BROWN SCHOOL OF ENGINEERING Electrical and Computer Engineering

MASTER'S STUDENT HANDBOOK



ACADEMIC YEAR 2024-2025

Welcome to the Brown School of Engineering!

We are glad that you have chosen to conduct your graduate studies at the Brown School of Engineering. Brown University has a proud history in American engineering education. Engineering at Brown is the third oldest civilian program in the country and the first program founded in the Ivy League.

The School of Engineering reflects the rigor, collaborative spirit, and creativity of its faculty and the idealism, curiosity, and pioneering ethos of its students. Teaching and research in the School of Engineering reflects the unique position Brown holds in higher education – an institution that provides the close mentoring relationships characteristic of a liberal arts college, the intellectual excitement of a research-intensive university, and an open curriculum that allows students to be the architects of their own education. Your enrollment in our highly selective programs is an opportunity to foster your intellectual independence and exploration to contribute in your own way to understand and develop technology to address challenges of the future.

Note: This handbook is a supplement to the <u>Graduate School Handbook</u>. Its format is intended to be viewed digitally as it contains many links to related university resources. The current digital version can be viewed at: https://www.brown.edu/academics/engineering/graduate-study/graduate-programs-guide

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A. STATEMENT OF PURPOSE

This handbook is provided to students enrolled in the Brown University School of Engineering master's program in Electrical and Computer Engineering and is intended to help students navigate the process toward obtaining their degree. It does not replace the school's graduate advising, but instead is intended as a reference guide to provide supplemental information.

B. INTRODUCTION

This handbook is intended to aid new students in their transition into graduate school as well as assist all students toward the successful completion of their degree while fulfilling associated requirements. It is each graduate student's personal responsibility to read and understand the information pertaining to graduate studies at Brown, which can be found in this handbook, in the Graduate School Handbook, and in the University Bulletin.

C. MISSION STATEMENTS

The School of Engineering has been keenly focused on developing world-class research and preparing its students to participate in this goal. Additionally, we are training our students to play significant leadership roles innovating in surrounding industrial opportunities. Please review Brown's SoE Mission statement at the following site:

The Missions of Brown University and the School of Engineering.

D. ELECTRICAL AND COMPUTER (ECE) MASTER'S DEANS AND DIRECTORS

Associate Dean of Educational Initiatives	Celinda Kofron
Director of Graduate Studies (DGS) for Engineering	Robert Hurt
ECE Master's Academic Director	Pedro Felzenszwalb
ECE Master's Program Director	Ted Tracy

E. MASTER'S STUDENT AFFAIRS STAFF

Students who have questions or matters of concern about student advising should contact a member of the Student Affairs Team. B&H refers to Barus & Holley, one of the two School of Engineering buildings. The other being the Engineering Research Center (ERC).

Name	Title	Office	Phone
Kathleen DiOrio	Manager, Student Affairs	B&H 312	863-1296
Ann Wang	Student Affairs Coordinator	B&H 312	863-6843

F. UNIVERSITY POLICY INFORMATION

The following links provide information for important university-wide resources:

University Bulletin

Affirmative Action

Nondiscrimination and Anti-Harassment

Gender Discrimination and Sexual Violence (Title IX)

Relationship and Interpersonal Violence

The University Bulletin also includes a <u>General Regulations</u> section containing information on academic requirements, course registration, grading, exams, and <u>Student Conduct and Community Standards</u>.

G. ETHICS AND PROFESSIONALISM

Both Brown and the School of Engineering have strict policies regarding ethics and professionalism. Unethical behavior or any type of academic dishonesty will not be tolerated. As a graduate student, you are responsible for knowing and abiding by the <u>Student Conduct and Community Standards</u>.

All students are expected to have read in full and be familiar with Brown's <u>Academic Code</u> and <u>Code of Student Conduct</u>. In addition, all students conducting research must complete <u>BEARCORE</u>, the University's program on ethics and responsible research conduct, which details responsible conduct of research.

H. STUDENT TIMELINES, TUITION, AND STANDING

a. Timelines for Master of Science (Sc.M.) Students

The ECE Sc.M. program duration default is enrollment for four (4) semesters. All ECE Sc.M. students are admitted into the four-semester, two-year trajectory (2+2+2+2). Students must update their track, program plan, and expected date of completion (EDOC) by the end of their first semester. All updates must be approved by the Academic Director.

Typical timelines:

• The typical timeline for Thesis Track is 4 semesters or 2 years:

1st semester	2 nd semester	3 rd semester	4 th semester
3 courses	2 courses (plus research)	2 courses (plus research)	1 reading/research course

• The timeline for Non-Thesis Track is flexible: 2-4 semesters with at least 2 courses per semester enrolled (with an exception for the last semester of enrollment).

Example #1:

1st semester	2 nd semester	3 rd semester	4 th semester
2 courses	2 courses	2 courses	2 courses

Example #2:

1st semester	2 nd semester	3 rd semester	4 th semester
3 courses	3 courses	2 courses	n/a

• The Professional Track can be incorporated into the Thesis Track (with research advisor permission) or Non-Thesis Track.

Example #3:

1 st semester	2 nd semester	3 rd semester	4 th semester
3 courses	2 courses	ELI based Coop (2960)	2 courses

Please note that starting in AY24/25, we will allow candidates to take a single credit course (ELI 2960) to represent a Coop working opportunity with one of our Industry Partners.

• Finally, part-time students can take as few as one course per semester and as many as 8 semesters for completion.

If you vary from the expected courses or number of courses per semester, this could affect your completion date and tuition costs. In addition, there may be visa implications for international students who deviate from the program structure. International students must be enrolled full-time. There are rare exceptions to this, such as during the very last semester of coursework when enrollment in only one course is permitted, or in the case of medical necessity.

At the start of the first term, all students will receive an <u>electronic master's program plan</u> during the week of the orientation. Students will be asked to list their course plan, choice of Thesis or Non-Thesis Track and opt in or opt out of the Professional Track. The form must be completed and submitted to <u>Ann Wang</u>, Student Affairs Coordinator, before the end of the Fall course shopping period. Students should plan to meet with the academic director, program director, and/or their research advisor to discuss changes to their program plan.

International students must be enrolled full-time* at all times throughout their academic program, with these few exceptions:

- Documented medical reasons (up to a maximum of one year)
- Documented academic reason (one semester only)
- During the last semester of coursework (enrollment in only one course is permitted)

^{*}Enrollment in ENGN 2960 is considered full-time enrollment.

b. Tuition Deadlines and Expectations

The deadline for paying your fall semester tuition bill is August 1; the payment deadline for spring semester is January 1. <u>Billing and Payment Information</u> can be found on the Graduate School website and the <u>Bursar</u> website.

All students will be billed for the minimum of two courses. Once you have registered for a third course you will receive an updated bill for that third course. Account balances not paid by the deadline are assessed a 1.5% late fee. Students with account balances will have a hold placed by the <u>Bursar Office</u> on their student records. Please note: The University Bursar hold will prevent students from receiving academic transcripts, receiving their diploma, bookstore charging privileges, and participating in pre-registration for upcoming terms.

Once the student account is paid and cleared, holds are released and privileges restored.

Current tuition deadlines and policies may be found on <u>Brown's Graduate School</u> site and also in the <u>Policies section</u> of the Bursar webpage.

c. Academic Standing

A student's academic standing will be evaluated at the end of each semester.

To maintain *Good* standing, a student must pass their required courses. This means that a grade of C or higher is obtained in courses approved in their program plan. It is expected that all courses will be taken in the grading option of ABC/NC. In general, courses/credits may not be taken on an S/NC basis, except for Graduate Independent Study. A mandatory S/NC course requires the Academic Director's approval and the agreement of the professor to write a course evaluation on the student's course performance for the Program.

Satisfactory standing indicates that the students have encountered some difficulty in the program. Difficulties could include receiving incomplete (INC) or no credit (NC) or missing (M) grade in a course, or subpar research performance toward a thesis.

Note: Students who receive no credit in a course are required to take an additional course subject to additional tuition fees.

A student may be placed on *Warning* for recurring performance issues. If performance is not improved during a semester on Warning, a student may be terminated from the program.

Standing changes to *Satisfactory* or *Warning* are communicated to students in writing by the Academic Director. The communication will include clear expectations and timelines to improve standing and the consequences of not meeting the criteria. Student standing does not appear on external academic transcripts.

d. Leave of Absence

All students seeking to take time away from their program of study must complete the appropriate leave of absence (LOA) request in <u>UFunds</u>. Students considering a <u>medical leave of absence</u> should consult with <u>Janaé Perkins</u>, Assistant Dean of Student Affairs in the School of Professional Studies (SPS). <u>University Health Services</u> and/or <u>Counseling and Psychological Services</u> may also be utilized as needed. All other leaves (personal, professional development, family, and academic - probationary) require the student to fill out the graduate leave of absence form in UFunds. You must identify the Engineering DGS **OR** your Academic Director **AND** <u>Ann Wang</u> as recommenders before submitting.

I. DEGREE REQUIREMENTS

Brown's School of Engineering offers several options for the Master of Science (Sc.M.) degree, whether your goal is further academic pursuits or improving your employment potential. Options below may be chosen and programs tailored toward your individual needs:

a. Master of Science (Thesis)

- Candidates must complete a coherent plan of study based in engineering or engineering science consisting of eight graduate or advanced level courses and an acceptable thesis, which is normally sponsored by a member of the Engineering faculty.
- For detailed master's thesis submission instructions, please visit: https://graduateschool.brown.edu/academics-research/programs-requirements/masters-requirements.
- The program must include <u>ENGN 2010</u> and <u>ENGN 2020</u> (Mathematical Methods in Engineering and Physics) or their equivalent (must be 2000-level, see below).
- <u>ENGN 2010</u> and/or <u>ENGN 2020</u> can be replaced by an alternate/applied mathematics course or 2000-level engineering/science course. This substitution can be made with the approval of the academic director. The final program must contain at least one advanced (2000-level) mathematics/applied mathematics course.
- Two additional 2000-level Engineering courses (other than ENGN 2980)
- Three additional Engineering or approved courses (not more than two 1000-level courses).
- One thesis preparation course (<u>ENGN 2980</u> Special Projects: Reading, Research, Design).
- Students should choose courses in consultation with the academic director, program director, and/or research advisor to develop a coherent program.
- The proposed program of study must be approved by the academic director. Courses in entrepreneurship and technology management are typically not acceptable as engineering or science courses or electives.

For students in a Master of Science in Electrical and Computer Engineering program (Thesis Track), the approved course sequence is 2-2-2-2, where the student takes two courses in each semester. However, the program strongly recommends a sequence of 3-2-2-1 where the student takes 3 courses the first semester, 2 the second, 2 the third, and 1 the fourth.

B. Master of Science (Non-Thesis)

- Candidates must complete a coherent plan of study based in engineering or engineering science consisting of eight graduate or advanced level courses.
- The program must include <u>ENGN 2010</u> and <u>ENGN 2020</u> (Mathematical Methods in Engineering and Physics) or their equivalent (must be 2000-level, see below)
- <u>ENGN 2010</u> and/or <u>ENGN 2020</u> can be replaced by an alternate/applied mathematics course or 2000-level engineering/science course. This substitution can only be made with the approval of the academic directors. The final program must contain at least one advanced (2000-level) mathematics/applied mathematics course.
- Two additional 2000-level Engineering courses (other than ENGN2980)
- Four additional Engineering or approved courses (not more than three 1000-level courses).
- Students should choose courses in consultation with the academic director and/or program director to develop a coherent program.
- The proposed program of study must be approved by the academic director. Courses in entrepreneurship and technology management are typically not acceptable as engineering or science courses or electives.

For students in the Master of Science in Electrical and Computer Engineering program (Non-Thesis Track), the approved course sequence is 3-3-2, meaning the student takes 3 courses the first semester, 3 the second, and 2 the third.

C. Master of Science (Professional Track)

- Non-thesis and thesis students can also complete the professional track, but thesis students need permission from their thesis advisor to pursue this track.
- In addition to the requirements outlined above, a paid or unpaid experiential learning experience of 3-6 months is a required component of the professional track program. Experiential learning can include one of the following (but not both):
- A summer internship directly related to the program of study
- Completion of ENGN 2960 (Experiential Learning in Industry (ELI)) as an elective course. *Note: students enrolled in ENGN 2960 are considered full-time students*.
- All internships must be approved by the School of Engineering in collaboration with the Office of International Student and Scholar Services (OISSS), if applicable.

IMPORTANT: You must never begin work before your internship is approved. For students in the Master of Science in Electrical and Computer Engineering program (Professional Track), the approved course sequence is 3-2-1-2, meaning the student takes 3 courses the first semester, 2 the second, 1 the third (typically ENGN 2960), and 2 the fourth.

b. Sample Programs of Study

The following is a sample guide to courses recommended for ECE master's degree candidates. Each student should discuss courses with the Academic or Program Director. Ultimately, the student is responsible for proposing a coherent set of courses that satisfy the School of Engineering's Sc.M. Requirements. For the most recent course descriptions, please visit Courses@Brown. Most of these examples are shown for "Non-Thesis" candidates that will have more course slots while "Thesis" students may have dedicated independent research classes.

Students with Multimedia/Signal Processing Interest

SEMESTER	COURSES (3+3+2)
Semester I	ENGN 2010 Mathematical Methods in Engineering and Physics II ENGN 2605 Image Understanding APMA 1690 Computational Probability and Statistics
Semester II	ENGN 2020 Mathematical Methods in Engineering and Physics II ENGN 2520 Pattern Recognition and Machine Learning ENGN 2560 Computer Vision
Semester III	Two approved ENGN 1000 or 2000 level courses

Students with Computer Engineering Interest

SEMESTER	COURSES (3+3+2)
Semester I	ENGN 2911X Reconfigurable Computing for Machine/Deep Learning ENGN 1650 Embedded Microprocessor Design APMA 1650 Statistical Inference I
Semester II	ENGN 2520 Pattern Recognition and Machine Learning ENGN 1640 Design of Computing Systems ENGN 2020 Mathematical Methods in Engineering and Physics II
Semester III	One approved 2000 level ECE course One approved ENGN 1000 or 2000 level courses

Students with Electrophysics/Circuits Interest

SEMESTER	COURSES (3+3+2)
Semester I	ENGN 2010 Mathematical Methods in Engineering and Physics I ENGN 2625 Optical Microscopy ENGN 1590 Intro to Semiconductors and Semiconductor Electronics
Semester II	ENGN 1931A Photovoltaics Engineering ENGN 2590 Semiconductor Devices ENGN 2020 Mathematical Methods in Engineering and Physics II
Semester III	ENGN 2980 Special Projects: Reading Research Design ENGN 2912E Low Power VLSI System Design

Students with Computer Vision Interest

SEMESTER	COURSES (3+3+2)
Semester I	ENGN 1610 Image Understanding ENGN 2912B Scientific Programming in C++ ENGN 2010 Mathematical Methods in Engineering and Physics I
Semester II	ENGN 2560 Computer Vision ENGN 2520 Pattern Recognition and Machine Learning ENGN 2020 Mathematical Methods in Engineering and Physics II
Semester III	ENGN 2911X Reconfigurable Computing for Machine/Deep Learning One approved ENGN 1000 or 2000 level courses

Students with Medical Imaging Interest

SEMESTER	COURSES (3+3+2)	
Compoter I	ENGN 2010 Mathematical Methods in Engineering and Physics I	
Semester I	ENGN 1610 Image Understanding ENGN 1650 Embedded Microprocessor Design	
Semester II	ENGN 2530 Digital Signal Processing ENGN 2520 Pattern Recognition and Machine Learning ENGN 2020 Mathematical Methods in Engineering and Physics II	
Semester III	ENGN 2912B Scientific Programming in C++ One approved ENGN 1000 or 2000 level course	

Students with Communications and Signal Processing Interest (Professional Track)

SEMESTER	COURSES (3+2+1+2)
Semester I	ENGN 2010 Mathematical Methods in Engineering and Physics I ENGN 1610 Image Understanding APMA 1690 Computational Probability and Statistics
Semester II	ENGN 1680 Communications Systems ENGN 2530 Digital Signal Processing
Summer I-II, Semester III	ENGN 2960 Experiential Learning in Industry ELI Coop opportunity with Industry Partner
Semester IV	Two approved ENGN 1000 or 2000 level courses ENGN 1560 Applications In Microwave Engineering ENGN 2520 Pattern Recognition and Machine Learning

c. 5th Year Master's Program

Students enrolled in the 5th year master's program following receipt of their Bachelor of Science (Sc.B.) degree can transfer two relevant 1000- or 2000-level undergraduate courses from their Brown undergraduate program, even if they were used to satisfy Sc.B. degree requirements. The 5th Year Master's program is typically completed in one academic year.

d. Cross-Registration

There are agreements in place between Brown and the Harvard University Faculty of Arts & Sciences as well as Brown and Rhode Island School of Design that allow for cross-registration of graduate students in courses without paying tuition to the host institution. Cross-registration is available for Sc.M. students. A request for cross-registration should be based on interest in specific courses that cannot be found at Brown University but are offered at the graduate level at the other institution. There is an academic performance threshold expected by the host institution and Brown. Each cross-registration request is reviewed with these two criteria in mind. For details on the process, please consult the relevant section of the <u>Graduate School Handbook</u>. ECE master's students in Good academic standing are typically allowed to cross-register for one course over the duration of their program.

e. Transfer Courses

Brown's School of Professional Studies allows at most one course taken elsewhere to be transferred to Brown to be used towards your Master's requirements. This course must have been taken after you received your bachelor's degree and must not have been used towards any other degree. The course should be a four-credit course taken in the semester system (as opposed to a three-credit course or a course taken in the quarter system). If, for example, you've taken two three-credit courses in the semester system, or two or more courses in the quarter system, they might be combinable into something equivalent to a Brown course. It's also important that the course (or combined courses) cover the same material as one of our courses (and thus replace that course). If you think you have a course (or courses) that qualifies please contact the ECE Master's Academic Director. You must receive a B or higher grade for a course to be considered for transfer credit.

Please note that 5th year Master's students may not use transfer courses to satisfy master's degree requirements. A course taken at Harvard counts as a transfer course, thus the one-course limit applies.

J. ADVISING, THESIS, AND GRADUATION

a. Program Advisors

The Academic Director and Program Director serve in an advisory role to ECE master's students. Each student will meet with one of these advisors to review their preparation and goals, discuss the choice of the first-year course program, and recommend a tentative degree plan and course progression. These advisors will continue to advise the student on their progress throughout the period of study as an open line of communication, an individual advisor, and a monitor of each student's progress.

b. Selection of a Research Advisor and Project

Students on the Thesis Track must select a thesis advisor for their Sc.M. program before beginning the second semester. The process begins with the student contacting a faculty member whom they would like to serve in this capacity. Please do not hesitate to reach out to our faculty; they expect to hear from you.

The selection of a research project is an extremely important step in a student's degree program. The student will work on this project for a significant amount of time and will be associated with it for the rest of their career; therefore, the decision will take time and should not be taken lightly. Selection of a research project will result from discussions with your advisor and the student's personal areas of interest. The selection of a research project should take place during the second semester of enrollment.

Any engineering graduate student who plans to work in an engineering laboratory <u>must attend</u> an <u>Environmental Health and Safety</u> Training Seminar. The Engineering Safety Officer informs all graduate students by email of the dates and times that these three-hour seminars are held. Non-attendance to this required training may revoke a student's TA or RA appointment or laboratory access. Depending upon the nature of the research that a student becomes involved with, other safety trainings may be necessary prior to our granting student access to a lab (i.e., hazardous waste, laser safety, biosafety, radiation safety, etc.). A basic <u>Laboratory Safety</u> training course as well as more specialized trainings are required, depending on the nature of your work and type of lab. Laboratory safety courses are available through Brown's Office of Environmental Health & Safety. Please visit the <u>EHS website</u> to view courses available and descriptions of who is required to attend.

c. Finalization of Degree

Brown offers degree conferral in May, October, and February. The thesis submission deadline for a May degree conferral is the end of April, and there are no extensions to this firm deadline. All students who plan to receive a degree in May must file an Application to Graduate in Banner Self-Service at the beginning of April of their commencement year. See Registrar's

website for dates and deadlines. If your graduation plans change after filing the application, you must inform the Registrar immediately.

Your completed graduation application first goes to the Registrar and then is sent to the School of Engineering where it is reviewed for completion of requirements by Student Affairs and the Director of Graduate Studies. There are specific requirements for students who are "thesis" or "non-thesis" status. This status is determined by the student (with advisor confirmation) by the second semester of the Master of Science degree program. Applications to graduate are reviewed in September for October graduates, in January for February graduates, and in April for May graduates. Note: The only commencement ceremony at Brown is held in May; October and February graduates are invited to participate in the May ceremony.

If your application to graduate is not submitted by the due date, the Graduate School will deny the application and you will be required to register for the next available degree conferral. For additional information, please visit

https://www.brown.edu/academics/gradschool/about/commencement

d. Attending Commencement

For those planning to attend <u>Commencement</u>, you also must <u>register</u> to participate. When you register, please identify any awards and honors you received while a graduate student at Brown for possible inclusion in the Commencement program. Please complete this task regardless of whether you plan to attend the ceremony. The Graduate School provides graduating students <u>detailed information</u> on how to plan for and participate in Commencement.

K. MISCELLANEOUS

a. Community: The Graduate Student Council

Graduate Student Council

The <u>Graduate Student Council</u> (GSC) helps to foster a sense of community among graduate students across departments, to facilitate collective action on graduate student issues, and to be a voice for the graduate community. Like the GSC Facebook page to keep current with <u>events</u>. Resources such as alternate source for <u>conference funding</u> are available to support the academic and social lives of Brown graduate students.

b. Wellness Resources

When Brown students are psychologically healthy, they perform better academically, form and sustain more meaningful relationships, and can make the most out of their time while at Brown. We are committed to supporting the wellness of our students and have created a space for relaxation within the walls of the Engineering Research Center (ERC). Our private single-occupant **Wellness Room** is located on the 2nd floor of the ERC, Room 203. Use of this space must be reserved for up to two 30-minute increments per day. This room is for wellness use only,

including restful breaks to support mental health, for nursing mothers, and for private conversations with health care providers. Priority is given to nursing mothers, both in scheduling priority and unlimited usage. Check the <u>online schedule</u> for room availability and to make your reservation. You will receive a Google calendar confirmation once you have scheduled the space for yourself.

Counseling and Psychological Services (CAPS) provides crisis intervention, short-term individual therapy, group therapy, community outreach, and referral services. They offer consultation to students, faculty and staff who are concerned about the well-being of students. Walk-in appointments are free of charge and confidential. CAPS is located at 69 Brown Street in Page-Robinson Hall, 5th floor, Room 512. To make an appointment, please call (401) 863-3476 or visit CAPS, Room 512 of 69 Brown St.

Friends are often the first to notice that a student might be experiencing high levels of distress. Please access these <u>resources for a friend in distress</u> as needed. We hope you never feel that you are alone or that you need to solve difficult situations by yourself. <u>Many university services</u> stand ready to assist you in an emergency as well as in non-emergencies.

Important contact in the School of Professional Studies

<u>Janaé Perkins</u>, Assistant Dean of Student Affairs, is well-versed in the challenges and issues unique to master's students. Master's students may see her to discuss:

- Medical and personal leave
- Support for individual students
- Support practices and policies

c. Student Life Resources

<u>Academic Support</u> (Office of the Dean of the College, University Hall): Provides academic support services that supplement the support provided by course instructors.

Brown Center for Students of Color (68 Brown Street): The Brown Center for Students of Color is a student-focused center designed to provide students of color with a base for social, academic, administrative, cultural, and organizational support.

Brown Recreation: Information about on-campus fitness facilities, aquatics, and club sports.

<u>Health Education Services</u> (13 Brown Street): Make an appointment with the nutritionist, talk with a Health Educator about alcohol or sexual health, and get information about sexual assault.

<u>Center for Career Exploration</u> (167 Angell Street): The Center works in collaboration with academic departments to connect students with career resources; help students identify their skills, interests and values and to explore a wide range of career options; and to articulate their unique experiences to employers.

<u>Counseling and Psychological Services (CAPS)</u>, (69 Brown Street, Page-Robinson Hall, 5th Floor, Room 512): Provides crisis intervention, short-term individual therapy, group therapy, community outreach, and referral services.

<u>Graduate Student Professional Development</u>, (Horace Mann, 47 George Street): Development opportunities include advanced teaching opportunities, Global Mobility grants and research travel funds, interdisciplinary scholarly opportunities at Centers and Institutes, communications workshops and public research talks, and a series on exploring careers in higher education administration.

<u>Health Services</u>, (13 Brown Street): Your resource for emergency medical services, non-urgent medical care, and confidential sexual assault hotline. <u>Bwell Health Promotion</u> provides educational resources for nutrition, sexual health, sexual assault and dating violence, physical and emotional health, alcohol and drug use, and more.

<u>LGBTQ Center</u> (22 Benevolent Street): Provides a comprehensive range of education, information and advocacy services and works to create and maintain an open, safe, and inclusive environment for lesbian, gay, bisexual, transgender, queer and questioning students, faculty, and staff, their families and friends, and the campus community at large.

Office of the Chaplains and Religious Life (69 Brown Street, Page-Robinson Building, 4th Floor, Room 410): Works to ensure that a diversity of beliefs has voice and vitality throughout the University community. OCRL sponsors many faith-based programs and coordinates a broad set of chaplains and affiliates that advise a breadth of spiritual traditions.

Office of Institutional Equity & Diversity (Horace Mann 3rd Floor): Provides leadership for the formulation and oversight of policies related to pluralism and equity and initiates programs and practices that promote diversity, inclusion, and fair treatment for all members of the Brown community.

Office of International Student and Scholar Services (OISSS, 69 Brown Street, Page-Robinson Hall, 3rd Floor): Facilitates the integration of international students and scholars into the Brown community. OISSS provides advising services on immigration and visa matters, work permission, orientation, cultural adjustment, and personal concerns.

<u>Division of Campus Life</u> (20 Benevolent Street): Provides a variety of services, support and outreach to undergraduate, graduate, and medical students designed to promote academic achievement and personal development.

Office of Military-Affiliated Students (Vartan Gregorian Quad A, 101 Thayer Street, Room 106): Brown is committed to building a community that actively supports veterans who are beginning, returning to, or advancing their pursuit of higher education. This office supports the experience of all student veterans, including those who served in the military for countries other than the United States.

Ombuds Office, (Hillel Building, 80 Brown Street, 3rd Floor): The Ombuds Office provides an independent, confidential, neutral and informal resource for faculty, staff, postdoctoral

fellows and associates, graduate students and medical students who have concerns arising from or affecting their work and studies at Brown.

<u>Sarah Doyle Center for Women and Gender</u> (26 Benevolent Street): Seeks to provide a comfortable, yet challenging place for students, faculty, and staff to examine the multitude of issues around gender. The Center offers programs and services for all members of the Brown community and is a site for research into and exploration of gender issues that extend into and beyond the classroom.

SHARE Advocates (Sexual Harassment and Assault Resources and Education), (Andrews House, 13 Brown Street): Confidential services include support for a survivor or friends of a survivor, help filing a complaint (if that is the student's choice), and help navigating resources at Brown and the community.

Sheridan Center for Teaching and Learning, (Sciences Library, 201 Thayer Street, 7th floor): Provides practical advice about teaching and professional development; promotes best practices and promising new practices in teaching; supports instructors as they launch and develop their professional careers.

<u>Student Accessibility Services (SAS)</u>, (20 Benevolent Street): SAS coordinates and facilitates services for students (including graduate students and postdoctoral trainees), faculty, staff and visitors with physical, psychological, and learning disabilities. Click here for FAQs.

<u>Substance Abuse Support</u> (addiction and recovery): The University dedicates resources to support students in recovery from addiction and substance use disorders, and to assist all students negatively affected by their own or others' substance use. The Dean of the College office and the Division of Campus Life provide overlapping services to students with substance use disorders, to develop campus policies regarding alcohol and other drugs, and to educate all members of the campus community about alcohol and drugs and their effects. For more information about available services, please email our Dean for Recovery and Substance-Free Student Initiatives, <u>Lindsay Garcia</u>, in the Office of the Dean of the College.

d. Attending School Seminars and Talks

A key component to being a successful graduate student is intellectual curiosity. As such, the department strongly encourages the attendance of all graduate students at all thesis defenses. Ongoing Engineering seminars are held throughout the year by visiting scholars and other professionals which we also encourage you to attend. You may view Engineering's events calendar to see current and upcoming school-wide activities. There are two travel funds you can apply to:

- The School of Engineering <u>Travel Fund</u>: Funding for Engineering Graduate Students and Postdoctoral Research Associates presenting at research or academic conferences, in person or virtually, is available for both domestic and international conferences. Students and postdocs can apply for up to \$1,000 to cover registration, travel, and other related expenses
- Graduate School <u>Conference Travel Fund</u>: Graduate students presenting at academic conferences, in person or virtually, can apply to the Graduate School for up to \$700 to cover registration, travel, and other related expenses

e. Writing Resources

In graduate school, it is expected that students become proficient in technical writing, including but not limited to class reports and summaries, term projects, technical papers, thesis or dissertation proposals, and thesis or dissertations. The Writing Center, located in the Sciences Library, 201 Thayer Street, 5th Floor, is an excellent resource accessible to all Master's students. View additional library resources for research on engineering-related topics.

Other Writing Resources:

Thyer, B. A. 1994. Successful Publishing in Scholarly Journals. SAGE Publications.

Beer, D. and Mc. Murrey, D. 2013. *A Guide to Writing as an Engineer,* Fourth edition: Wiley.

f. Engineering Contacts

GRADUATE PROGRAM LEADERSHIP	
Director of Graduate Studies (DGS) for Engineering	Robert Hurt
Co-Directors of Graduate Studies (co-DGS) for Biomedical Engineering (BME)	Michelle Dawson Vikas Srivastava
Biomedical Engineering Master's Program Director	Marissa Gray
Chemical Engineering (ChemE) Master's Academic Director	Franklin Goldsmith
Data-Enabled Computational Engineering and Science (DECES) Master's Academic Directors and Program Director	Yuri Basilevs George Karniadakis Michael Donohue
Electrical and Computer Engineering (ECE) Master's Academic Director and Program Director	Pedro Felzenszwalb Ted Tracy
Materials Science (Materials) Master's Academic Director	Lucas Caretta
Mechanical Engineering and Applied Mechanics Master's Academic Directors	Daniel Harris Bill Curtin
Program in Innovation Management and Entrepreneurship (PRIME) Master's Academic Director	Ja-Nae Duane
Program in Innovation Management and Entrepreneurship (PRIME) Master's Program Associate Director	Tina Garfinkel
Master of Arts in Design Engineering (MADE) Master's Program Director	Beth Altringer Eagle

SCHOOL OF ENGINEERING STUDENT AFFAIRS STAFF				
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A School of Engineering Faculty and Staff Directory may be found at http://www.brown.edu/academics/engineering/people

FACULTY

Visit the School of Engineering website for a listing of our current faculty and areas of expertise: http://www.brown.edu/academics/engineering/people/faculty

GRADUATE STUDENTS

A full graduate student directory, including PhD and Master's students, may be found at: https://www.brown.edu/academics/engineering/graduate-student-directory

BROWN UNIVERSITY PEOPLE SEARCH

http://directory.brown.edu/search