Revised September 2024*

University of Rhode Island
Interdisciplinary Neuroscience Program Handbook

Organization and Policies

2025-2026

**The INP Handbook is updated annually, consistent with the URI Catalog.*

Table of Contents

b. Defense Forms
    i. Thesis/Dissertation Defense Evaluation
    ii. Thesis Dissertation Defense Evaluation Rubric
c. Comprehensive Exam Forms
    i. INP Graduate Student Written Comprehensive Exam Evaluation Rubric
d. Student Evaluation and Remediation Forms
    i. INP Annual Evaluation of Graduate Student Progress Form
    ii. INP Remediation Policies
    iii. INP Remediation Plan
    iv. INP Remediation Review Form
e. Graduate Committee Forms
    i. Master's Program Graduate Committees Form
    ii. Doctoral Program Graduate Committees Form

1) Program Background and Institutional Setting

University of Rhode Island

The University of Rhode Island is a state-supported co-educational institution with an enrollment of approximately 2,500 graduate students and 15,000 undergraduate students and a full-time faculty of about 750. It was founded in 1892 as one of the land grant colleges, and in 1971 became one of the first four sea grant colleges in the United States. The University is located in the picturesque village of Kingston, in historic “South County” near the state’s beautiful coastline and many lovely beaches. Kingston is 25 miles south of the capital city of Providence and within easy access of the main population areas of the region, including Boston (70 miles) and New York City (150 miles).

Interdisciplinary Neuroscience Program

The Interdisciplinary Neuroscience Program (INP) at URI develops researchers, clinicians, and entrepreneurs who investigate the physiological basis of thought and behavior (URI INP Website, 2020). INP Students work with faculty who study the brain using human and other animal models from a variety of perspectives. INP faculty have a wide range of interests including Alzheimer’s Disease, Amyotrophic lateral sclerosis (ALS), Attention Deficit Hyperactivity Disorder (ADHD), biomedical engineering, biomedical signal processing, communication disorders, computational models for bacterial communities in various marine environments, concussions and sports-related injuries, substance use disorder, epigenetic pathways and factors in mediating latent effects on disease, epilepsy, experience dependent neuroplasticity, geriatric pharmacotherapy, language and speech perception, medicinal plants, memory retention, movement disorders, molecular mechanisms of aging, molecular mechanisms of energy-dependent proteins, neuromotor control, neuroinflammation, neuroimmunology, NMDA receptor physiology and pharmacology, Parkinson’s Disease, physical rehabilitation, spinal muscular atrophy and more.

2) General Description

The Interdisciplinary Neuroscience Program (INP) at URI offers a Master of Science (M.S.), Doctor of Philosophy (Ph.D.), Post-baccalaureate Certificate, and a Bachelor’s degree in the Neurosciences. The INP is housed in the College of Health Sciences, with the undergraduate program having three tracks, shared across the Colleges of Environmental and Life Sciences, Health Sciences, and Pharmacy. Students benefit from a multidisciplinary education that provides them with neuroscience expertise and the ability to concentrate in one of many areas of specialization within neuroscience. Declaring a concentration/track at the Graduate level is not required (unlike the undergraduate program). The Interdisciplinary Neuroscience Program is unique because it offers the opportunity for graduate students to include biomedical engineering, computational, pharmaceutical neuroscience, and psychology as well as other courses in their graduate education.

The INP at the University of Rhode Island represents a community of scholars that continues to grow each year. Incoming cohorts of students range from 5 to 10+ each year, which provides students with individual attention and frequent interaction with INP faculty. Graduate students (Master's-Thesis track and PhD students) match with a faculty member lab based on their research interests prior to being accepted.

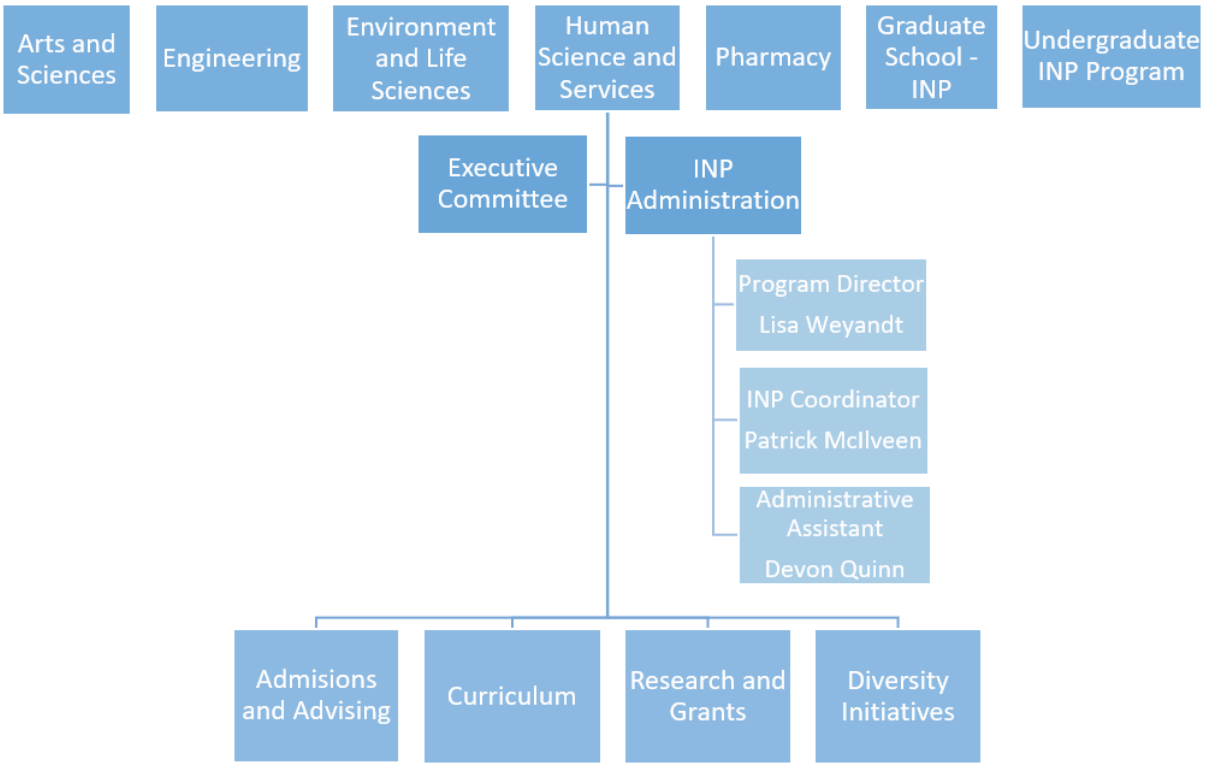
The following colleges currently contribute to the Interdisciplinary Neuroscience Graduate and Undergraduate Programs: College of Arts and Sciences; College of Business; College of Engineering; College of the Environment and Life Sciences; College of Health Sciences; and College of Pharmacy. INP faculty represent diverse departments including: Biological Sciences; Biomedical and Pharmaceutical Sciences; Chemistry; Cell and Molecular Biology; Communicative Disorders; Electrical, Computer, and Biomedical Engineering; Finance; Mechanical, Industrial, and Systems Engineering; Human Development; Kinesiology; Psychology; and Physical Therapy. This diversity provides opportunities for students to specialize their coursework in the program and collaborate with other research laboratories. In addition, thanks to a generous gift from Tom '75 and Cathy Ryan, URI launched the George and Anne Ryan Institute for Neuroscience in the fall of 2013. The Ryan Institute and the INP collaborate to advance the research and provide research opportunities for students who will be the neuroscientists of tomorrow. https://ryaninstitute.uri.edu/.

3) Program Administration and Governance

The Interdisciplinary Neuroscience Graduate Program (INP) is managed by INP administration, the INP Executive Committee and the Dean of the College of Health Sciences(where the program resides). Members of the Executive Committee are nominated by the Deans of each college represented in the INP and also includes a representative from the George and Anne Ryan Institute for Neuroscience. The Executive Committee and INP Administration are responsible for admissions and advising, grants and research, curriculum, and management of the INP. The Director of the INP is a tenured faculty member, who leads the INP with the aim to grow the program by developing neuroscience endeavors and finding opportunities for research and educational collaboration. The Director also acts as a liaison between the Graduate School and the Executive Committee, and the Deans of the three colleges, and oversees the day-to-day operations of the program including communication with INP faculty and advising students. The INP administration also includes a full-time Coordinator and administrative assistant.

Graduate Student Liaison Committee

The Graduate Student Liaison Committee is composed of up to four graduate students elected by a majority of INP M.S. and Ph.D. students, as well as two undergraduate students. The Student Liaison Committee participates in the governance of the INP and meets with the Director at least once each semester to provide input and share student concerns about INP programs and policies.



4) Resources, Facilities, and Participating Departments

George and Anne Ryan Institute for Neuroscience
https://ryaninstitute.uri.edu/
Founded in 2013, The George & Anne Ryan Institute for Neuroscience brings together a team of scientists noted for their contributions to under-explored factors in brain health – including the roles of inflammation, the immune system, and blood vessels in the development of neurodegenerative diseases, such as Alzheimer's Disease and ALS. The George & Anne Ryan Institute is named for the parents of Thomas Ryan '75 who created the Institute with his wife, Cathy, to support innovation in discovery science and translational medicine in the fight against neurodegenerative disease. Joining forces with a closely linked network of clinicians and innovators throughout Rhode Island.

College of Arts and Sciences
https://web.uri.edu/artsci/
401-874-2566
uricas@uri.edu

Department of Chemistry
https://www.chm.uri.edu/index.php/home/
401-874-2318

chemistry@etal.uri.edu

College of Business
https://web.uri.edu/business/
401-874-2337
cob@etal.uri.edu

College of Engineering
https://web.uri.edu/engineering/
401-874-5985
wendy_gallo@uri.edu

Electrical, Computer, and Biomedical Engineering
https://web.uri.edu/engineering/about/electrical-computer-biomedical/
401-874-2506
mleach@uri.edu

Mechanical, Industrial, and Systems Engineering
https://web.uri.edu/engineering/about/mechanical-industrial-systems-engineering/
401-874-2525
nsantucci@uri.edu

College of Environment and Life Sciences
https://web.uri.edu/cels/
401-874-2957
cels@uri.edu

Department of Biological Sciences
https://web.uri.edu/bio/
401-874-2373
bio_chair@etal.uri.edu

Department of Cell and Molecular Biology
https://web.uri.edu/cmb/
401-874-2201
cmb@etal.uri.edu

College of Health Sciences
https://web.uri.edu/chs/
401-874-2244
chs@etal.uri.edu

Department of Communicative Disorders
https://web.uri.edu/cmd/
401-874-5969
Department of Health Studies

https://web.uri.edu/health-studies/
401-874-2440
mgreaney@uri.edu

Department of Human Development and Family Studies
https://web.uri.edu/human-development/
401-874-2150
hdf@etal.uri.edu

Department of Kinesiology
https://web.uri.edu/kinesiology/
401-874-2976

Department of Nutrition and Food Science
https://web.uri.edu/nfs/
401-874-2253

Physical Therapy Department
https://web.uri.edu/physical-therapy/about/
401-874-5001

Department of Psychology
https://web.uri.edu/psychology/
401-874-2193
uripsychology@etal.uri.edu

College of Pharmacy
https://web.uri.edu/pharmacy/
401-874-2761
pharmcol@etal.uri.edu

Department of Biomedical and Pharmaceutical Sciences
https://web.uri.edu/pharmacy/bps/

5) Funding

Internal Funding

Internal funding sources include graduate fellowships, scholarships, teaching assistantships, and research assistantships. Funds are awarded annually on a competitive basis. **Students seeking internal funding must complete the application for the type of funding they are interested in (TA, Fellowship, etc.)** (sent by the Administrative Assistant of the INP) **by the designated deadline.** Students may complete an application for more than one type of funding. The INP Admissions committee reviews the applications and will request necessary documents, which will include two letters of recommendation, a personal statement, and a CV from the selected students. All completed INP Funding documents should

be sent to the INP Administrative Assistant. INP administration will forward those nominations to the graduate office. If requested, the personal statement should include information about progress to degree completion, research goals, and long-term research and professional goals. To be competitive for funding, graduate students should be in good academic standing in the program, which includes making adequate progress in research and completing graduate degree milestones. More information on individual types of funding can be found on the Graduate School website.

Graduate Assistantships

Students must be full-time students in order to be considered eligible for URI assistantships (i.e., the student must be enrolled in 6-12 credits of coursework per fall/spring semester). Graduate students offered an assistantship must accept the offer before April 15th to commit to the position. Graduate Teaching Assistants are required to work up to 20 hours per week for a full assistantship. Students who receive a partial assistantship will have prorated benefits. More information about Graduate Assistantships can be found in the Graduate School Manual Section 12.30 and University Manual 7.80.10 – 7.83.11. If a student wishes to seek additional on-campus employment during the academic year, then the student must first obtain the consent of the Dean of the Graduate School before beginning the additional on-campus employment. Off-campus employment must not conflict with the duties and responsibilities of the assistantship and progress to degree completion.

Graduate Research Assistantships are awarded to graduate students who may be assigned to individual research projects sponsored by the University or outside sources. The Graduate Research Assistant is also expected to spend a maximum of 20 hours per week on research duties. Remuneration is generally equivalent to the stipend for a Graduate Teaching Assistant. Additionally, Graduate Research Assistants receive health insurance and remission of tuition and a portion of University fees (see current GAU contract for more information).

Graduate School Fellowship

A limited number of Graduate School fellowships are available each academic year and are administered by the Graduate School. To be considered for the Graduate School fellowship, the student must complete the INP fellowship nomination application by the designated deadline. Recipients of the Graduate School Fellowship receive a stipend for the academic year and benefits. The university will pay for the student's tuition and a percentage of fees for the academic year. Graduate students who receive a fellowship may not seek secondary employment without the permission of the Dean of the Graduate School.

Graduate School Tuition Scholarship

There are a limited number of Graduate School Tuition Scholarships available to qualified students in need of financial assistance. To be considered for the Graduate School Scholarship, a graduate student must complete the INP scholarship nomination application by the designated deadline. The tuition scholarship is

awarded by the Dean of the Graduate School. Awardees of the scholarship will have their tuition and a percentage of fees paid from University sources for the academic year.

Enhancement of Graduate Research Award

The **Enhancement of Graduate Research Award (EGRA) Grant** offers graduate students financial resources of up to $1,000 for conducting research or professional development, such as travel to a workshop or conference. The EGRA is competitive and graduate students are encouraged to apply. The EGRA is due in late October. Graduate students should plan to request letters of recommendation for the application at least two months in advance of the application deadline. This provides faculty members with adequate time to compose a letter of recommendation. Students are encouraged to attend a grant writing workshop on-campus to learn strategies for writing effective, cogent, and cohesive grants.

Graduate Student Association (GSA) Student Reimbursement Program

The **Graduate Student Association (GSA) Student Reimbursement Program** provides graduate students who fill out the reimbursement form by the deadlines with financial assistance for conferences, workshops, or training seminars within the graduate student's research area. Reimbursement applications must be completed after the event has passed. All the forms, receipts, etc. should be stapled together and submitted to the GSA **(not the INP Director).**

Refer to the Graduate School for due dates. The GSA will reimburse the graduate student for travel, registration fees, transportation, conference materials, and lodging. There is no reimbursement offered for food expenses. The graduate student must retain all original receipts. If the original receipt is not available, then the student must provide a memo explaining why this is the case when filling out the reimbursement application.

External Funding

Graduate students are encouraged to apply to national grants and fellowships for graduate education that are available through external agencies. The application deadlines for a majority of national fellowships and grants are in the fall and early winter (October through December). Generally, applications require a personal statement/research proposal, curriculum vitae (CV), and three letters of recommendation. Graduate students are encouraged to complete their personal statements or research proposal in advance of the deadline to allow time for edits and revisions. Letters of recommendation should be requested at least two months in advance of the application deadline.

Examples of external funding opportunities are listed below.

- Ruth L. Kirschstein National Research Service Award (NRSA) Research Training Grants and Fellowships
  - https://researchtraining.nih.gov/career/graduate

- Individual Fellowships for Graduate Students in Neuro-, Behavioral, Addiction, and Communication Sciences (F31)
  - https://www.nia.nih.gov/research/training/f31-individual-fellowships-phd-students

- National Science Foundation (NSF) Graduate Research Fellowship
  - https://www.nsfgrfp.org/

- National Science Foundation (NSF) Doctoral Dissertation Improvement Grants
  - https://beta.nsf.gov/funding

- National Defense Science and Engineering Graduate Fellowship
  - https://ndseg.sysplus.com/NDSEG/about/

6) Program Requirements

Neuroscience is a dynamic and evolving field of scientific study. It is important to note that program requirements may change from year to year based on program needs and changes in University policy. INP Administration will notify students of any program requirements or changes.

Students are expected to adhere to the requirements as they are stated in the first semester they matriculate at URI. Students who have taken a leave of absence or deferred a semester can use either the requirements that were stated when they first matriculated or comply with current requirements at the time they return to the university. Students cannot mix and match program requirements.

The INP graduate program offers three options: A Master of Science (M.S.), Doctor of Philosophy (Ph.D.) degree, or a Certificate in Neuroscience. Please note that the Master of Science offers a thesis or a non-thesis option. The thesis program requires students to match with a mentor and conduct research (resulting in a thesis), while the non-thesis program does not require a mentor match or thesis, consequently the acceptance rate tends to be higher in the non-thesis program.

Master of Science

Program requirements:
Thesis Track: The thesis program requires a minimum of 30 credits: 20-23 in required coursework, 6-9 in thesis research, and 1-3 in electives. Required courses include: NEU 502, 503, 504, 511, at least on credit of 581 **or** 582, 587 (one semester), 591 (one semester); and PSY/STA 532 or PSY 533. A thesis proposal

and successful defense of the thesis are required. Total research credits in NEU 591 and NEU 599 used towards the degree must not exceed 12 credits.

Non-thesis Track: The non-thesis program requires a **minimum** of 30 credits: 23 in required coursework, 7-9 in electives. Required courses include: NEU 502, 503, 504, at least two semesters of NEU 581/582, 587 (four semesters), 591(at least 3 credits), PSY/STA 532 or equivalent, and three credits of statistics. As stated before, non-thesis track students do not require a major professor.

For both types of master's programs, a Program of Study should be submitted to the Graduate School by the end of the first semester of a student's studies. Students are required to schedule a meeting with the INP Coordinator for assistance in creating a draft or internal POS. From there, students will submit an official POS for the Graduate School through Adobe.The INP Director is required to approve the POS via Adobe. Students are also responsible for submitting a Nomination for Graduation form prior to graduating. The forms can be found online on the Graduate School Forms page. https://web.uri.edu/graduate-school/forms/

Doctor of Philosophy

Program requirements:

Students with an M.S.: Students entering the program with an M.S. must have previously earned an M.S. (thesis required) in an appropriate discipline, a comprehensive exam, and a successful dissertation defense. Up to 30 transfer credits will be accepted for students who have already earned an M.S. degree.

Students without an M.S.: Students entering the program without an M.S. must successfully complete the Qualifying Exam. The Qualifying Exam is an assessment of the student's potential to perform satisfactorily at the doctoral level and be an independent researcher. Therefore, students who did not earn a Master's degree prior to admission to the doctoral program are expected to take the examination no later than the first semester following the completion of 18 credits of coursework.

Graduate School Information About Qualifying Examination: According to the Graduate School Manual, information about the Qualifying Exam is outlined as follows: 7.55.1 General: Students without a master's degree who are accepted into a Ph.D. program are expected to take a qualifying examination during their first two academic semesters. This examination is intended to assess a student's potential to perform satisfactorily at the doctoral level and shall not consist of courses taken unless specific approval has been granted by the Graduate Council. If granted, the courses shall be listed in the University of Rhode Island Catalog. The type of examination to be used, whether it is written, oral, or both, and the preparation and administration of the examination(s) are the responsibilities of the Graduate Program Director in consultation with 1) a departmental committee designed for this purpose or 2) with the major professor. The procedure used for giving qualifying exams shall be incorporated into the departmental procedure given to each new student and filed with the Dean of the Graduate School. Written qualifying examinations should be, in

general, scheduled for a minimum of four hours and oral examinations should be a minimum of two hours. Both the student and the Dean of the Graduate School will be informed promptly of the results of the examination(s) in accordance with the procedure described in 7.70. The form for reporting the results of the examination can be found on the Graduate School website, titled 'Results of a Doctoral Qualifying Exam'. A student who fails the examination may be permitted on re-examination in the part or parts failed if re-examination is recommended by the examiners and approved by the Dean of the Graduate School. The second examination may be taken only after an interval of ten weeks has passed, but before a year has elapsed.

For the INP specifically, these additional guidelines apply:
The Interdisciplinary Neurosciences Program has elected to solely require a two-hour oral qualifying examination for students who enter the doctoral program without a Master's degree. The qualifying examination will assess the student's comprehension and ability to synthesize concepts from the first academic year of study. It is the responsibility of the student and the major professor to schedule the oral examination, form the examining committee, and agree on the content of the exam. The committee must consist of four members, each of whom must be from a different department within the INP (i.e., Biological and Pharmaceutical Sciences, Psychology, Engineering, etc.) and faculty who are core members of the INP. Please note that the Ryan Institute is not a department. The student's major professor may serve as a member on the students examining committee as the representative from that particular department.

A minimum of 64 credits is required for graduation; of these, 30 credits must be earned through required coursework, 25 credits of dissertation research, and 9 credits of elective work. Required coursework includes NEU 502, 503, 504, 511, 581/582 (two semesters), 587 (three semesters), PSY 532 and an additional Statistics course (see approved Statistics electives), and NEU 591 (two semesters). Of the two semesters of NEU 591 required, one must be in the student's primary area of research, and one in a related discipline. The total number of research credits (the sum of credits from NEU 591 and NEU 699) cannot exceed 28. Depending on a student's previous training and experience, certain requirements may be waived at the discretion of the student's dissertation committee and the Graduate School. In the final semester, a formal presentation of thesis research is recommended in NEU 581 or 582. Students may use either standard or manuscript format for their dissertation (https://web.uri.edu/graduate-school/files/ThesisDissertationProcessRevised_04_30_2018.pdf).

Road to 64 Credits for Graduation
Required Coursework (30 cr.) NEU 502, 503, 504, 511, 581, 582 = 15 cr.

PSY 532 + additional statistics course = 6 cr. NEU 591 (two semesters of 2-3 cr) = 4-6 cr. NEU 587 (three semesters of 1 cr.) = 3 cr.
Dissertation Research (25 cr.) NEU 699 = 1-6 cr.
Elective Coursework (9 cr.) Courses chosen by student from list of approved INP electives.

A Program of Study should be submitted to the Graduate School by the end of the second semester of a student's studies. Students are required to schedule a meeting with the INP Coordinator for assistance in creating a draft or internal POS. From there, students will submit an official POS for the Graduate School through Adobe.The INP Director is required to approve the POS via Adobe. Students are also required to submit a Nomination for Graduation form prior to graduating. The forms can be found online on the Graduate School Forms page. https://web.uri.edu/graduate-school/forms/

Comprehensive Examinations: Each doctoral student is required to successfully complete a comprehensive examination at or near, but not later than, 12 months after completion of the required courses stipulated in the program of study (44-54 credits). The examination is designed to assess the student's intellectual capacity and adequacy of training for scholarly research. The format and content of the comprehensive examination will be determined by the student's major professor and members of the student's dissertation committee in accordance with the policies of the Graduate School. The comprehensive examination consists of a written and oral examination. Examples of possible comprehensive examination formats include a written grant proposal followed by an oral defense of the proposal or a written essay followed by an oral examination on the content of the committee's choosing. The graduate student will only be allowed to proceed to the oral exam upon successful completion of the written exam. After the Ph.D. student passes comprehensive examinations, then the graduate student becomes a doctoral candidate and may proceed to complete their doctoral research and defend his/her thesis at a time agreed upon by the doctoral dissertation defense committee. Major professors must complete an INP Evaluation form (See Appendix) and submit this form to the INP Director within 3 days of the oral examination.

Research for the Doctoral Dissertation: The student's dissertation committee must approve the proposed research in accordance with Graduate School Policy. The student is required to develop a dissertation proposal under the guidance of their major professor that is reviewed by the doctoral committee for comment. The student is then required to meet with the committee for final approval of the dissertation research to be completed in fulfillment of the doctoral requirements. This

proposal meeting is important because it provides the student with an opportunity to present their research ideas, engage in a scholarly conversation with members of the committee, and to receive feedback regarding any necessary changes to the proposal.

Post-baccalaureate Certificate in Neuroscience

A URI graduate student who is pursuing a non-neuroscience major but wants official recognition that he/she has specific training and instruction in neuroscience can pursue a Certificate in the Neurosciences. The post-baccalaureate certificate in neuroscience allows students enrolled in a graduate degree and students considering a graduate degree in neuroscience to take courses in neuroscience and learn more about the field. Should students decide to pursue a graduate degree in the Neuroscience field at URI, courses completed during the certificate program will transfer to the graduate degree upon matriculation into the graduate program. Please note, said Certificate students would still need to apply to the Neuroscience graduate degree program of their choice (M.S. [thesis or non-thesis] or PhD). They cannot automatically transfer over to the degree program.

A Bachelor's degree in the sciences (or related disciplines) is required for consideration for the program, and 3.00 GPA or higher. Students may pursue the certificate program only (i.e., they need not be enrolled in another graduate program). Graduate students currently enrolled in a Master's or Doctoral program at URI are also eligible to apply. Students who graduate with a certificate in neuroscience without concurrent enrollment in another program at URI are not eligible to walk during graduation. Students who are concurrently enrolled in another program will walk in the graduation ceremony for their MS or PhD program.

Program requirements:
Students are required to successfully complete 12-16 credits of neuroscience coursework including NEU 503 (see following section regarding required and elective courses). A Program of Study specifically for the certificate program should be submitted to the Graduate School within the first semester of a student's studies. Students are required to schedule a meeting with the INP Coordinator for assistance in creating a draft or internal POS. From there, students will submit an official POS for the Graduate School through Adobe. The INP Director is required to approve the POS via Adobe. Students are also required to submit a Nomination for Graduation form for the certificate program prior to graduating**. If a student does not complete a POS and Nomination for Graduation form for the certificate program, the certificate will not appear on their transcript.** The forms can be found online on the Graduate School Forms page. https://web.uri.edu/graduate-school/forms/

7) Coursework

Course and Grade Guidelines

A student's overall GPA must be a B or higher (3.0 average). Note that if a student earns a C or lower in a course, they must immediately notify their major professor and the INP Director as that negatively affects their GPA average and could keep them from earning a 3.0 GPA average. A remediation plan will be enacted which may include retaking a course. Courses should be taken in the first two years of graduate study. Doctoral students are also required to complete two semesters of graduate-level statistics courses (M.S. students only one). Required and suggested elective statistics courses are listed in the Electives subsection of this handbook. Students are encouraged to discuss which statistic(s) course(s) are most relevant to their research with their major professor. Please refer to the appropriate section of the Graduate School Manual for more information on scholastic standing and acceptable grades. https://web.uri.edu/graduate-manual/scholastic-standing/

It should be noted that students are unable to retroactively transfer credits from a future program to fulfill required coursework for the INP.

Note that the number of 400-level courses that graduate students may take for graduate credit are limited; students pursuing a doctorate without a Master's degree may take up to 12 credits of 400-level courses. Students with an M.S. degree who are enrolled in the doctoral program cannot take 400-level courses for graduate credit.

To request a permission number from a class that has already close, please use the following language when contacting the professor:

> "Dear Professor X"
>
> I am a doctoral student in the Interdisciplinary Neuroscience Program and am required to take XX (name of course) X semester (Fall or Spring). Would you be able to provide me with a permission number in the near future? I am looking forward to taking the course and meeting you in the X (semester).
>
> Thank you,
> XX"

Interdisciplinary Neuroscience Master's Program Curriculum			
First Year (Fall Semester)	**Cr.**	**First Year (Spring Semester)**	**Cr.**
NEU 502: Introduction to Neurobiology	4	NEU 503: Introduction to the Neurosciences	3
NEU 587: Seminar in Neurobiology	1	NEU 587: Seminar in Neurobiology	1
NEU 581: Neurosciences Colloquium	1	NEU 582: Neurosciences Colloquium	1
PSY 532: Experimental Design	3	NEU 599: Master's Thesis Research	3-6
**Elective/Research Credit		**Elective/Research Credit	

Second Year (Fall Semester)	Cr.	Second Year (Spring Semester)	Cr.
NEU 511: Human Neuroscience and Neurology	5	NEU 504: Neuroethics	1
NEU 591: Seminar in Neurobiology	2-3	NEU 599: Master's Thesis Research	3-6
NEU 599: Master's Thesis Research	3-6		

Interdisciplinary Neuroscience Doctoral Program Curriculum			
First Year (Fall Semester)	**Cr.**	**First Year (Spring Semester)**	**Cr.**
NEU 502: Introduction to Neurobiology	4	NEU 503: Introduction to the Neurosciences	3
NEU 587: Seminar in Neurobiology	1	NEU 587: Seminar in Neurobiology	1
NEU 581: Neurosciences Colloquium	1	NEU 582: Neurosciences Colloquium	1
PSY 532: Experimental Design	3	**Elective/Research Credit	
**Elective/Research Credit			
Second Year (Fall Semester)	**Cr.**	**Second Year (Spring Semester)**	**Cr.**
NEU 511: Human Neuroscience and Neurology	5	NEU 504: Neuroethics	1
NEU 587: Seminar in Neurobiology	1	NEU 591: Special Projects in Neuroscience	2-3
NEU 591: Special Projects in Neuroscience	2-3	**Elective/Research Credit	
**Additional STA Class	3	**Written and Oral Comprehensive Exam	
Third Year (Fall Semester)	**Cr.**	**Third Year (Spring Semester)**	**Cr.**
NEU 699: Doctoral Dissertation Research	3-6	NEU 699: Doctoral Dissertation Research	3-6
Fourth Year (Fall Semester)	**Cr.**	**Fourth Year (Spring Semester)**	**Cr.**
NEU 699: Doctoral Dissertation Research	3-6	**Required research presentation in NEU 581/582	

Course	Semester Offered	Title of Course	Credits
NEU 502	Fall	Introduction to Neurobiology	4
NEU 503	Spring	Introduction to the Neurosciences	3

NEU 504	Spring (Alternate years)	Neuroethics	1
NEU/ PHT 511	Fall	Human Neuroscience and Neurology	5
NEU 581	Fall	Neuroscience Colloquium	1
NEU 582	Spring	Neuroscience Colloquium	1
NEU 587	Fall/Spring	Seminar in Neurobiology	1
NEU 591	Fall/Spring	Special Projects in Neuroscience	2-3* *Doctoral students must enroll in two different NEU 591 courses
NEU 599	Fall/Spring	Master's Thesis Research	Number of credits determined in consultation with major professor
NEU 699	Fall/Spring	Doctoral Dissertation Research	Number of credits determined in consultation with major professor

Neurosciences (required):

NEU 502: Introduction to Neurobiology (4 credits) Cross-listed as BIO 502. Fundamental processes in neurobiology with emphasis on cellular and membrane mechanisms of nerve functioning. (Lecture 3). Pre: BIO 201 and MTH 141, or permission of instructor.

NEU 503: Introduction to the Neurosciences (3 credits) This survey course will introduce basic neuroscience areas, including gross and microscopic anatomy, neural development, membrane physiology, sensory and motor systems, language, cognition, neuropharmacology, neuroengineering, and psychological disorders. (Lecture 3). Pre: Graduate standing or permission of the instructor.

NEU 504: Neuroethics (1 credit) Neuroethics is the study of ethical issues regarding research in neuroscience. Students will learn the implications of neuroscience research for human self-understanding, ethics, and policy. (Seminar 1) Pre: Graduate standing or permission of the instructor.

NEU 511: Human Neuroscience and Neurology (5 credits) Cross-listed as PHT 511. Anatomy, functional anatomy, dysfunction, and evaluation of the human nervous system as a basis for understanding its morphology, function, and therapeutic intervention. (Lecture 4, Lab. 2) Pre: Second year standing in

Department of Physical Therapy (DPT) program, matriculated in the INP or permission of DPT chairperson

NEU 581: Neuroscience Colloquium (1 credit) Program of invited speakers, who will present original research topics in neurosciences field. Credit available to graduate students in the Interdisciplinary Neurosciences Program (INP) and graduate students and upper-level undergraduates from other programs. (Seminar)

NEU 582: Neuroscience Colloquium (1 credit) Program of invited speakers, who will present original research topics in neurosciences field. Credit available to graduate students in the Interdisciplinary Neurosciences Program (INP) and graduate students and upper-level undergraduates from other programs. (Seminar)

NEU 587: Seminar in Neurobiology (1 credit) Cross-listed as BIO 587. Survey of current literature in the neurosciences. Topics include molecular and behavioral electrophysiology, ion channels, nerve net modeling, ultrastructure of excitable cells, receptor and pharmacological neurobiology of invertebrates and vertebrates. (Seminar) Pre: Graduate standing or one advanced neuroscience course.

NEU 591: Special Projects in Neuroscience (2-3 credits) Advanced work under the supervision of a faculty member arranged to suit the individual requirements of the student. (Independent Study) Pre: permission of instructor.

NEU 599: Master's Thesis Research (1-6 credits) Number of credits is determined each semester in consultation with the major professor or program committee. (Independent Study) Pre: Graduate standing in the Interdisciplinary Neuroscience Program. S/U credit.

NEU 699: Doctoral Dissertation Research (1-12 credits) Number of credits is determined each semester in consultation with the major professor or program committee. (Independent Study) Pre: graduate standing in the Ph.D. program. S/U credit.

a) Special Projects in Neuroscience

The purpose of the course Special Projects in Neuroscience (NEU 591) is to provide research or laboratory experience in an area of neuroscience or a related field. Students may repeat this course once; in total, the doctoral student should complete two courses of NEU 591 with two different professors. The number of credits per semester will range from **2-3 credits** depending on the nature of the project and the time required to complete the project goals. In accordance with university policy for credits, 1 credit amounts to 2 hours per week of work. The course will be individualized based on the various needs of the student in collaboration with the professor. The graduate student is expected to contribute to an ongoing research project.

Each student will have distinctive experiences based on the participants involved in the research project. It is expected that students will come to the course with different personal attributes and professional competencies. Therefore, at the student's initiation, individualized plans must be developed with the professor and specify outcomes for each student. Students must be assessed and provided with constructive written or verbal feedback by the professor for research-based competencies at two time-points in the semester: at mid-semester and at the end of the semester. Students should discuss this feedback with the professor along with any changes in goals and objectives for the semester.

Objectives/Competencies:

- The student will keep a journal of skills/competencies acquired throughout the independent study.
- The student will complete a written report of a length appropriate to the number of credit hours in the form of a manuscript for submission or a presentation to the professor's lab/research group.

Expected Contributions:

- The student will assist the professor with tasks necessary to advance study objectives.
- The student will attend and actively participate in lab meetings.
- The student will demonstrate initiative in obtaining the skills necessary to complete the project.
- The student will consistently demonstrate a professional manner.
- Early in the semester, the professor and the student will collaborate to set goals for the project and determine the amount of time required to achieve those goals.
- All projects will include a final report or presentation in the lab. Grades will be determined by the professor, based upon performance in the project and the final report and/or presentation.

b) Elective Courses

Graduate students in the Interdisciplinary Neuroscience Program may take elective courses specific to their research specialization area. Recommended and approved elective courses for different disciplines within the field of neuroscience that are currently offered at the University of Rhode Island are described below. Students are encouraged to explore the URI Student Course Catalog, consult with their major professor about which courses to take, and create a program of study that will build a strong foundation and provide valuable insight into their specific research specialization. If a student is interested in taking an elective course that is not listed below as an approved elective, they should reach out to the INP Director for permission to take such course. As discussed in Section 6- Program Requirements of this Handbook, students are required to submit a program of study (POS) according to the URI Graduate School specifications, as well as an internal POS to the Coordinator of the INP.

Biopharmaceutical Sciences:

PHC 502: Drug Development (3 credits) Scientific and regulatory aspects of drug development from discovery to market, exemplified by URI research. (Lecture 3). Pre: Graduate standing in Pharmacy. Open to CHE students in pharmaceutical track.

PHC 520: Pharmaceutical Sciences Journal Club (1 credit) Critical reviews of current research reports in the field of pharmaceutical science. The students will be evaluated on the basis of their effectiveness in organization, interpretation, and oral presentation, according to criteria already established in the department. (Lecture 1). Pre: Graduate standing or in good standing in the P1-P4 years of the Pharm.D. curriculum.

BPS 551: Chemistry of Natural Products (3 credits) Introduction to chemistry of certain groups of natural products especially in relation to their chemotaxonomic position in plant classification. Topics limited to secondary metabolites; e.g., terpenoids, phenolic compounds, aromatic compounds, phytosterols, alkaloids. (Lecture 3). Pre: CHM 228 and CHM 230. In alternate years.

BPS 587: General Pharmacology (3 credits) An introduction to principles of pharmacology and major drug categories, for graduate students and advanced undergraduate students in biological sciences. (Lecture 3) Pre: permission of instructor

BPS 633: Biosynthesis (3 credits) Biogenesis of medicinally active principles of biological origin. Emphasis given to organic acids, polysaccharides, glycosides, steroids, and certain nitrogenous compounds. (Lecture 3). In alternate years.

BPS 641: Biochemical Pharmacology LEC: (3 credits) Theory and application of pharmacological studies at the cellular and subcellular levels and their significance to drug action in the intact organism. (Lecture 2, Lab. 3) Pre: permission of instructor. Offered every third year.

Cellular and Molecular Biology:

CMB 550: Practical Tools for Molecular Sequence Analysis (3 credits) Cross-listed as BPS 550. Students will be introduced to practical ways to analyze DNA, protein and genome datasets. Students will be introduced to computing environments and publicly available software tools for analysis. Pre: CMB 311 or BIO/CMB 352 or BIO 341 or permission of instructor.

CMB 581: General Biochemistry I (3 credits) First semester of a two-semester course on the principles of biochemistry. Topics include: bioenergetics, protein structure, enzymology, glycolysis, the tricarboxylic acid cycle, and oxidative phosphorylation. (Lecture 3). Pre: CHM 228 and 229.

CMB 582: General Biochemistry II (3 credits) Second semester of a two-semester course on the principles of biochemistry. Topics include: photosynthesis, membranes, hormones, metabolism, and the biosynthesis of DNA, RNA, and proteins. (Lecture 3). Pre: CMB 581 or permission of instructor.

Neural Engineering:

ELE 501: Linear Transform Analysis (3 credits) Transform analysis (including Fourier, Laplace, and z-transforms) of continuous- and discrete-time systems and signals. Properties of transforms, computational efficiency, and applications such as compact representations of video and sound. (Lecture 3). Pre: Vectors, matrices, calculus with real and complex variables.

ELE 506: Digital Signal Processing (4 credits) Review of z-transform, frequency response of LTI systems, digital filter structures, sampling theorem, spectral analysis, DFT and FFT algorithms, windows, periodogram, introduction to design of FIR and IIR filters. (Lecture 4). Pre: ELE 501 or permission of instructor.

ELE 564: Medical Imaging (3 credits) Engineering and clinical applications of medical imaging systems including X-ray, computed tomography, radioisotope imaging, ultrasound, magnetic resonance imaging; picture archiving and communications system and medical image processing. Term paper required. May not be taken by students who have credit in BME 464. (Lecture 3). Pre: Senior standing in electrical or computer engineering or permission of instructor.

ELE 565: Medical Image Processing Laboratory (1 credit) Development of medical image processing algorithms with graphical user interface in C++ under the Windows operating system: smoothing and sharpening filters, morphological filters, area measurement and edge tracer. Projects involving advanced algorithms. May not be taken by students who have credit in BME 465. (Lab 3). Pre: Senior standing in biomedical engineering or permission of instructor.

ELE 568: Neural Engineering (3 credits) Principles and technologies of neuroengineering and clinical applications; brain stimulator, spinal cord stimulation, functional electrical stimulation (FES), neural-machine interface for motor prosthesis control, artificial visual/auditory devices for augmented sensory perception. Pre: graduate standing in electrical engineering or permission of instructor

Psychology:

PSY 533: Advanced Quantitative Methods in Psychology (3 credits) Advanced quantitative methods applied in psychology. Survey of methods such as multiple regression, multivariate analysis of variance, discriminant analysis, canonical

correlation, principal component analysis, and factor analysis. Applications involve practice with computer programs. (Lecture 2, Lab 2) Pre: PSY 532

PSY/NEU 601: Physiological Psychology (3 credits) An advanced consideration of physiological research on neural, endocrine, and response systems as they relate to attention, motivation, emotion, memory, and psychological disorders. (Lecture 2, Lab 2) Pre: Counts as a course for graduate study in psychology and includes an historical perspective with an emphasis on clinical neuroscience. Graduate standing in the PSY or INP programs or permission of the instructor. It is highly recommended that students have taken a graduate level course in methodology/statistics and psychopathology.

PSY 603: Development (3 credits) Theoretical, methodological, and applied issues in life span development, including cognitive, perceptual, psychomotor, affective, and social development. Topically organized. Counts as a "core course" for graduate study in psychology and includes an historical perspective. (Lecture 3).

PSY 604: Cognitive Psychology (3 credits) A survey of the theoretical and methodological issues in human cognition. Topics include pattern recognition, attention, memory, language, problem solving. Counts as a “core course” for graduate study in psychology and includes an historical perspective. (Lecture 3).

PSY 607: Advanced Psychopathology (3 credits) A review of the multicultural, theoretical, clinical, and empirical literature related to the development, classification, and diagnosis of psychopathology. Counts as a “core course” for graduate study in psychology and includes an historical perspective. (Lecture 3).

PSY 611: Methods of Psychological Research and Experimental Design (3 credits) Provides the student of psychology with a knowledge of research methodology and the techniques of experimental designs. It prepares for the development of thesis problems of graduate students in psychology and related disciplines. (Lecture 3). Pre: PSY 532 and 533.

Communicative Disorders:

CMD 504: Research in Communicative Disorders (3 credits) Types of research in speech pathology, audiology, and communication science; critiques of representative models with special emphasis on experimental research; individual pilot projects or master’s thesis. (Lecture 3). Pre: 372, 373, 374, 375, graduate standing, or permission of instructor.

CMD 550: Audiology for Speech Pathologists (2 credits) Introduction to audiology for the speech-language pathology graduate student. Hearing disorders, hearing assessment, child and adult aural rehabilitation. Modular format with variable credits. (Lecture 2). Pre: Graduate standing. Offered once per year.

CMD 561: Phonological Disorders (3 credits) Assessment, design, and implementation of therapeutic management programs for various speech production disorders at the articulatory and phonological levels. (Lecture 3). Pre: CMD 372, 373, 374, 375, or equivalent, or permission of instructor.

CMD 569: Test and Measurement in Speech-Language Pathology (3 credits) Procedures for evaluation and diagnosis in speech-language pathology. Psychometric considerations in testing. Implications of evaluation information for differential diagnosis, prognosis, referrals, and therapeutic programs. Multicultural considerations in the diagnostic process. (Lecture 3). Pre: CMD 372, 373, 374, 375, 465 or equivalent; graduate standing or permission of instructor.

CMD/NEU 583: Acquired Cognitive Communication Disorders (3 credits) Study of acquired cognitive problems resulting from neurological disorders and diseases; differential diagnoses; assessment of the domains of cognition; and therapeutic strategies for cognitive rehabilitation. (Lecture 3). Pre: Graduate standing.

CMD 585: Language Disorders in Adults (3 credits) Provides basic information on the characteristics, assessment, and treatment of adults with acquired language disorders secondary to stroke, head injury, and progressive neurological diseases. (Lecture 3). Pre: Graduate standing or permission of instructor.

Statistics:

STA 411: Biostatistics II (3 credits) Cross-listed as PHP, BPS 411. An overview of statistical methods with applications to health-related studies. Chi-square tests, effect measures, analysis of variances, multiple comparison procedures, linear and logistic regression, some nonparametric and survival tests. (Lecture 3, Rec 1). Pre: STA 307 or 308 or 409, or permission of instructor.

STA 502: Applied Regression Analysis (3 credits) Topics in regression analysis including subset selection, biased estimation, ridge regression, and nonlinear estimation. (Lecture 3). Pre: STA 412

STA 522: Bioinformatics I (3-4 credits) **Cross-listed as CSC/CMB 522, BPS 542**. Integrates computing, statistical, and biological sciences, algorithms, and data analysis/management. Multidisciplinary student research teams. Modeling dynamic biological process. Extra project work for 4 credits. (Lecture. 3, Project 3). Pre: Major in computing, statistical, or biological science or permission of instructor.

STA/PSY 532: Experimental Design (3 credits) Cross-listed as STA, PSY, AFS 532. Application of statistical methods to biological and psychological research and experimentation. Experimental situations for which various ANOVA and ANCOVA designs are most suitable. (Lecture 3). Pre: STA 409 or equivalent.

STA 536: Applied Longitudinal Analysis (3 credits) Longitudinal Data, Linear Mixed Effects Models, Repeated Measures ANOVA, Generalized Linear Models for Correlated Data. (Lecture 3). Pre: STA 411 or STA 412 or permission of instructor.

STA 541: Multivariate Statistical Methods (3 credits) Review of matrix analysis. Multivariate normal distribution. Tests of hypotheses on means, Hotelling's T2, discriminate functions. Multivariate regression analysis. Canonical correlations. Principal components. Factor analysis. (Lecture 3). Pre: STA 412

STA 542: Categorical Data Analysis Methods (3 credits) Analysis of multidimensional categorical data by use of log-linear and logit models. Discussion of methods to estimate and select models followed by examples from several areas. Pre: STA 412

Computer Science:

CSC 592: Special Topics in Computer Science (1 – 4 credits) Advanced topics of current interest in computer science. (Lecture 1-4, Project 1-3). Pre: Permission of instructor. May be taken more than once.

CSC 593: Programming for Scientists (3 credits) Scientific programming. Algorithmic thinking. Scripting, language comparisons, code design, programming resources and communities. Not for graduate or undergraduate credit in Computer Science. Not for graduate or undergraduate computer science majors. (Lecture 3) Pre: Permission of instructor.

8) Presentation of Research

While enrolled in NEU 581 or 582 (Neuroscience Colloquium), graduate students are encouraged to present their research in a 15–20 minute presentation with five minutes for questions and answers. In general, presentations should be tailored to the audience. Neuroscience is a broad field, consisting of molecular and cellular biology, engineering, pharmaceutical sciences, psychology, and communicative disorders, kinesiology research, among other disciplines.

Presentations should use clear, concise language to discuss research hypotheses or research questions, proposed or current methods, results/expected results, discussion and interpretation of results, and future directions. These presentations will serve to introduce student research foci to INP members, provide a forum for critique and feedback of student work (which may lead to improvement of methodological approaches or ideas for auxiliary lines of inquiry), and develop students' communication skills in a variety of presentation formats.

9) Graduate Committees

It is critical that INP students carefully review the Graduate School Manual regarding the formation of INP committees and required graduate school forms. The following section will provide an overview of INP committees, however it is the students responsibility to remain informed of graduate school requirements, which are listed in section 8.40.

NOTE: To help students organize the formulation of their various INP committees, a **Doctoral Program Graduate Committees** form and **Master's Program Graduate Committees** form is found in the appendix.

The Graduate School requires that INP students form a Master's Thesis Committee or a Doctoral Dissertation Committee during their first year in their graduate program, and submit an Establishment of Committee Form to the Graduate School with that information (Note, non-thesis Master's students do not need complete an Establishment of Committee form).

The graduate Master's Thesis Committee or Doctoral Dissertation Committee will guide and support the graduate student throughout the student's progression to degree completion. Please see the sections below for more information on committee membership.

Graduate students are encouraged to meet with their major professor and their graduate committee throughout their graduate career to discuss progress towards the completion of milestones, research objectives, and research methods. Moreover, graduate students may contact individual members of their graduate committee for constructive feedback on grant proposals and applications for external funding. The graduate committee is a valuable resource for students to gain more insight into their research project(s), develop critical thinking skills, and improve technical writing to the standards of their field.

When establishing the thesis or dissertation committee, the student must select a major professor who will also serve as chair of this committee. Note that the major professor must be a core faculty member of the INP (see INP website for list of core faculty members). However, a student may have an external person (to the INP and/or to the university) serve as a co-major professor, but not the sole major professor, contingent on the INP co-professors agreeing to this arrangement. Second, students must have an "inside" faculty member who must be from the Interdisciplinary Neuroscience Program and the same discipline and/or department as the major professor, or a closely related field. In addition, the student must choose an "outside" committee member who does not belong to the Interdisciplinary Neurosciences Program. In total there must be a minimum of three faculty members serving on the Master's Thesis Committee or Doctoral Dissertation Committee.

Lastly, although not required, a student may select an individual not currently affiliated (external) with URI to serve as an "outside" committee member. However, this external individual must be approved to serve on a graduate committee at URI via one of two routes:

1) To serve on the committee, this external individual would apply to the Graduate School for Adjunct Faculty with Graduate Faculty Status at URI. **OR**
2) The student may submit a special request memo to the Graduate School asking for a non-URI outside member at the time they submit the "Establishment of a Committee" form. However, if the external individual is not adjunct faculty, then that person can only serve once on a graduate committee.

a) Master's Thesis Committee

b) Master's Thesis Defense Committee

When the student's major professor and thesis committee have determined that the student is ready to defend their thesis, the student must submit a GS Request to Schedule an Oral Defense Form.

Note that the defense committee will include the Master's Thesis Committee and one additional "outside the INP" faculty member, who will serve as chair of thesis defense committee. In order for the Master's degree student to pass the thesis defense, the thesis defense committee must unanimously agree that the graduate student passes.

c) Doctoral Dissertation Committee

d) Doctoral Qualifying Exam

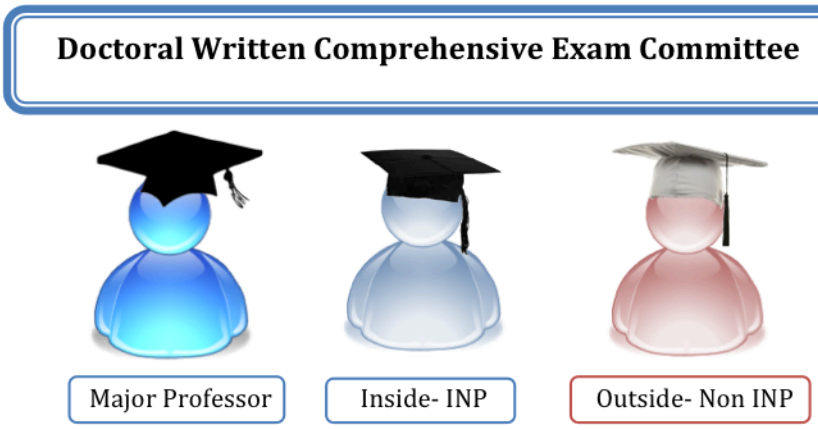
As discussed previously on PAGE 12 , the Graduate School requires students who enter the Doctoral program without a Master's degree to take the Qualifying Exam by the end of their second semester of studies. Students who enter the Doctoral program with a Master's degree are not required to complete a Qualifying Exam. The purpose of the Qualifying Exam is to assess a student's potential to perform satisfactorily at the doctoral level.

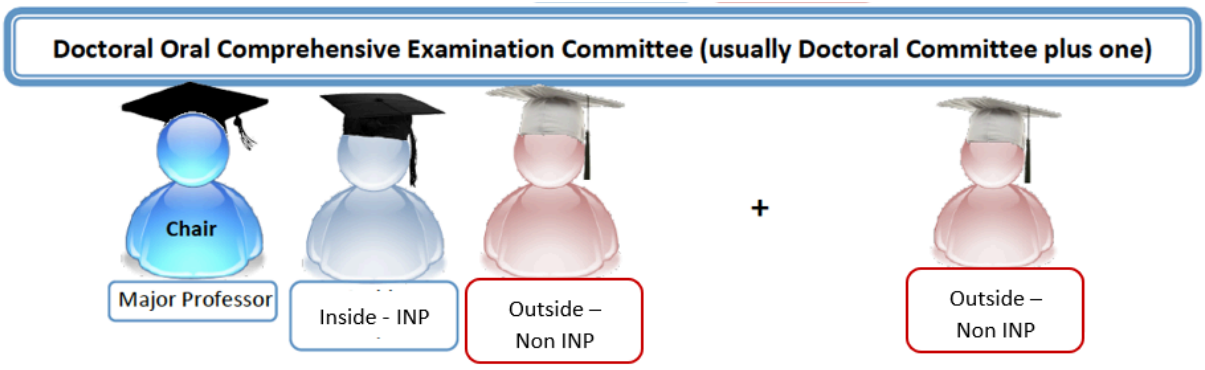
The INP requires a two-hour oral qualifying examination only. The qualifying examination will assess the student's comprehension and ability to synthesize concepts from the first academic year of study. It is the responsibility of the student and the Major Professor to schedule the oral examination and form the examining committee. The committee must consist of four members, each of whom must be from a different department within the INP (e.g., Psychology, Pharmacy, Physical Therapy, etc.) and part of the INP faculty. Please note that the Ryan Institute is not a department. The student's Major Professor may serve as a member on the students examining committee as the representative from that particular department.

After completing the exam, the form for reporting the results of the examination can be found on the forms page of the Graduate School website. A student who fails the examination may be permitted re-examination on the part or parts failed if re-examination is recommended by the examiners and approved by the Dean of the Graduate School. The second examination may be taken only after an interval of ten weeks has passed, but before a year has elapsed.

e) Doctoral Written and Oral Comprehensive Examination Committee

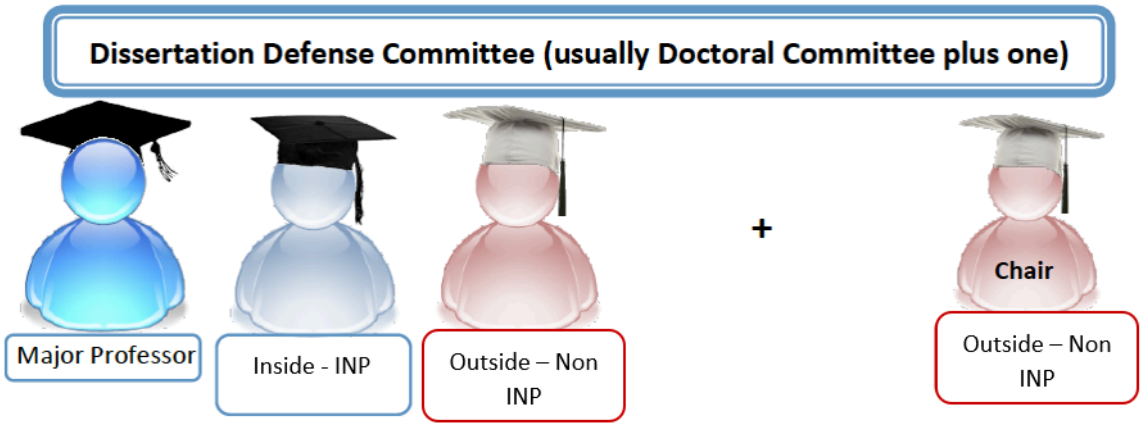
The written comprehensive exam is administered by the student's Doctoral Dissertation Committee. The oral comprehensive examination is also administered by the student's Doctoral Dissertation Committee and an additional outside faculty member. The major professor acts as the chair of the Comprehensive Written and Oral Examination Committee. A unanimous vote from the committee is required to pass the examinations.





f) Doctoral Dissertation Defense Committee

The dissertation defense committee consists of the Doctoral Dissertation Committee and one additional faculty member: an outside member, who will act as the chair of the dissertation defense committee. The graduate student may pass the defense only if the committee unanimously votes that the student has passed and met all dissertation requirements.



10) Progress to Degree – Student Evaluation

The Interdisciplinary Neuroscience Program Faculty will review student progress annually according to the following process and procedures. The purpose of the annual evaluation is to facilitate student self-reflection, student-major professor discussion, future academic planning and goal setting, and to produce a summative evaluative statement regarding student progress and standing in the Interdisciplinary Neuroscience Program.

Process & Instructions:

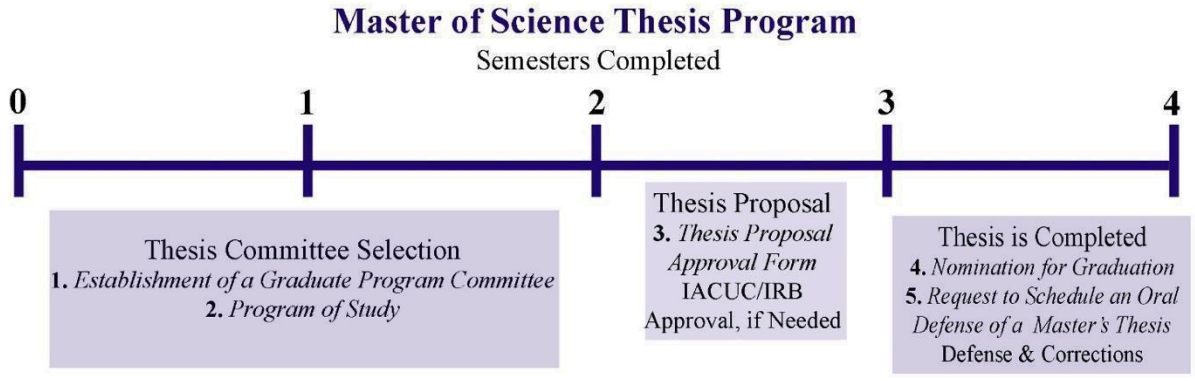
1. The INP Director will email the Annual Evaluation of Graduate Student Progress Form (See Appendix) to graduate students and major professors late November of each year. The INP Director will also inform INP faculty of the student evaluation process and encourage faculty who have comments or concerns about a student to share this information with the student's major professor.
2. Students are required to initiate a meeting with their major professor for the purpose of discussing and completing the Annual Evaluation of Graduate Student Progress Form (See Appendix). Students are also required to share an unofficial transcript with their major professor during the meeting. Both the student and the major professor will sign the form. A remediation plan is required for students who are not progressing satisfactorily in the program and must be developed collaboratively by the major professor and student (See Appendix). The

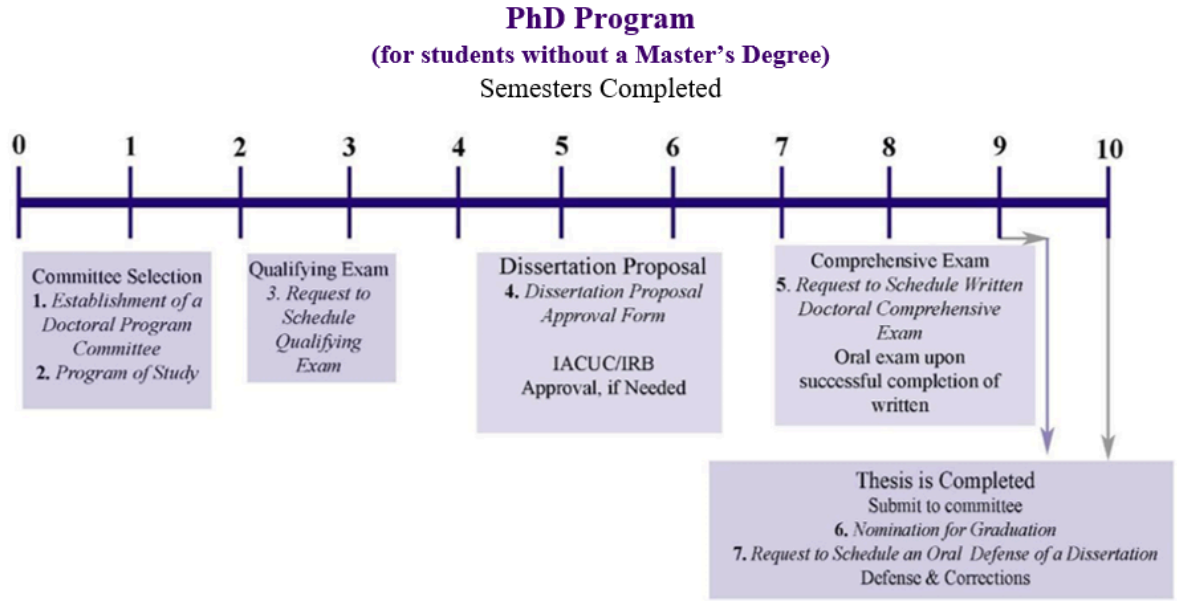
student is then responsible for submitting the signed evaluation form to the INP Director who will share this information with the INP Executive Committee. If necessary, feedback and recommendations will be provided to the student's major professor following this meeting and/or review of the materials submitted by the student.

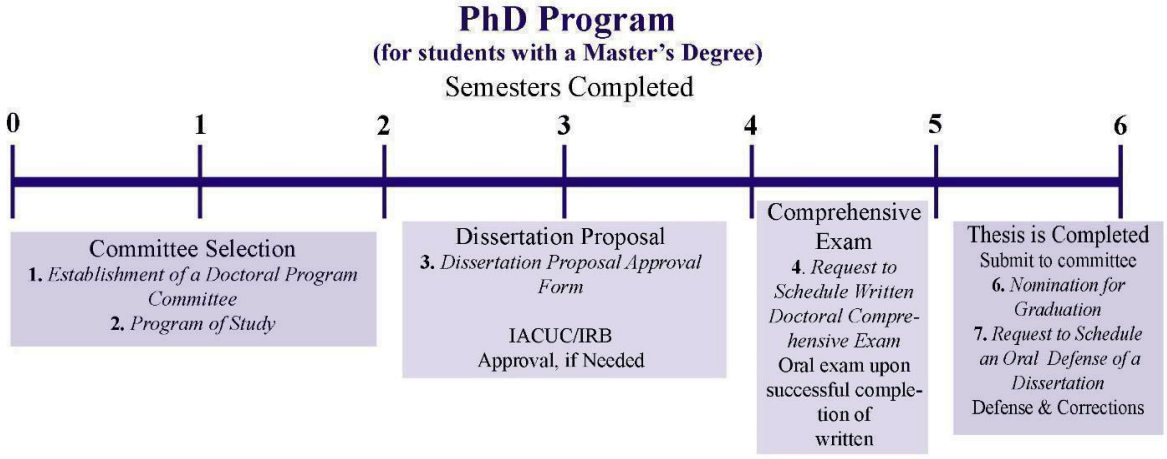
3. The completed evaluation form must be submitted electronically by the student to the INP Director by April 1st. The student's evaluation will be kept in an electronic file by the INP Director.

Note: Graduate students are encouraged to meet with their graduate committee whenever changes are made to their research plans. If the graduate student is experiencing difficulty making progress in their dissertation research, then the graduate student is encouraged to troubleshoot independently, speak with their major professor, and meet with their graduate committee to identify strategies for moving forward in the research plan.

11) Master's and Doctoral Academic Timeline







Students are expected to complete the required courses and electives to meet the requirements of a master's or doctoral degree by the end of the second year of graduate study. By the end of the first year of graduate study, students are expected to form a thesis/dissertation committee.

Master's students are required to submit their Program of Study (POS) by the end of their first semester. Students should first schedule a meeting with the INP Coordinator for assistance in creating a draft or internal POS. From there, they will submit an official POS for the Graduate School through Adobe. The student must submit the "Establishment of a Committee" electronic form as well.

Doctoral students are expected to complete a Program of Study by the end of their second semester (first academic year). Students should first schedule a meeting with the INP Coordinator for assistance in creating a draft or internal POS. The INP Coordinator will consult with the INP Director regarding any POS questions. After receiving feedback from the INP Coordinator, the student will submit an official POS to the Graduate School through Adobe. The student must submit the "Establishment of a Committee" electronic form as well. If the graduate student is on the doctoral track and does not have a Master's of Science degree, then the graduate student must schedule and pass the Qualifying Examination by the end of year one or shortly thereafter when all the required neuroscience courses have been completed.

Generally, the dissertation proposal is submitted to the Graduate School for approval by the end of year two. The graduate student is encouraged to submit the dissertation proposal early in their graduate career to direct and focus their research goals and objectives as agreed to by their dissertation committee. The dissertation proposal must be approved by the Thesis/Dissertation Committee before it is submitted to the Graduate School. Within 12 months of completing the Program of Study, the doctoral student should schedule and complete the Comprehensive Examinations. Once the doctoral student passes the Written Comprehensive Examination, the student may schedule the Oral Comprehensive Examination. The

student must pass both the Written and Oral Comprehensive Examinations before proceeding to their thesis/dissertation defense.

It is expected that students will graduate from the INP doctoral program in 5 years. University policy requires all students to graduate within 7 years. Students who do not complete within this time period must petition the graduate school to continue and may be required to retake courses and other degree requirements. Procedures are specified in the Graduate School Manual (https://web.uri.edu/graduatemanual/).

For information on the Certificate program, please see INP Handbook Section 6) Program Requirements.

12) Career Development

Professional Development and Career Advising Services

The Graduate School offers professional resources for graduate students through workshops to help students develop their skills and learn more about career opportunities. The Professional Development Director provides assistance with improving CVs, cover letters, and strategies for job searching and interviewing. Moreover, the Professional Development Director assists students with bolstering their digital career presence, identifying opportunities for academic and industry careers, and skill building. Career development workshops are held routinely throughout the semesters and students can schedule appointments with the Professional Development Director, Cara Mitnick. Additionally, graduate students can also visit the Center for Career and Experiential Education on-campus to learn about workshops and career fairs available to all URI students. (https://web.uri.edu/graduate-school/about/professional-development/)

13) INP Policy for Changing Major Professor

All students admitted into the Interdisciplinary Neuroscience Program (INP) match with a major professor (i.e., advisor) during the application process. Major professors play a critical role in helping students develop an appropriate Plan of Study (POS) and in the development of skills necessary to become an independent researcher. Mentoring is a required component of the students' program as PhD/Master's Thesis students are not able to complete the INP program without the support of a major professor (https://web.uri.edu/graduate-manual/committees/#section850). The following section explains the procedures if a student or a faculty member wishes to initiate the process of changing major professors:

1. The party (student or professor) who wishes to initiate the process should first contact the Director of the INP to convey their concerns and discuss possible solutions.
2. If the student initiates the process, they are required to a) identify an INP faculty member who could potentially serve as a major professor, b) contact the faculty member, and c) arrange an in-person meeting to discuss the

compatibility of the student and professor's interests and determine whether the faculty member is willing to serve as the student's new major professor.

3. The INP faculty member who is willing to serve as the new major professor is then required to notify the INP Director in writing about their decision to serve as major professor (and accept the student into their lab). The INP Director will subsequently notify the INP chair of the Admissions and Advising Committee and the Dean of the Graduate School of this change.

4. The graduate student is required to develop a new program of study with their new major professor and with the assistance of the INP Coordinator. The student is then required to submit the new POS to the Graduate School via Adobe.

If a match with a new major professor does not occur, then:

- The student may proceed to non-binding deliberation with the department Chair and other relevant faculty, under the auspices of the University Ombudsman or the Committee on Academic Standards and Appeals, any time after ten academic weeks have passed.
- The doctoral student can discuss the possibility of finishing a research project with the current major professor to earn a M.S., or they can apply to another graduate program either at URI or elsewhere. M.S. students may also elect to complete the M.S. nonthesis program, withdraw, or apply to another department or university to complete the degree.
- If a minimum of 12 credits of NEU courses or approved electives have been earned, including NEU 503, then the student can elect to receive a Post-Baccalaureate Certificate.

14) INP Policy for Interpersonal Appeals Process

Grievance Mediation and Procedure

Please refer to the GS handbook regarding these matters (https://web.uri.edu/graduate-manual/appendix-a/). Should an INP graduate student encounter interpersonal difficulties within the program, they should first directly address the grievance with the person(s) involved in order to mutually resolve the issue if possible. Note that anyone who witnesses or experiences an incident of discrimination or harassment can report it to the University of Rhode Island Bias Resource Team. The Bias Resource Team will provide a safe space for the student, review the incident, and connect the student to the appropriate resource(s) to provide a resolution and effect change while maintaining the student's confidentiality. If the aggrieved graduate student is unable to address the person(s) involved directly or if the issue was not satisfactorily resolved through discussion with the primary person(s) involved, then the graduate student should address the issue with the INP Director or a campus ombudsperson to pursue the matter further.

If the INP Director is contacted by the student, the Director will attempt to resolve the appeal from the graduate student through direct discussion with the aggrieved party in an attempt to gain clarity into the dispute and gather further evidence. The INP

Director will discuss the dispute or appeal with the faculty member(s) involved and if a satisfactory resolution cannot be reached, then the INP Director will contact the Associate Dean of the Graduate School about the grievance.

If the issue is not resolved, the Graduate Dean will assemble an appeals committee to provide an unbiased and fair resolution to the grievance. The committee will consist of three Interdisciplinary Neuroscience Program faculty members not involved in the grievance. The committee will review the graduate student's grievance, discuss the appeal with the person(s) involved, and reach a decision about the resolution of the grievance within one month. The committee will report its recommended actions to address the appeal to the INP Director and Dean of the graduate student's college. Subsequently, the Dean of the Graduate School will approve or reject the proposed actions to resolve the appeal. The INP Director will then inform the graduate student of the approved course of action that will be carried out to address the reported grievance within one week.

15) Graduate School Regulation and Policies

All candidates for Certificates, Master's and doctoral degrees entering, admitted to, or readmitted by The Graduate School are governed by the appropriate edition of the Graduate School Manual. INP graduate students must abide by the policies and regulations set forth in the Graduate School Manual as approved by the Graduate Council governing all graduate students at the University of Rhode Island. While there is some overlap between the information in this INP Program Manual and the Graduate School Manual, the Graduate School Manual should be consulted for all general University-wide academic regulations and policies. The Graduate School Handbook may be found at: Graduate School Manual.

16) Forms for Certificate, Master's and Doctoral Students

Forms for graduate students can be found on the university website. All forms are to be completed on the University of Rhode Island Graduate School website using the electronic forms. All Graduate School forms must be signed by the INP Director. Moreover, each year the INP Director collects yearly progress reports in the form of Master's or PhD Annual Evaluation Forms. The Annual Evaluation form must be completed by the graduate student in consultation with the student's major professor. Graduate students must send an electronic version of the advising forms to the INP Director.

The following forms concerning exams, dissertations, and theses cannot be initiated by a student:

1. Results of A Doctoral Comprehensive Examination Form **Initiator: Major Professor**
2. Results of Oral Exam in Defense of Doctoral Dissertation **Initiator: Defense Chair**

3. Results of Oral Exam in Defense of Master's Thesis **Initiator: Defense Chair**
4. Results of A Doctoral Qualifying Examination **Initiator: Major Professor**
5. Results on Non-Thesis Master's Comprehensive Examination **Initiator: Major Professor**

17) Student and Program Issues

Disability Services for Students:
Students who have a physical and/or mental disability or condition that may limit their life functioning or their ability to satisfactorily complete course, program, and/or degree requirements are encouraged to meet with their course instructors to discuss reasonable instructional modifications or accommodations at the start of the semester. As part of this process, students are also required to contact Disability, Access, & Inclusion in order to properly document the disability within the first two weeks of classes. It is important for students to document their disabilities/requests for accommodations through the proper channels so that the INP can assist them.

Policy on Academic Honesty:
Students are expected to act with integrity and honesty in the completion of all academic work. Academic dishonesty includes cheating, plagiarism, fabrication or falsification, denying others access to information and /or material, sabotage of other's work, unauthorized multiple submissions of work, and facilitating another's academic dishonesty. Procedures for incidents of academic dishonesty will be consistent with the URI Student Handbook (see pp. 11-48) and Graduate School Manual (see Section 4.95). Academic action may include but is not limited to: (1) awarding a final course grade of "F"; (2) awarding a failing grade on the test, paper, or assignment in question; or (3) requiring the student to retake the test or resubmit the paper or assignment. As per the URI Student Handbook, the instructor will send written notice of the allegation of academic dishonesty to the instructor's dean, the student's academic dean, and the dean of students. In addition, the instructor is required to notify the student's major professor and INP Director. Notice to the INP Director must be in writing. While all violations of academic honesty are considered serious, some infractions may be particularly severe, egregious infractions of academic dishonesty may require notification of the INP Executive Committee to determine if further administrative action is warranted (e.g., termination from program or other academic consequence).

18) Information Sources

Important sources of information on university policy, procedures, and professional ethics are contained in the following.

1. Interdisciplinary Neuroscience Program website can be found here: https://web.uri.edu/inp/

2. Graduate School Manual. This manual on all graduate school policies can be purchased at Campus Copy & Design in the Memorial Union or read online at Graduate School Manual.
3. Graduate school forms. These are available in the Graduate School in Quinn Hall or online at Grad School Forms.
4. University catalog. This is available from the Graduate Admissions Office in Quinn Hall or online at University Catalog.
5. URI Student handbook. This is available in the Office of Student Life, Memorial Union, or online at URI Student Handbooks.