a brief overview of the topic designed to be understood by a first-year Neuroscience graduate student.

ii. Current Research Question – a clear presentation of the research topic or question with a summary of results on the subject matter in the recent literature.

iii. Significance and limitations of the research.

iv. Discussion of future directions that the research might take.

v. References following conventional biomedical journal formats and including titles for all references.

vi. Appendices: tables and figures (these may also be incorporated in the text).

VII. THESIS REQUIREMENTS (thesis option only)

a. Thesis Proposal

i. Master’s Thesis Committee Selection: In consultation with the faculty mentor (a core or associate member of the Neuroscience Institute), the student will select at least two additional faculty members to serve on the student’s Master’s Thesis Committee, one of whom must be a core or associate member of the Neuroscience Institute. The formation of the Master’s Thesis Committee must be filed and approved using the College of Arts and Sciences Graduate Services Office portal (Appointment of Master’s Thesis Committee form: https://cas.gsu.edu/academics-admissions/required-milestones/). The student’s committee should play an important role in the synthesis and development of the student’s research topic.

ii. Proposal Format: The purpose of the proposal is to clearly formulate the specific aims of the proposed research in relation to a well-defined hypothesis. This may require multiple iterations between the student and committee until the Proposal is approved. The Thesis Proposal should be 4-5 pages double-spaced and consist of:

1. Cover Page (not included in page limit)
2. Abstract
3. Introduction - providing the rationale or justification for the proposed experiments and concluding with the hypothesis being tested
4. The Specific Aim(s) and Experimental Design
5. Materials and Methods (brief)
6. References (not included in page limit)

iii. Oral Defense of Thesis Proposal: After provisional approval of the written Thesis Proposal by the committee, the student will orally defend the proposal in a meeting with the student’s Master’s Thesis Committee. The oral defense will consist of a brief presentation of the Thesis Proposal followed by committee questions about the proposal and the relevant background material. If successful, this will be documented using the College of Arts and Sciences Graduate Services Office portal (Proposal Approval for Master’s Thesis form: https://cas.gsu.edu/academics-admissions/required-milestones/). Upon successful completion of this step, the student is accepted into the Thesis Option and should use the above online portal to change status. If unsuccessful, the committee will decide further course of action.

b. Thesis Preparation and Defense
   i. Commencement of Thesis: Once the student’s research is nearing completion (as judged by the faculty advisor), the student will begin preparation of the Thesis.
   
   ii. Completion of Thesis: A copy of the Thesis that is approved by the faculty advisor will be provided to the other members of the Master’s Thesis Committee at least four weeks prior to the Thesis Defense date.
   
   iii. Request for Defense: After the Master’s Thesis Committee has agreed that the Thesis is ready for defense, the student should provide to the graduate coordinator: a draft version of the Thesis, a single page Abstract, and a request for scheduling the Defense. This must be done at least two weeks prior to the requested defense date.
   
   iv. Scheduling of Defense: The date of the defense will be determined by the student and the Thesis Committee. The graduate coordinator will schedule a room for the presentation and Defense and send out notice with the Abstract to NI faculty and students announcing the defense, at least one week before the scheduled event. A copy of the Thesis must be made available to the graduate faculty at this time for inspection.
   
   v. Thesis Defense: During the Defense, the faculty advisor will introduce and moderate the proceedings. The Defense will begin with an oral
presentation (30-45 min) of the Thesis content by the student, followed by a general question and answer period. Subsequently, the student and Thesis Committee will meet to answer any remaining questions about the Thesis and/or presentation. The committee will then meet in private to vote on whether the student has successfully defended the Thesis (majority prevails). If successful, the student will file the signed Final Thesis Approval form with the graduate coordinator and this will be documented using the College of Arts and Sciences Graduate Services Office portal (Master’s Thesis Approval form: https://cas.gsu.edu/academics-admissions/required-milestones/). The Thesis must also be published according to University guidelines.

VIII. RESPONSIBILITY OF THE GRADUATE STUDENT
It is the responsibility of the student to meet the requirements and deadlines of the Graduate School and the College of Arts and Sciences Graduate Services Office concerning submission of copies of the approved Thesis. The student is also responsible for reading this policy document and the current Graduate Bulletin from the College of Arts and Sciences. Failure to comply with these documents may result in a delay in graduation. All candidates for the MS degree must file a formal application for graduation with the Graduate Services Office at least two semesters prior to the anticipated graduation date. All students must comply with the College of Arts and Sciences Continuous Enrollment Policy: https://cas.gsu.edu/current-students/continuous-enrollment/.

IX. PETITIONS
If students wish to deviate from the policies set forth in this document, they must submit the written petition to the Associate Director of Graduate Studies for consideration. All written decisions in response to the petition will be sent to both the student and the faculty advisor. Requests for deviation from College of Arts and Sciences or University requirements should be addressed to the Petitions Committee of the College of Arts and Sciences.