



## 2022–2023 Master's Student Handbook

This student handbook will inform you of the requirements and policies of each of our programs. Please see the section for the program you are enrolled in.

*While this handbook is specific to your academic experience in the department, there are several other resources and offices graduate students are encouraged to consult during their tenure at Carnegie Mellon University. Information about The Word, the student handbook, the Office of Graduate and Postdoc Affairs, the Office of the Dean of Student Affairs and others are included in Appendix A of this handbook.*

Note: The information contained in this graduate handbook template focuses on the resources and locations available at the Carnegie Mellon Pittsburgh Campus.

Last revision date (August 31, 2022)

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## Carnegie Mellon University

<https://www.cmu.edu/about/mission.html>

### Vision

Carnegie Mellon University will have a transformative impact on society through continual innovation in education, research, creativity, and entrepreneurship.

### Mission

To create a transformative educational experience for students focused on deep disciplinary knowledge; problem solving; leadership, communication, and interpersonal skills; and personal health and well-being.

To cultivate a transformative university community committed to (a) attracting and retaining diverse, world-class talent; (b) creating a collaborative environment open to the free exchange of ideas, where research, creativity, innovation, and entrepreneurship can flourish; and (c) ensuring individuals can achieve their full potential.

To impact society in a transformative way — regionally, nationally, and globally — by engaging with partners outside the traditional borders of the university campus.

## Mission of the Machine Learning Department

Machine Learning is a scientific field addressing the question "How can machines *learn*, i.e., how to create algorithms and corresponding effective computer implementations capable of automatically analyze data and improve their performance with experience?" We study learning from many kinds of experience: predicting which medical patients will respond to which treatments by analyzing experience captured in databases of online medical records, or building mobile robots that learn models of their environments by gathering navigational experience from their sensors and actively interacting with people, or designing computer aids for scientific discovery that combine initial scientific hypotheses with new experimental data to automatically produce refined scientific hypotheses that better fit observed data.

To tackle these problems, we develop algorithms that discover general conjectures and knowledge from specific data and experience, based on different methods, including sound statistical and computational principles, as well as instruction and self-exploration. We also develop theories of learning processes that characterize the fundamental nature of the computations and experience sufficient for successful learning in machines and in humans.

The mission of the Machine Learning Department is to help lead the development of the discipline of machine learning, by performing leading research in this field, by developing and propagating a model academic curriculum for the field, and by helping society to benefit from the knowledge gained by the field.

We are committed to the principle that students may achieve competence through a variety of methods, including courses, seminars, projects, and independent and guided research. Our curricula are designed to give students the tools they need to solve real-world problems by

using advanced machine learning techniques and developing their own learning algorithms. We are dedicated to providing exceptional training for future leaders in the field.

## Department Personnel

- Martial Hebert, Dean of School of Computer Science (SCS)
- Robert Frederking, Associate Dean for Doctoral Programs, SCS
- David Garlan, Associate Dean for Master's Programs, SCS
- Tom Cortina, Associate Dean for Undergraduate Programs, SCS
- Roni Rosenfeld, Department Head, Machine Learning Department (ML)
- Tom Mitchell, Director, Doctoral Programs in ML
- Katerina Fragkiadaki, Director, Master's Programs in ML
- Matt Gormley, Director, Undergraduate Programs in ML
- Diane Stidle, PhD Programs Administrator, ML
- Dorothy Holland-Minkley, Master's Programs Administrator, ML
- Laura Winter, Undergraduate Programs Administrator, ML
- [ML Core Faculty](#)
- [ML Affiliated Faculty](#)
- [ML Related Faculty](#)
- Russ O'Lare, Business Manager, ML
- Mary Stech, Student Employment Processes Manager, ML
- Christina Melucci, Assistant to the Dept. Head, ML

The Directors serve as ombudspople for graduate students to assist with difficult academic or personal situations where a confidential sounding board and/or an intermediary can be helpful. Examples of situations where students are encouraged to seek advice or assistance include:

- Difficulty in communications with advisor, particularly when those difficulties may lead to considering changing advisors or leaving the program
- Conflict with other group members that is difficult to resolve within the group
- Issues related to diversity or the departmental climate for those in groups who are historically underrepresented in science, or
- Personal concerns that interfere significantly with the ability to make timely progress in research or program requirements. These might be due to health, family or financial challenges.

Upon the student's request, information shared will be kept in confidence, as long as no laws require otherwise. Should help be needed from additional sources, the student would be asked before sharing confidential information.

In the event that a difficulty cannot be resolved within the department, please see the grievance procedures for resolving difficult matters, which are available here:

<https://www.cmu.edu/graduate/policies/appeal-grievance-procedures.html>

Students can also confer with Angie Lusk, [alusk@andrew.cmu.edu](mailto:alusk@andrew.cmu.edu), the SCS Student Affairs contact. Angie Lusk is listed as an emergency contact for all graduate students in SCS, since she serves as a liaison, and students are particularly welcomed to reach out to her with inter-departmental concerns.

## **Degrees Offered**

PhD in Machine Learning

Joint PhD in Machine Learning and Public Policy

Joint PhD in Neural Computation and Machine Learning

Joint PhD in Statistics and Machine Learning

Master's in Machine Learning Research (on the way to the PhD)

[Primary Master's in Machine Learning](#)

[Fifth-Year Master's in Machine Learning](#)

[Master's in Machine Learning – Applied Study](#)

## Expected Background

Incoming students must have a strong background in Computer Science, including a solid understanding of complexity theory and good programming skills, as well as a good background in mathematics. Specifically, the first-year courses assume at least one year of college-level probability and statistics, as well as matrix algebra and multivariate calculus. Experience in MATLAB/R/SciPy-NumPy is especially helpful, as is probability/stats, linear algebra, and matrix and tensor calculus. This background should be at least at the level of the following courses:

15-150 Principles of Functional Programming

15-210 Parallel and Sequential Data Structures and Algorithms

36-225 Introduction to Probability Theory

36-226 Introduction to Statistical Inference

We will accept equivalent coursework or experience from outside of CMU for these prerequisites.

## Master's Degree Progress and Attainment

### ML Degree Requirements

Master's in Machine Learning: 9 12-unit courses + 3-unit Practicum (111 units total)

Master's in Machine Learning – Applied Study: 9 12-unit courses + 3-unit Internship + Professional development (111 units total)

### Policies and Procedures Guiding Degree Progress

#### Graduate Students

Carnegie Mellon graduate students are expected to complete their degree requirements within the standard length of time for their program of study as outlined in the relevant Graduate Student Handbook. Standard program lengths for graduate students vary significantly – ranging from two semesters for some full-time master's programs to several or more years for doctoral programs. Upon completion of the graduate program degree requirements, the degree will be certified by the student's academic program in the semester in which the student completes the requirements.

#### Early Completion

Graduate students who consider the completion of all degree requirements in less than the standard length of time for their program of study may consult with their degree-granting program or department to determine if early degree certification is allowed and under what circumstances.

#### Extended or Longer-than-Standard Completion

Longer-than-standard degree completion may occur due to academic interruptions in making progress toward the degree as defined by the academic program, interruptions of full-time study

or progress towards the degree due to serious, documented medical issues, or other unusual or unforeseen circumstances.

Master's students who require longer than the standard time to complete their degree requirements are expected to remain in close contact with their graduate program, and will be certified at the end of the semester in which they have completed their degree requirements. Students shall reference CMU Policy on Master's Student Statute of Limitations ([www.cmu.edu/policies/student-and-student-life/masters-students-statute-of-limitations.html](http://www.cmu.edu/policies/student-and-student-life/masters-students-statute-of-limitations.html)) regarding guidelines and restrictions which place an upper limit on the maximum length of time allowable for master's degree completion and certification.

### **Additional Guidance for Students**

**Program of study.** Students seeking guidance about their program of study and degree requirements should consult with their academic advisor and/or appropriate associate dean.

**Financial aid and student account.** Students are expected to make normal progress toward their degree in order to graduate within the standard timeframe for their program of study. Under U.S. Federal Title IV regulations, student eligibility for federal financial aid is contingent upon enrollment in and successful completion of courses that are counted as credit toward their current degree program. To receive the maximum amount of federal financial aid for which they may be eligible, students must enroll each semester in at least 36 units that count toward their current degree level. (See separate guidance regarding integrated degree completion.)

Students should consult with their designated college liaison in The HUB regarding billing and financial aid, particularly for early completion, longer-than-standard completion, or integrated undergraduate and master's degree programs.

**International students.** Immigration status for students in F-1 and J-1 non-immigrant status is tied to making normal progress toward completing degree requirements. Therefore, F-1 and J-1 students who are considering completing their degree requirements early, anticipating longer-than-standard completion, or moving from an undergraduate to a graduate student classification (integrated undergraduate-graduate study) should consult with their designated advisor in the Office of International Education (OIE) to ensure compliance with immigration regulations.

### **Integrated Bachelor & Master's Degree Programs**

Note: This academic regulation will be in effect for first- and second-year students starting in the 2022-23 Academic Year, and can offer helpful guidance and insights for third- and fourth-year students, as well as fifth-year architecture students.

The integration of bachelor and master's degree programs ("IBM" programs) benefits CMU students who elect to maximize their use of time and academic energy to blend their undergraduate studies with master's-level study in close combination, in an integrated program of study at CMU. Some CMU departments and programs have developed integrated options for students in response to student desires for such opportunities and to enliven their graduate programs with students who are well-acclimated to the rigor and demands of the CMU educational experience.

## General Information

Carnegie Mellon students in integrated bachelor-master's programs are expected to complete their degree requirements within a standard length of time for their full-time program of study as outlined in the Undergraduate Catalog and relevant Graduate Student Handbook. This document describes several standard models for the CMU integrated bachelor-master's degree programs, some of which involve acceleration of either the undergraduate or the graduate degree component (or both) within the integrated program designs. Each CMU integrated program offers specific, pre-determined model(s) of integrated study reflecting one of the following:

- 4+0 meaning that a student will complete both undergraduate and master's degree coursework in eight semesters (four years) of full-time study. This model generally applies when the undergraduate and graduate field of study are the same, such as an undergraduate and master's degree in Chemistry or Mathematics.
- 3-1-1 meaning three years of full-time undergraduate coursework, followed by one year of integrated undergraduate and graduate study, and one year of exclusively master's level coursework for a total of five years of full-time study. An example would be undergraduate degrees integrated with Heinz College or Tepper graduate degree programs. The undergraduate degree generally is completed in eight semesters of full-time study (or less.)
- 4+1 semester meaning eight semesters (four years) of full-time undergraduate coursework including integration of some master's level courses, followed by one semester of exclusively master's level coursework for a total of four and a half years. The undergraduate degree generally is completed in eight semesters of full-time study (or less.)
- 4+2 semesters meaning eight semesters (four years) of full-time undergraduate coursework including integration of some master's level courses, followed by two semesters of exclusively master's level coursework for a total of five academic years. The undergraduate degree is completed in eight semesters of full-time study (or less.)
- 4+3 semesters meaning eight semesters (four years) of full-time undergraduate coursework including integration of some master's level courses, followed by three semesters of exclusively master's level coursework for a total of five and a half academic years. The undergraduate degree is completed in eight semesters of full-time study.
- 5+1 for architecture meaning five years of Bachelor of Architecture (B.Arch.) undergraduate coursework followed by two semesters of full-time master's level coursework for a total of six academic years. The B.Arch. undergraduate degree generally is completed in 10 semesters.

The standard undergraduate program of study is grounded in a primary degree and its requirements, and may be complemented by an additional major(s) or minor(s) as part of the academic plan. Some students decide to apply for one of CMU's several integrated degree programs to complement their undergraduate degree with an integrated or accelerated master's degree. Depending on the model of the integrated program, when an undergraduate student applies to an IBM program, they recognize that the standard for undergraduate study will be

eight semesters (or 10 for B.Arch.), plus one, two, three or four additional semesters of full-time graduate-level study (except for the 4+0 model, above) to complete the master's degree.

CMU students in most IBM programs are considered to be undergraduates until they have completed the requirements for their bachelor degree at which point they are certified by their undergraduate academic program; this typically occurs at the time determined to be the standard for their integrated program following a successful seven or eight semesters (or 10 for B.Arch.) of full-time enrollment, depending on the design of their integrated program. However, in one rare model, the integrated program design holds the bachelor degree certification to be given concurrently with the master's degree in the ninth or tenth semester of full time enrollment.

**Early completion of undergraduate degree.** An IBM student who has completed all undergraduate degree requirements in fewer than the standard number of semesters for their program may request an early undergraduate degree certification from their undergraduate program, in close consultation with their academic advisor(s). This situation, while possible, is not common due to the necessity of staying on track for both undergraduate and master's degree programs in an integrated manner.

**Movement from undergraduate to graduate student classification.** Students in an IBM program who are certified as having completed their undergraduate degree – typically in the number of semesters that is the standard for their integrated program – then will be classified as a graduate student at CMU, and are expected to complete their graduate degree requirements within the standard length of time for their integrated program of study. Students should be aware of and plan for financial implications, including financial aid, and/or F-1/J-1 non-immigrant implications due to the change of level when moving from undergraduate student status to graduate student status at CMU. (See details below.)

**The standard for the graduate component of the IBM student/program.** Upon completion of the graduate program degree requirements in the standard period of study, the graduate degree will be certified in the semester in which the student completes the requirements by the student's graduate program.

**Early completion of the graduate degree requirements.** Graduate students who consider the completion of all degree requirements in less than the standard length of time for their program of study must consult with their degree-granting program or department to determine if early degree certification is allowed academically and under what circumstances.

**Incomplete graduate degree requirements.** In some cases, students in an IBM program may withdraw from the graduate component of the program of study and, therefore, will not be certified or awarded the graduate degree. Any such withdrawal decision also may require close consultation with the undergraduate advisor to determine eligibility for undergraduate degree completion and certification of the undergraduate degree is not already certified.

**Extended or longer-than-standard graduate degree completion.** Longer-than-standard degree completion may occur due to academic interruptions in making progress toward the

degree as defined by the academic program, interruptions of full-time study or progress toward the degree due to serious, documented medical issues, or other unusual or unforeseen circumstances.

IBM students who require longer than the standard time to complete their graduate degree requirements are expected to remain in close contact with their graduate program, and will be certified at the end of the semester in which they have completed their degree requirements. Students shall reference CMU Policy on Master's Student Statute of Limitations ([www.cmu.edu/policies/student-and-student-life/masters-students-statute-of-limitations.html](http://www.cmu.edu/policies/student-and-student-life/masters-students-statute-of-limitations.html)) regarding guidelines and restrictions which place an upper limit on the maximum length of time allowable for master's degree completion and certification.

### **Additional Guidance for Students**

**Program of study.** Students seeking guidance about their program of study and degree requirements should consult with their academic advisor and/or appropriate dean.

**Financial aid and student account.** Students are expected to make normal progress toward their degree in order to graduate within the standard timeframe for their program of study. Under U.S. Federal Title IV regulations, student eligibility for federal financial aid is contingent upon enrollment in and successful completion of courses that are counted as credit toward their current degree program. To receive the maximum amount of federal and state financial aid for which they may be eligible, students must enroll each semester in at least 36 units that count toward their current degree level. CMU institutional undergraduate grants support undergraduate degree completion and on-time graduation; institutional undergraduate grants for students in undergraduate programs and in IBM programs are renewable for eight semesters (and 10 for B.Arch.).

Students should consult with their designated college liaison in The HUB regarding billing and financial aid, particularly for early completion, longer-than-standard completion, or integrated bachelor and master's degree programs.

**International students.** Immigration status for students in F-1 and J-1 non-immigrant status is tied to making normal progress toward completing degree requirements.

Therefore, F-1 and J-1 students who are considering completing their degree requirements early, anticipating longer-than-standard completion, or moving from an undergraduate to a graduate student classification (integrated undergraduate-graduate study), should consult with their designated advisor in the Office of International Education (OIE) to ensure compliance with immigration regulations.

### **Statute of Limitations**

As outlined in the Master's Students Statute of Limitations, <http://www.cmu.edu/policies/student-and-student-life/masters-students-statute-of-limitations.html>, students who have matriculated at Carnegie Mellon beginning Fall 2012 or later will complete all requirements for the master's degree within a maximum of seven years from original matriculation as a master's student, or less if required by a more restrictive department, school or college policy. Once this time-to-

degree limit has lapsed, the person may resume work towards a master's degree only if newly admitted to a currently offered master's degree program under criteria determined by that program.

Under extraordinary circumstances, such as leave of absence, military or public service, family or parental leave, or temporary disability, a school or college may, upon the relevant department's recommendation and with the written approval of the dean (or designate), defer the lapse for a period commensurate with the duration of that interruption. Students who are pursuing a master's degree as part-time students for all semesters of their program, as approved by their program, may also appeal to their program or department for extension of the time to degree limit.

### **Student Progress**

Student progress will be evaluated at the end of each academic semester by the MLD faculty. Students will enter information into the MLD online system to inform the faculty of their goals for the semester and if they were achieved. For students in the MSML-AS program, this includes a report to the program director on their coursework and professional development activities. The student will also enter their plans for the next semester. After the faculty meet, the assessment of the student's progress will be communicated via the same online system.

### **Internship Opportunities**

You must discuss your plans for an internship with your advisor for approval. The summer semester is the optimal time for an internship.

International students are required to consult with the Office of International Education for eligibility before seeking an internship/co-op or signing an offer contract. The dates of the internship must be within the dates of the semester, as determined by the university.

### **Registering for Internships**

You should register for 10-635 Practicum. Upon completion of the internship you must submit an internship report to your program administrator.

Your faculty advisor will assign a pass/fail grade. Advisors are individually responsible for adequately supervising this portion of the programs.

### **Resources to Obtain an Internship**

- Department Internship announcements
- University Career Fairs
- [Career and Professional Development Center](#)

## Primary Master's Program in Machine Learning

This highly selective program consists primarily of coursework, with a very limited research component, and typically takes three to four semesters to complete.

### Program Requirements

To complete the degree of Master of Science in Machine Learning, we require that each student:

- Complete the MSML Course Requirements, described below
- Complete a practicum, described below

In addition, students must satisfy all university requirements for the graduate degree:

<http://www.cmu.edu/graduate/policies>

### MSML Course Requirements

The six core courses together provide a foundation in machine learning, statistics, probability, algorithms, and AI. They also provide depth in both theory and application of machine learning to problems in the real world. The three electives can be used to deepen the student's knowledge in their chosen subfield.

### Set Core

Students take **all six** courses from the Core:

- 10-701 Introduction to Machine Learning *or* 10-715 Advanced Introduction to Machine Learning
- 10-617 Intermediate Deep Learning *or* 10-703 Deep Reinforcement Learning *or* 10-707 Topics in Deep Learning
- 10-708 Probabilistic Graphical Models
- 10-718 Machine Learning in Practice
  - This course is designed to give students hands-on experience in using ML to tackle real-world problems and develop a sensitivity to the issues surrounding transitioning machine learning algorithms to practice, including working with stakeholders to frame the problem appropriately, developing machine learning pipelines, taking into account concerns such as fairness and bias, and measuring the societal impact of the deployed system.
- 10-725 Convex Optimization
- 36-700 Probability & Mathematical Sciences *or* 36-705 Intermediate Statistics

*Note:* MS students interested in pursuing the ML PhD should consider taking 10-715 and 36-705 instead of 10-701 and 36-700, due to the course requirements of the ML PhD. If a student takes 10-701 and later enters the PhD, they may be able to use 10-701 to fulfill that requirement, as described in the Course Waiver Policy section below.

### Electives

Students take their **choice of three** courses from the Electives:

- 10-613/10-713 Machine Learning Ethics and Society
- 10-605/10-805 Machine Learning with Large Datasets
- 10-703 Deep Reinforcement Learning
- 10-707 Topics in Deep Learning
- 10-714 Deep Learning Systems: Algorithms and Implementation
- 10-716 Advanced Machine Learning: Theory and Methods
- 10-717 The Art of the Paper (6 units = ½ Elective)
- 10-721 Philosophical Foundations of Machine Intelligence (6 units = ½ Elective)
- 10-730 Advanced AI and Brain Seminar (6 units = ½ Elective)
- 10-732 Robustness and Adaptation in Shifting Environments
- 10-745 Scalability in Machine Learning
- 10-777 Historical Advances in Machine Learning
- 10-813 Advanced Topics in Machine Learning Theory
- 10-XXX Special Topics in Machine Learning (*course numbers vary*)
- 11-711 Algorithms for NLP
- 11-741 Machine Learning for Text Mining
- 11-747 Neural Networks for NLP
- 11-777 Multimodal Machine Learning
- 15-750 Algorithms in the Real World or 15-850 Advanced Algorithms
- 15-780 Graduate Artificial Intelligence
- 15-826 Multimedia Databases and Data Mining
- 16-720 Computer Vision
- 36-707 Regression Analysis
- 36-709 Advanced Probability
- 36-710 Advanced Statistical Theory
- 10-620 Independent Study (see the Independent Study section below)
- 10-620 Independent Study
- 10-620 Independent Study

### Practicum Requirements

To earn the MSML, students must complete a 3-unit practicum. This practicum may be either directed research or an internship related to machine learning. Unlike Independent Study, directed research for the practicum does NOT need to be under ML Core Faculty. Most students complete the practicum during the summer, and it may be paid or unpaid.

### Independent Study

The Machine Learning Department allows Independent Study for credit. To count, an Independent Study must be for 12 units and be supervised by a Machine Learning Department Core Faculty member. To request approval of an independent study, the student should give their program administrator: an indication of support from the supervising faculty member, a description of the work to be undertaken, and a short description of the deliverables that will be due to the research advisor at the end of each semester, such as a write-up of work done, a

summary of the literature studied, a copy of the code produced, or a presentation to the research group.

With pre-approval, research conducted under the guidance of a faculty member who is not Machine Learning Department Core Faculty can count as an Independent Study. To request approval for such an Independent Study, the student must email the Program Director with the name and affiliation of the proposed research advisor and a proposal of the work to be done and how it relates to machine learning (approximately one page).

Only one Independent Study can be completed per semester and it is expected that it will be with the same research group for the full semester. Students should only make a commitment to work with one research group at a time. A student who is sitting in on multiple research groups' meetings should be sure to tell the faculty that they are doing so to learn about the group's work, not as a commitment to work with that group.

In rare circumstances, the Machine Learning Department allows students to count courses taken at outside universities while at MLD; these are listed as Independent Study credit, and are not subject to the 12-unit requirement above. The approval process is the same as for other Independent Study courses: the deliverable is the outside course grade, while the supervising faculty member certifies that the course is appropriate for the student and the number of credit hours, and is responsible for recommending a grade threshold to the program director at the beginning of the course, as well as verifying the threshold at the end of the course.

### **Residency Requirements**

Students in the Primary Master's in Machine Learning program must complete at least 72 units of MSML coursework and the practicum while enrolled in the program, regardless of previous coursework.

Most students complete the program full-time in three consecutive semesters plus a full-time summer practicum. However, part-time enrollment is allowed.

### **Program Milestones**

Students completing the program full-time are expected to take at least 3 courses for the Primary Master's program in each semester, unless they have fewer than 3 courses remaining. Students may overload to take additional courses with advisor approval, though approval to overload is very rare in the first semester.

Most students follow the following timeline:

- First semester: Complete 10-701 (or 10-715), 36-700 (or 36-705), and one other course
- Second semester: Complete three courses
- Summer: Complete the practicum
- Third semester: Complete 10-718 and the final two courses

Students completing the program part-time are expected to contact their advisor to determine an appropriate timeline for their situation.

## Previously Taken Courses

### *Courses taken at other Universities*

Some students will have taken courses similar to ours at other universities before entering the Primary Master's program. Based on such equivalent coursework, any student can apply to replace (not reduce) up to two courses with MSML electives.

### *Courses taken at Carnegie Mellon University*

Courses taken at Carnegie Mellon University *used to fulfill the requirements of a bachelor's or another master's degree* cannot be counted towards the Primary Master's in Machine Learning program.

**Course Replacement:** Any student who took courses from the Master's in Machine Learning curriculum at Carnegie Mellon before entering the program can apply to replace (not reduce) those courses with MSML electives if the grade obtained was B- or above.

**Course Reduction:** If students have previously taken courses from the Master's in Machine Learning curriculum at Carnegie Mellon and have not used them towards another degree, up to three of them may be used to satisfy the Primary Master's in Machine Learning requirements and do not need to be repeated or replaced if the grade obtained was B- and above.

### **Summer Internships for MS Students**

During the summer semester, Master's students need to secure a summer internship or summer directed research. You must discuss your summer plans with your advisor and register for the appropriate course: 10-635 Practicum (3 units) for an internship or 10-697 Reading and Research (usually 36 units) for research at Carnegie Mellon. At the end of the practicum, you must submit a short, written report to your advisor, who will determine your pass/fail grade for the semester. The Practicum course and the Reading and Research course will count towards your program requirements.

*Note:* International students must apply for Curricular Practical Training (CPT) with the Office of International Education for immigration authorization for internships within the United States before committing to an internship. The dates of your internship must be within the dates of the semester, as determined by the university.

### **Financial Support**

The MS program does not offer any type of financial support. Tuition for this program is the responsibility of the student.

## Fifth-Year Master's in Machine Learning

The Fifth-Year Master's in Machine Learning allows CMU undergraduates to complete a MS in Machine Learning in one additional year by taking some of the required ML courses as an undergraduate.

### Program Requirements

To complete the degree of Master of Science in Machine Learning, we require that each student:

- Complete the MSML Course Requirements, including 6 Core and 3 Elective courses. These Course Requirements are the same as in the Primary Master's section above
- Complete a practicum, as described in the Primary Master's section above
- Be enrolled full-time (at least 36 units per semester)

*Note:* A student may use one 400- or 500-level elective taken as an undergraduate if its requirements are identical to an approved cross-listed graduate-level course, as indicated by the course syllabus or an email from the instructor.

In addition, students must satisfy all university requirements for the graduate degree:

<http://www.cmu.edu/graduate/policies>

### Residency Requirements

Students in the Fifth-Year Master's in Machine Learning program must complete 72 units of MSML coursework and the practicum while enrolled in the master's program, after completion of their bachelor's degree. They must also be enrolled full-time for both of the semesters and the summer. Students may overload to take additional courses with advisor approval, but must remain enrolled full-time for both semesters regardless.

### Program Milestones

Students are expected to complete at least 3 courses for the Fifth-Year Master's program in their first semester and complete the coursework in their second semester.

Most students follow the following timeline:

- By end of summer after senior year: Complete the practicum
- By end of the first semester of fifth year: Complete 36-700 (or 36-705), 10-718, and one other course
- By end of the second semester of fifth year: Complete the final three courses

In particular, it is the student's choice if they wish to complete the practicum in the summer between senior year and the fifth year or during the summer after the fifth year.

### Previously Taken Courses

To enter the Fifth-Year Master's in Machine Learning, you will have to have successfully completed the "Introduction to Machine Learning" course requirement (10-701 or 10-715) and two other required courses during your undergraduate years at Carnegie Mellon. These three courses taken as an undergraduate may be counted towards both your undergraduate degree

and the Fifth-Year master's degree (though note that triple-counting, such as between a minor, major, and the master's, is never allowed). Taking more than three courses from the MSML curriculum as an undergraduate does not further decrease the number of courses that must be taken from the MSML curriculum as a master's student.

For any additional courses taken from the MSML curriculum beyond the standard three, if you earned at least a B- grade, you do not need to repeat them and can instead replace them with MSML electives.

For the "Introduction to Machine Learning" course requirement, instead of taking 10-701 or 10-715 you may instead take both 10-315 Introduction to Machine Learning (SCS Majors) and 15-281 Artificial Intelligence: Representation and Problem Solving. Together, these two courses can fulfill the "Introduction to Machine Learning" course requirement. Note that they will remain listed as 10-315 and 15-281 on your transcript, and the two of them together count as "one course" for the purpose of the Fifth-Year MS. For the purposes of double-counting, only 12 units' worth of 10-315 or 15-281 is used towards the MS.

### **Financial Support**

The MS program does not offer any type of financial support. Tuition for this program is the responsibility of the student.

## Master's Program in Machine Learning – Applied Study

This highly selective program combines coursework, an internship, and professional development to train students to be the next leaders in industry. This alternative to the traditional Master of Science in Machine Learning provides certification that the student has experience in industry and is prepared for the distinct challenges of applying machine learning in non-academic settings. It typically takes three to four semesters to complete.

### Program Requirements

To complete the degree of Master of Science in Machine Learning – Applied Study (MSML-AS), we require that each student:

- Complete the ML Course Requirements, including 6 Core and 3 Elective courses. These Course Requirements are the same as in the Primary Master's section above
- Complete an internship, described below
- Complete professional development activities, described below

In addition, students must satisfy all university requirements for the graduate degree:

<http://www.cmu.edu/graduate/policies>

### Internship Requirements

During the summer semester, MSML-AS students need to secure a full-time summer internship related to machine learning. You must discuss your summer plans with your advisor and register for 3 units of 10-635 Practicum. At the end of the practicum, you must submit a written report to the program director, who will determine your pass/fail grade for the semester. The Practicum course will count towards your program requirements.

The MSML-AS program does not guarantee that each student will be able to secure a summer internship, and so MLD will offer summer research opportunities as a backup option for students unable to obtain external internships. MLD faculty can provide research opportunities in a wide range of applied fields to any MSML-AS students who are unable to secure an internship. However, the expectation is that all MSML-AS students will secure summer internships; research is only allowed as a substitute in the case of extenuating circumstances.

*Note:* International students must apply for Curricular Practical Training (CPT) with the Office of International Education for immigration authorization for internships in the United States before committing to an internship. The dates of your internship must be within the dates of the semester, as determined by the university.

### Professional Development Requirements

To help them prepare for this internship, MSML-AS students will complete the CPDC's Canvas Course Module before beginning the program.

MSML-AS students will be expected to join the Machine Learning Department LinkedIn group to connect with alumni and to provide their resume to the MSML-AS program coordinator to share with prospective employers, unless the student has privacy concerns that would prevent the sharing of their information.

Students who do not already have industry experience in a related field will be guided to strengthen their professional skills by participating in workshops and seminars like those hosted by the Career and Professional Development Center (such as the Resume Lab or Interview Prep Lab), the Student Academic Success Center (such as Communicating Data Effectively or Professional Talk), and the Global Communication Center (such as Creating Effective PowerPoint Presentations or Team Communication), such as their individual needs require.

### Residency Requirements

Students in the Primary Master's in Machine Learning – Applied Study program must complete at least 72 units of MSML coursework and the practicum while enrolled in the program, regardless of previous coursework.

Most students complete the program full-time in three consecutive semesters plus a full-time summer practicum. However, part-time enrollment is allowed.

### Program Milestones

Students completing the program full-time are expected to take at least 3 courses for the Primary Master's program in each semester, unless they have fewer than 3 courses remaining. Students may overload to take additional courses with advisor approval, though approval to overload is very rare in the first semester.

Most students follow the following timeline:

- Summer before coursework: Complete the CPDC's Canvas Course Module
- First semester: Complete 10-701 (or 10-715), 36-700 (or 36-705), and one other course
- Second semester: Complete three courses
- Summer: Complete the internship
- Third semester: Complete 10-718 and the final two courses

Students completing the program part-time are expected to contact their advisor to determine an appropriate timeline for their situation.

### Previously Taken Courses

#### *Courses taken at other Universities*

Some students will have taken courses similar to ours at other universities before entering the Primary Master's program. Based on such equivalent coursework, any student can apply to replace (not reduce) up to two courses with MSML electives.

#### *Courses taken at Carnegie Mellon University*

Courses taken at Carnegie Mellon University *used to fulfill the requirements of a bachelor's or another master's degree* cannot be counted towards the Primary Master's in Machine Learning – Applied Study program.

**Course Replacement:** Any student who took courses from the Master's in Machine Learning curriculum at Carnegie Mellon before entering the program can apply to replace (not reduce) those courses with MSML electives if the grade obtained was B- or above.

**Course Reduction:** If students have previously taken courses from the Master's in Machine Learning curriculum at Carnegie Mellon and have not used them towards another degree, up to three of them may be used to satisfy the Primary Master's in Machine Learning – Applied Study requirements and do not need to be repeated or replaced if the grade obtained was B- and above.

### **Financial Support**

The MSML-AS program does not offer any type of financial support. Tuition for this program is the responsibility of the student.

## Registration Policies

During the during the fall and spring semesters, MS students should normally be registered for at least 36 units. During the summer, students should be registered for 3 or 36 units, depending on how they are completing the practicum.

### Cross Registration Program with Local Universities

<https://www.cmu.edu/policies/student-and-student-life/transfer-credit-evaluation-and-assignment.html>

Carnegie Mellon University offers students the opportunity to take courses for credit through a cross-registration program (see Pittsburgh Council on Higher Education (PCHE) and Cross-registration below) and through the receipt of transfer credit from other accredited institutions. The Carnegie Mellon University transcript will include information on such courses as follows: Carnegie Mellon courses and courses taken through the university's cross-registration program will have grades recorded on the transcript and be factored into the QPA. All other courses will be recorded on this transcript indicating where the course was taken, but without grade. Such courses will not be taken into account for academic actions, honors or QPA calculations. (Note: Suspended students may take courses elsewhere; however, they may receive transfer credit only if their college's and department's policies allow this.)

### Course Add/Drop Policy

Students are able to add, drop, and withdraw from courses for a limited time after the first day of class. The university's policies can be found at the HUB website:

<https://www.cmu.edu/hub/registrar/course-changes/>

Students taking undergraduate and master's level courses must follow the procedures and deadlines for adding, dropping, or withdrawing from courses as identified on the academic calendar. Information can be found at <https://www.cmu.edu/hub/registrar/course-changes/index.html>. There is a separate calendar for doctoral level courses.

- Full-time graduate student status, according to the University and the Department, is 36 units in Fall and Spring and 3 units in the Summer.
- Dropping below full-time may affect your financial aid eligibility, loan repayment, housing, tax dependency and/or visa status, and varsity sports eligibility.
- Dropping all courses is not the equivalent of leaving the university temporarily (leave of absence) or permanently (withdrawal). A student who wishes to remove him/herself from the university must submit either a Leave of Absence or Withdrawal form.

### Course Audit Policy

Auditing is presence in the classroom without receiving academic credit, a pass/fail, or a letter grade. Audited courses will not count towards your degree requirements. The extent of a student's participation must be arranged and approved by the course instructor. A student wishing to audit a course is required to register for the course, complete the Course Audit Approval Form, obtain permission of the course instructor and their advisor, and return the form to the Registrar's Office prior to the 10<sup>th</sup> day of class.

Any student enrolled full-time may audit a course without additional tuition charges. Part-time students who choose to audit a course will be assessed tuition at the regular per-unit tuition rate.

## Grades and Grading

University Policy on Grades [www.cmu.edu/policies/student-and-student-life/grading.html](http://www.cmu.edu/policies/student-and-student-life/grading.html)

This policy offers details concerning university grading principles for students taking courses and covers the specifics of assigning and changing grades, grading options, drop/withdrawals and course repeats. It also defines the undergraduate and graduate grading standards.

For Machine Learning students, course work with a grade of C+ or lower is not acceptable toward graduate degree requirements. Students receiving a grade of C+ or lower will either have to retake the course or work with the instructor to do remedial work to prove they have learned the material.

A course offered by the Machine Learning Department as Pass/Fail may be declared by the Machine Learning Department as counting (if passed) towards degree requirements.

## Process for Appealing Final Grades

<https://www.cmu.edu/student-affairs/theword/academic/appeal-of-grades-and-academic-actions.html>

Final grades will be changed only in exceptional circumstances and only with the approval of the instructor and the department, unit or program. Grading is a matter of sound discretion of the instructor and final grades are rarely changed without the consent of the instructor who assigned the grade. The following circumstances are the unusual exceptions that may warrant a grade appeal: (a) the final grade assigned for a course is based on manifest error (e.g. a clear error such as arithmetic error in computing a grade or failure to grade one of the answers on an exam), or (b) the faculty or staff member who assigned the grade did so in violation of a University policy.

## Policy on Grades for Cross-registration Courses

<http://www.cmu.edu/policies/student-and-student-life/transfer-credit-evaluation-and-assignment.html>

Carnegie Mellon University offers students the opportunity to take courses for credit through a cross-registration program (see Pittsburgh Council on Higher Education (PCHE) and Cross-registration below) and through the receipt of transfer credit from other accredited institutions. The Carnegie Mellon University transcript will include information on such courses as follows: Carnegie Mellon courses and courses taken through the university's cross-registration program will have grades recorded on the transcript and be factored into the QPA. All other courses will be recorded on this transcript indicating where the course was taken, but without grade. Such courses will not be taken into account for academic actions, honors or QPA calculations.

The Machine Learning Department does not accept transfer credit. While it is rare, requirements may sometimes be replaced if students have taken equivalent coursework elsewhere. The Director of the program will decide whether a certain course may be replaced based on the accreditation of the institution offering the course, the course description, the learning outcomes of the course, the course syllabus, and student work product. This replacement is rare, and students should not expect to have requirements replaced based on courses taken at other institutions. Refer to the Course Waiver Policy section for more information.

PhD students who follow their advisors and enter the MLD PhD program are considered exceptional cases and will be reviewed on an individual basis to determine course waivers.

### **Academic Integrity**

Please review the University Policy on Academic Integrity (<https://www.cmu.edu/policies/student-and-student-life/academic-integrity.html>). The policy includes the University expectations around academic integrity and provides definitions of cheating, plagiarism, and unauthorized assistance.

A review of the University's Academic Disciplinary Actions procedures (<https://www.cmu.edu/student-affairs/theword/academic-discipline/index.html>) is also recommended. These procedures outline the process for investigating, reporting, and adjudicating violations of the University Policy on Academic Integrity. The procedures also outline the appeal process.

A first violation usually has repercussions at the course level, such as failure of the course. Depending on severity, however, a first violation may result in program-level repercussions, including dismissal from the program and recommendation for expulsion from the university. Academic integrity on research papers, including a dissertation, is also enforced strictly; citations are required to avoid plagiarism, including self-plagiarism. A second academic integrity violation usually results in dismissal from the program and recommendation for expulsion from the university.

Violations will be discussed at the end of semester review meeting and the department reserves the right to assess additional penalties to the student, as outlined in the University Policy found at: <https://www.cmu.edu/student-affairs/ocsi/academic-integrity/grads.html>

Machine Learning master's students are required to complete the OLI online course on Academic Integrity in both of their first two semesters in the program: <https://oli.cmu.edu/>

### **Master's Student Review**

The Machine Learning faculty meet at the end of each academic semester to make a formal evaluation of each student in the program. The program directors and faculty research advisors communicate in written form the assessment from these Master's Student Review meetings to the graduate students. Additional oral conversations take place, as and if needed.

Evaluation and feedback on a student's progress are important both to the student and to the faculty. Students need information on their overall progress to make long range plans.

At each semi-annual Master's Student Review meeting, the faculty review the student's previous semester's coursework and research progress (if applicable) and the student's next semester's plans to ensure that the student is making satisfactory progress. The evaluation of a student's progress in directed research often depends on the student having produced some tangible result; examples include the implementation of pieces of a software system, a written report on research explorations, an annotated bibliography in a major area, or, as part of preparation for doing research, a passing grade in a graduate course (beyond the required core courses and electives).

The purpose of having all the faculty meet together to discuss all of the students is to ensure uniformity and consistency in the evaluation by all of the different advisors. The faculty measure each student's progress against the goal of completing the program in a reasonable period of time. In their evaluation, the faculty consider courses taken, directed research, teaching if applicable, skill, development, papers written and lectures.

The faculty's primary source of information about the student is the student's advisor. The advisor is responsible for assembling the above information and presenting it at the faculty meeting. The student should make sure the advisor is informed about participation in activities and research progress made during the semester. Each student is asked to submit a summary of this information to the advisor at the end of each semester; this summary is viewable by all faculty during the Master's Student Review meeting.

Based on the above information, the faculty decide whether a student is making satisfactory progress in the program. If so, the faculty usually suggest goals for the student to achieve over the next semester. If not, the faculty make more rigid demands of the student.

Ultimately, permission to continue in the program is contingent on whether or not the student continues to make satisfactory progress toward the ML degree. If a student is not making satisfactory progress, the faculty may choose to drop the student from the program.

#### **Terms of progress in Master's Student Review letters from faculty:**

Each Master's Student Review letter will include a code indicating your current progress. The codes we use are:

SP = In the semiannual evaluation of all our students the faculty reviewed your progress toward the MS. We have determined that your current level of progress is satisfactory.

USP = We have determined that your current level of progress is unsatisfactory. The letter will contain specific instructions for how to return to SP standing.

N-2 = We have determined that there are significant problems with your current level of progress. Accordingly, this is an N-2 letter: you are in danger of receiving an N-1 letter at the next Master's Student Review meeting unless you improve your rate of progress in the program. The letter will contain specific instructions for how to return to SP standing.

N-1 = This is an N-1 letter. You may not be allowed to continue in the program past the next Master's Student Review meeting unless you satisfy specific conditions that will be given in the letter.

### **Process for Leave of Absence and Return from Leave of Absence**

Students who wish to leave the program temporarily may request a leave of absence by submitting a request to their program administrator. Leaves are initially granted for a period of no more than one year, but an extension of up to one additional year may be granted under exceptional circumstances. When an extension is granted, the conditions for return must be negotiated with the advisor and the Director, prior to returning to the program. The return must typically be at the start of a semester.

Students on leave of absence should contact their program administrator two months prior to the end of the leave to indicate their plans for the next year.

University process for leave of absence: <https://www.cmu.edu/hub/registrar/leaves-and-withdrawals/>

### **Process for Withdrawal from Program**

Students who wish to withdraw from the program should first discuss it with their advisor and then notify their program administrator.

University process for withdrawal from program: <https://www.cmu.edu/hub/registrar/leaves-and-withdrawals/>

## **Resources and Regulations Governing Research at Carnegie Mellon** [Office of Research Integrity & Compliance](#)

Carnegie Mellon University promotes the responsible conduct of research through high standards of ethics and accountability in planning, conducting and reporting research. The responsible conduct of research is demonstrated through behavior that meets generally accepted standards. These standards are set forth by state and federal regulations, institutional policies, professional codes of conduct, and personal convictions. The building blocks of responsible conduct of research include:

- Honesty - conveying information truthfully and honoring commitments,
- Accuracy - reporting findings precisely and taking care to avoid errors,
- Efficiency - using resources wisely and avoiding waste, and
- Objectivity - letting the facts speak for themselves and avoiding improper bias

We may ask graduate students to complete the CITI on-line education course: [CITI's website](#).

- Office of Sponsored Programs, <https://www.cmu.edu/osp/>
- Office of Research Integrity & Compliance <https://www.cmu.edu/research-compliance/index.html>

- Intellectual Property Policy <https://www.cmu.edu/policies/administrative-and-governance/intellectual-property.html>
- Policy on Restricted Research <https://www.cmu.edu/policies/research/restricted-research.html>

Human Subjects in Research Policy <https://www.cmu.edu/policies/research/human-subjects-in-research.html>

Link to University Policies: <http://www.cmu.edu/policies/>

## Teaching Requirements

For a student to be considered for a Teaching Assistant (TA) position for one of our courses, they should have previously taken that course or a similar course.

If the student's native language is not English, they will be required to take the International Teaching Assistant (ITA) test.

### Evaluation and Certification of English Fluency for Instructors

Graduate students are required to have a certain level of fluency in English before they can instruct in Pennsylvania, as required by the English Fluency in Higher Education Act of 1990. Through this Act, all institutions of higher education in the state are required to evaluate and certify the English fluency of all instructional personnel, including teaching assistants and interns.

In addition to administering the International Teaching Assistant (ITA) Test (a mandatory screening test for any non-native speaker of English), the Language Support in the Student Academic Success Center helps teaching assistants who are non-native English speakers develop fluency and cultural understanding to teach successfully at Carnegie Mellon. Visit the Student Academic Success Center website for additional information:

<https://www.cmu.edu/student-success/>

The full university policy can be reviewed at: <http://www.cmu.edu/policies/faculty/evaluation-certification-english-fluency-instructors.html>. The fluency of all instructional personnel will be determined by each department.

The Eberly Center for Teaching Excellence is a resource for TA and instructor training and included in the section *Additional University Resources, Appendix A*.

The responsibilities of a TA vary with different courses. Examples are:

- Help design homework assignments and other instructional materials
- Give recitations
- Grading
- Help with organizing poster sessions (if applicable)
- Advise small groups of students for class projects (if applicable)
- Hold office hours for individual tutoring

## Departmental Resources

The Machine Learning Department is located on the 8<sup>th</sup> floor of Gates Hillman Center (GHC).

Location of multi-function printers, available to those with a CS account, and printing etiquette is found here: <http://www.cs.cmu.edu/~help/printing/index.html>

Information about public computer clusters and printers can be found at:  
<http://www.cs.cmu.edu/~help/printing/index.html>

The department's fax machine is located in the PhD Programs Administrator's office, 8001 GHC.

Key Distribution: Machine Learning MS students (except Secondary MS students) can use their CMU student ID to access the MSML/MSCS Lounge in TEP 1400, and can request access to a locker in the lounge from the Master's Programs Administrator.

CS Main Office: We do not have our own Main Office or mail facilities. CS is allowing us to use the following services.

Functions of the CS Main Office:

- Send mail
- Pick up mail/packages
- Send overnight packages

Please do not take any supplies from the CS Main office; office supplies for MSML students are provided in the MSML/MSCS Lounge.

Mailboxes are located on the 8<sup>th</sup> floor of GHC. A US Post Office is located in the basement of University Center.

To have packages delivered to you, please use the following address:

Your Name  
Carnegie Mellon University/Computer Science  
311 Hamerschlag Drive/Wean Hall room 3613  
Pittsburgh, Pennsylvania 15213-3891  
United States

Information on how to collect a package from the SCS Receiving office can be found at <https://computing.cs.cmu.edu/business/receiving>

## Departmental Seminars

The Machine Learning Department sponsors seminars by researchers from within and outside Carnegie Mellon, which are attended by faculty, staff and graduate students. Students are encouraged to meet and interact with visiting scholars. This is extremely important both to get a sense of the academic projects that are pursued outside of Carnegie Mellon and to get to know

the leaders of such projects. That applies not only to seminars directly relevant to a student's research interests: the seminars provide an opportunity to widen one's perspective on the field.

We currently have the following seminars:

[ML Distinguished Lecture Series](#)

[ML Lunch Seminar](#)

[ML Special Seminars](#)

## **Additional Department Policies**

### **"Grandfather" Policy**

When policies are changed it is because the department believes the new rules offer an improvement; any such changes will be communicated to the current graduate students. The students currently enrolled whose degree program is affected by a change in policy may choose to be governed by the older policy that was in place at the time of their matriculation. In case degree requirements are changed and certain courses are no longer offered, the department will try to find some compromise that allows those students to satisfy the original requirements.

### **Tuition and Funding**

Current tuition rates and cost of living including books, insurance, activities and technology fees, food and lodging costs can be found at the [MS in Machine Learning Financial Information](#) website. There are no tuition or fees in the summer semester for a Machine Learning MS student who is only completing their practicum. Tuition support is not generally provided to individual students through funding internal to the department; however, students are welcome to apply for external funding opportunities. Please review the extensive data available on-line: <http://www.cmu.edu/fso>.

### **Teaching Assistantships**

Teaching assistantships are awarded to selected students. Teaching assistant (TA) duties include, but are not limited to, holding office hours, conducting recitation classes, and grading. There are minimum English proficiency requirements that must be met in order for a student to accept a teaching assistantship. Pennsylvania state law requires that all students who are not native speakers of English take and pass a state-administered proficiency test. Support for teaching activities can be found through the [Eberly Center for Teaching Excellence](#). Students who will be TAs for the department are encouraged to visit the Teaching Center and to take advantage of the information and services located there. Students can apply for Teaching Assistantships on our webpage: <https://www.ml.cmu.edu/academics/ta.html>

### **Research Assistantships**

Many Machine Learning MS students do research only for course credit or solely for their professional development. Funding is not guaranteed for students conducting research.

In a very limited number of cases, a research assistantship may be provided by projects which are funded by government agencies, private industries, and consortia. Research assistants

(RAs) are expected to conduct appropriate research under the direction and guidance of their research advisor.

RA positions can be funded in one of the following ways, as determined by the advisor and department business office based on the scope and nature of the research being performed:

- Hourly wage for time worked
- 25% coverage of the MSML program tuition and ML PhD stipend for the semester
- 50% coverage of the MSML program tuition and ML PhD stipend for the semester
- 75% coverage of the MSML program tuition and ML PhD stipend for the semester

Health insurance and student fees are always the responsibility of the student.

### **Outside Employment**

Students are not allowed to be employed outside of the university during the academic year nor during the summer if they are being supported by the department, except as described in the next section, "Consulting."

### **Consulting**

The department has traditionally granted full-time students the right to devote up to an average of one day (of university time) 8 hours per week to outside, paid, professional activities, where that activity is consistent with that person's role as a member of the student body and where that activity also enhances the contribution of the student to the university. Such activity benefits both the student and the university. Students must fill out a Student Consulting Application and Agreement, have their advisor sign in agreement, and submit it to their program administrator for Department Head approval. Any such consulting must be consistent with U.S. labor laws and for international students, with visa terms.

International students are required to consult with the Office of International Education for eligibility before signing an offer contract.

### **Travel Support**

The university may be able to help with conference funding. To apply, please see instructions at: <http://www.cmu.edu/graduate/professional-development/conference-funding/index.html>

GuSH is a source of small research grant funds provided by GSA and the Provost's Office and managed by the Office of Graduate and Postdoc Affairs. Students can find more information about the application process and deadlines at: [www.cmu.edu/graduate](http://www.cmu.edu/graduate).

### **Reimbursements**

The university has detailed and strict policies relating to the purchase of goods, services, equipment, etc., whether using a general ledger account, restricted account, or grant. There are also reimbursement policies, along with tax exempt considerations that graduate students must adhere to.

### **Business Expenses**

Previously approved legitimate business expenses can be reimbursed. Receipts must be

submitted within 30 days of the expense. Any receipts submitted after 90 days will be considered income and you will be taxed. Your advisor's administrative assistant will help you claim reimbursement provided you have the following:

- receipt indicating item purchased and proof of payment
- business purpose for purchasing item
- account to be charged for reimbursement
- Approval (by faculty) in email, for reimbursement
- Signed expense report

Please consult with your advisor's assistant prior to incurring the expense for additional instruction.

### ***Travel Expenses***

Previously approved legitimate travel expenses can be reimbursed. Receipts must be submitted within 30 days of the expense. Any receipts submitted after 90 days of the dates of travel will be considered income and you will be taxed. Your advisor's administrative assistant will help you claim reimbursement provided you have the following:

- Flight receipts must show full itinerary (dates/times), class that was traveled, and last 4 digits of your credit card number.
- Hotel receipts must show a zero balance with proof of payment and your name
- Receipts for meals must be collected, unless you claim per diem meals; both daily meals and per diem meals cannot be claimed for the same travel expense report
- Personal car mileage is calculated at \$0.55 per mile; mileage covers gas, but not tolls.
- Business purpose for travel
- Account to be charged for reimbursement
- Approval (by faculty member) in email, for reimbursement
- Signed travel expense report

### ***Conditions:***

All receipts must have proof of purchase indicated. For business expenses, tax will not be reimbursed under any circumstance, except for non-travel business meals. To avoid paying tax, see if a staff member can purchase the item for you with a University-provided Procurement Credit Card.

Tax will be reimbursed for expenses incurred due to normal business-related travel (hotel, airfare, meals), but NOT for miscellaneous expenses such as the purchase of a replacement mouse for a department laptop, poster board for a presentation, etc., purchased while traveling or preparing for travel. These items should have been purchased through a department approved buyer thus not incurring tax expense.

### **Department Office/Building Security, Repairs and Services**

Please contact Jamie Gregory or Paul Stockhausen ([building@cs.cmu.edu](mailto:building@cs.cmu.edu)) for reporting damages, needed repairs, security concerns for routine items. For immediate security concerns, please contact the CMU Campus Police at 412-268-2323

## Department Graduate Student Committees

Departmental committees consist of the Doctoral Review Committee (DRC), PhD & MS Admissions Committees, Presentation Skills Committee, Social Committee, MS Student Committee, and Wellness Network.

We also have a student representative for the department for the University Graduate Student Assembly and SCS Dean's Master's Advisory Committee.

## University Policies & Department Expectations

It is the responsibility of each member of the Carnegie Mellon community to be familiar with university policies and guidelines. In addition to this departmental graduate student handbook, the following resources are available to assist you in understanding community expectations:

The Word/Student Handbook: [www.cmu.edu/student-affairs/theword/index.html](http://www.cmu.edu/student-affairs/theword/index.html)

Academic Integrity Website: <https://www.cmu.edu/policies/student-and-student-life/academic-integrity.html>

University Policies Website: [www.cmu.edu/policies/](http://www.cmu.edu/policies/)

Office of Graduate and Postdoc Affairs Website:  
<http://www.cmu.edu/graduate/policies/index.html>

Due to the changing nature of conditions and expectations surrounding public health and safety requirements please visit [www.cmu.edu/coronavirus](http://www.cmu.edu/coronavirus) for the most up to date information.

See Appendix A for additional information about The Word and University resources.

## Academic Calendar

The Academic Calendar can be found at <https://www.cmu.edu/hub/calendar/index.html> and provides information on all deadlines including registration dates, class start dates, add/drop deadlines, exam dates and more.

## Carnegie Mellon University Statement of Assurance

Carnegie Mellon University does not discriminate in admission, employment or administration of its programs or activities on the basis of race, color, national origin, sex, handicap or disability, age, sexual orientation, gender identity, religion, creed, ancestry, belief, veteran status or genetic information. Furthermore, Carnegie Mellon University does not discriminate and is required not to discriminate in violation of federal, state or local laws or executive orders.

Inquiries concerning the application of and compliance with this statement should be directed to the university ombudsperson, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-1018. Obtain general information about Carnegie Mellon University by calling 412-268-2000.

Carnegie Mellon University publishes an annual campus security and fire safety report describing the university's security, alcohol and drug, sexual assault and fire safety policies, and containing statistics about the number and type of crimes committed on the campus, and the

number and cause of fires in campus residence facilities during the preceding three years. You can obtain a copy by contacting the Carnegie Mellon Police Department at 412-268-2323. The annual security and fire safety report also is available online at [www.cmu.edu/police/annualreports](http://www.cmu.edu/police/annualreports).

Information regarding the application of Title IX, including to admission and employment decisions, the sexual misconduct grievance procedures and process, including how to file a report or a complaint of sex discrimination, how to file a report of sexual harassment, and how the university responds to such reports is available at [www.cmu.edu/title-ix](http://www.cmu.edu/title-ix). The Title IX coordinator may be reached at 5000 Forbes Ave., 140 Cyert Hall, Pittsburgh, PA 15213; 412-268-7125; or [tix@cmu.edu](mailto:tix@cmu.edu).

### **The Carnegie Mellon Code**

Students at Carnegie Mellon, because they are members of an academic community dedicated to the achievement of excellence, are expected to meet the highest standards of personal, ethical and moral conduct possible.

These standards require personal integrity, a commitment to honesty without compromise, as well as truth without equivocation and a willingness to place the good of the community above the good of the self. Obligations once undertaken must be met, commitments kept.

As members of the Carnegie Mellon community, individuals are expected to uphold the standards of the community in addition to holding others accountable for said standards. It is rare that the life of a student in an academic community can be so private that it will not affect the community as a whole or that the above standards do not apply.

The discovery, advancement and communication of knowledge are not possible without a commitment to these standards. Creativity cannot exist without acknowledgment of the creativity of others. New knowledge cannot be developed without credit for prior knowledge. Without the ability to trust that these principles will be observed, an academic community cannot exist.

The commitment of its faculty, staff and students to these standards contributes to the high respect in which the Carnegie Mellon degree is held. Students must not destroy that respect by their failure to meet these standards. Students who cannot meet them should voluntarily withdraw from the university.

The Carnegie Mellon Code can also be found on-line at:  
<https://www.cmu.edu/student-affairs/theword>

## **Additional University Policies/Protocols**

### **Assistance for Individuals with Disabilities**

<http://www.cmu.edu/education-office/disability-resources/>

The Office of Disability Resources at Carnegie Mellon University has a continued mission to provide physical and programmatic campus access to all events and information within the Carnegie Mellon community. We work to ensure that qualified individuals receive reasonable accommodations as guaranteed by the Americans with Disabilities Act (ADA) and Sections 503

and 504 of the Rehabilitation Act of 1973. Students who would like to receive accommodations can begin the process through [Disability Resources secure online portal](#) or email [access@andrew.cmu.edu](mailto:access@andrew.cmu.edu) to begin the interactive accommodation process.

Students with disabilities are encouraged to self-identify with the Office of Disability Resources and request needed accommodations. Any questions about the process can be directed to Catherine Getchell, 412-268-6121, [getchell@cmu.edu](mailto:getchell@cmu.edu).

### **Protocol for Review/Redress of Academic Conflicts**

Please see the University Policy:

<http://www.cmu.edu/academic-integrity/documents/academic-disciplinary-actions-overview-for-graduate-students.2013.pdf>

### **Summary of Graduate Student Appeal and Grievance Procedures**

<https://www.cmu.edu/graduate/policies/appeal-grievance-procedures.html>

Graduate students will find the Summary of Graduate Student Appeal and Grievance Procedures on the Graduate Education Resource webpage. This document summarizes processes available to graduate students who seek review of academic and non-academic issues. Generally, graduate students are expected to seek informal resolution of all concerns within the applicable department, unit or program before invoking formal processes. When an informal resolution cannot be reached, however, a graduate student who seeks further review of the matter is to follow the formal procedures outlined here. These appeal and grievance procedures shall apply to students in all graduate programs of the University. Students should refer to the department specific information in this handbook for department and college information about the administration and academic policies of the program.

### **Policy Against Sexual Harassment and Sexual Assault**

The University prohibits sex-based discrimination, sexual harassment, sexual assault, dating/ domestic violence and stalking. The University also prohibits retaliation against individuals who bring forward such concerns or allegations in good faith.

The University's Sexual Misconduct Policy is available at

<https://www.cmu.edu/policies/administrative-and-governance/sexual-misconduct/index.html>.

The University's Policy Against Retaliation is available

at <https://www.cmu.edu/policies/administrative-and-governance/whistleblower.html>.

If you have been impacted by any of these issues, you are encouraged to make contact with any of the following resources:

- Office of Title IX Initiatives, <https://www.cmu.edu/title-ix/> 412-268-7125, [tix@cmu.edu](mailto:tix@cmu.edu)
- University Police, <https://www.cmu.edu/police/>, 412-268-2323

Additional resources and information can be found at: <https://www.cmu.edu/title-ix/resources-and-information/resources.html>.

## **Consensual Intimate Relationship Policy Regarding Undergraduate Students**

<https://www.cmu.edu/policies/student-and-student-life/consensual-relationships.html>

This policy addresses the circumstances in which romantic, sexual or amorous relationships/interactions with undergraduate students, even if consensual, are inappropriate and prohibited. The purpose of this policy is to assure healthy professional relationships. This policy is not intended to discourage consensual intimate relationships unless there is a conflicting professional relationship in which one party has authority over the other as in the policy.

## **Childbirth/Maternity Accommodation Protocol**

<https://www.cmu.edu/graduate/programs-services/maternity-accommodation-protocol.html>

Students whose anticipated delivery date is during the course of the semester may consider taking time away from their coursework and/or research responsibilities. All female students who give birth to a child while engaged in coursework or research are eligible to take either a short-term absence or formal leave of absence. Students in course work should consider either working with their course instructor to receive incomplete grades, or elect to drop to part-time status or to take a semester leave of absence. Students engaged in research must work with their faculty to develop plans for the research for the time they are away.

Students are encouraged to consult with relevant university faculty and staff as soon as possible as they begin making plans regarding time away. Students must contact the Office of the Dean of Student Affairs to register for Maternity Accommodations. Students will complete an information form and meet with a member of the Dean's Office staff to determine resources and procedures appropriate for the individual student. Planning for the student's discussion with her academic contact(s) (advisor, associate dean, etc.) will be reviewed during this meeting.

## **University Financial Aid**

Graduate students should consult the graduate student financial aid information found on The HUB website: <https://www.cmu.edu/sfs/financial-aid/graduate/index.html>. Students will find the Graduate Financial Aid Guide, information about funding options and how to apply for financial aid and other helpful links.

## **Office of the Dean of Students Emergency Support Funding**

Graduate students who find themselves in need of immediate funds for emergency situations should contact the Office of the Dean of Student Affairs (see Appendix A), [www.cmu.edu/student-affairs/index.html](http://www.cmu.edu/student-affairs/index.html), to inquire about the types of emergency funding available to enrolled students.

## **Vacations and Time-Off**

Students with graduate assistantships are expected to continue with their research during academic breaks (including the Summer months) with the exception of the official university holidays. A complete list of the official university holidays can be found at the [Human Resources website](#).

Due to federal regulations governing graduate student support, paid time off for personal business and vacations is not provided. A supported graduate student wanting to take a one week break during one of the summer months in which they are receiving a stipend is expected to get approval for that break with their advisor and make up the work during the other three weeks of that month. Supported graduate students wishing to take longer periods of personal time off must do so without pay and must receive advanced approval from their research advisor a minimum of four weeks prior to the requested time off. The advisor must then notify the PhD Programs Administrator and Business Manager of this approval so that stipend adjustments can be processed.

### **Verification of Enrollment**

Enrollment Services is the only University office that can provide an official letter of enrollment, official transcript, or enrollment verification. Enrollment verification can be requested online through The HUB at: <http://www.cmu.edu/hub/records/index.html>

### **Change of Address**

Students are expected to keep their current address up-to-date in Student Information Online (SIO). This is important for students to be able to receive official notices from the university, to facilitate wellness checks, and to ensure that international students are in compliance with their visa requirements.

### **Employment Eligibility Verification**

If you are receiving a stipend, you are going to be a TA or you are planning to have a position with CMU then Employment Eligibility Verification is required.

Form I-9 must be completed within 3 business days of beginning work for any type of compensation (stipend or employment). Additional details are highlighted below.

To ensure compliance with federal law, Carnegie Mellon University maintains the [Employment Eligibility Verification \(I-9\) Policy \[pdf\]](#) covering the university's I-9 and E-Verify requirements:

Every individual receiving a stipend from CMU or employed by CMU must comply with the I-9 Policy by completing the Form I-9 within three business days following the first day of stipend start date/employment.

Individuals who expect to work on a federally funded project are further responsible for submitting an E-Verify Processing Request Form to the Office of Human Resources.

For more information, please see CMU's [Guidance for Completing the Form I-9 and E-Verify Requirements at CMU \[pdf\]](#), or visit the Human Resources Service website to [learn more about Form I-9 and E-Verify](#) and to [schedule an appointment to complete the Form I-9](#).

## Appendix A: Key Offices for Graduate Student Support

### Highlighted University Resources for Graduate Students and The WORD, Student Handbook

#### Key Resources for Graduate Student Support

- [Office of Graduate and Postdoc Affairs](#)
- [Office of the Dean of Students](#)
- [Center for Student Diversity and Inclusion](#)
- [Assistance for Individuals with Disabilities](#)
- [Eberly Center for Teaching Excellence and Educational Innovation](#)
- [Graduate Student Assembly](#)
- [Office of International Education](#)
- [Veterans and Military Community](#)
- [Ethics Reporting Hotline](#)
- [Policy Against Retaliation](#)

#### Key Resources for Academic and Research Support

- [Computing and Information Resources](#)
- [Student Academic Success Center](#)
- [University Libraries](#)
- [Research at CMU](#)
- [Office of Research Integrity & Compliance](#)

#### Key Resources for Health, Wellness & Safety

- [Counseling and Psychological Services](#)
- [University Health Service](#)
- [Campus Wellness](#)
- [Religious and Spiritual Life Initiatives](#)
- [University Police](#)
- [Shuttle and Escort Services](#)
- [The WORD](#)

## Key Resources for Graduate Student Support

### Office of Graduate and Postdoc Affairs

[www.cmu.edu/graduate](http://www.cmu.edu/graduate); [grad-ed@cmu.edu](mailto:grad-ed@cmu.edu)

The Office of Graduate and Postdoc Affairs provides central support for all master's and doctoral students, as well as academic programs, with a focus on supporting graduate student success at Carnegie Mellon.

Examples of resources offered through the Office of Graduate and Postdoc Affairs include- but are not limited to:

- Website with university resources, contact information for CMU programs and services, calendar of events related to graduate students
- Bi-monthly newsletter to all graduate students with information on activities, resources and opportunities
- Professional Development Seminars and Workshops
- GSA/Provost Conference Funding Grants
- GSA/Provost Small Research Grants (GuSH)
- Consultations on issues related to the graduate student experience

The Office of Graduate and Postdoc Affairs also works with the colleges and departments by informing and assisting in developing policy and procedures relevant to graduate students and working with departments on issues related to graduate students. Additionally we partner with many other offices and organizations, such as the Graduate Student Assembly, to support the holistic graduate student educational experience.

### Office of the Dean of Students

<https://www.cmu.edu/student-affairs/dean>

The Office of the Dean of Students provides central leadership of the metacurricular experience at Carnegie Mellon including the coordination of student support. Vice President of Student Affairs and Dean of Students Gina Casalegno leads the Division of Student Affairs which includes the offices and departments listed below (not an exhaustive list).

Graduate students will find the enrollment information for [Domestic Partner Registration and Maternity Accommodations](#) in the Office of the Dean of Students or on their [website](#). This Office also manages the [Student Emergency Support Funding](#) process. There are three forms of support funding for enrolled students: emergency student loans, maternity loans, and the Tartan Emergency Support Fund. These funds are made available through generous gifts of alumni and friends of the university as well as support from student organizations, Undergraduate Student Senate and the Graduate Student Assembly. Students will be provided with additional information about the various types of funding during a consultation meeting with a member of the Dean of Students team. Tuition costs are not eligible for Student Emergency Support Funding.

Additional resources for graduate students include [College Liaisons](#) and the [Student Support Resources](#) team. [College Liaisons](#) are senior members of the Division of Student Affairs who work with departments and colleges addressing student concerns across a wide range of issues. College Liaisons are identified on the student SIO page in the Important Contacts list. The Student Support Resources team offers an additional level of support for students who

are navigating any of a wide range of life events. [Student Support Resources](#) staff members work in partnership with campus and community resources to provide coordination of care and support appropriate to each student's situation.

The Division of Student Affairs includes (not an exhaustive list):

- [Athletics, Physical Education and Recreation](#)
- [Career and Professional Development Center \(CPDC\)](#)
- [Center for Student Diversity and Inclusion](#)
- [Cohon University Center](#)
- [Counseling & Psychological Services \(CaPS\)](#)
- [Dining Services](#)
- [Office of Community Standards and Integrity \(OCSI\)](#)
- [Office of Student Leadership, Involvement, and Civic Engagement \(SLICE\)](#)
- [University Health Services \(UHS\)](#)
- [Wellness Initiatives](#)

### **Center for Student Diversity & Inclusion**

<https://www.cmu.edu/student-diversity/>

Diversity and inclusion have a singular place among the values of Carnegie Mellon University. The Center for Student Diversity & Inclusion actively cultivates a strong, diverse and inclusive community capable of living out these values and advancing research, creativity, learning and development that changes the world.

The Center offers resources to enhance an inclusive and transformative student experience in dimensions such as access, success, campus climate and intergroup dialogue. Additionally, the Center supports and connects historically underrepresented students and those who are first in their family to attend college in a setting where students' differences and talents are appreciated and reinforced, both at the graduate and undergraduate level. Initiatives coordinated by the Center include, but are not limited to:

- First generation/first in family to attend college programs
- LGBTQ+ Initiatives
- Race and ethnically-focused programs, including Inter-University Graduate Students of Color Series (SOC) and PhD SOC Network
- Women's empowerment programs, including Graduate Women's Gatherings (GWGs)
- Transgender and non-binary student programs

### **Assistance for Individuals with Disabilities**

<http://www.cmu.edu/disability-resources/>

The Office of Disability Resources at Carnegie Mellon University has a continued mission to provide physical, digital, and programmatic access to ensure that students with disabilities have equal access to their educational experience. We work to ensure that qualified individuals receive reasonable accommodations as guaranteed by the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973. Students who would like to receive accommodations can begin the process through [Disability Resources' secure](#)

[online portal](#) or email [access@andrew.cmu.edu](mailto:access@andrew.cmu.edu) to begin the interactive accommodation process.

Students with physical, sensory, cognitive, or emotional disabilities are encouraged to self-identify with the Office of Disability Resources and request needed accommodations. Any questions about the process can be directed to [access@andrew.cmu.edu](mailto:access@andrew.cmu.edu), or call (412) 268-6121.

### **Eberly Center for Teaching Excellence & Educational Innovation**

[www.cmu.edu/teaching](http://www.cmu.edu/teaching)

We offer a wide variety of confidential, consultation services and professional development programs to support graduate students as teaching assistants or instructors of record during their time at Carnegie Mellon University and as future faculty members at other institutions. Regardless of one's current or future teaching context and duties, our goal is to disseminate evidence-based teaching strategies in ways that are accessible and actionable. Programs and services include campus-wide Graduate Student Instructor Orientation events and our Future Faculty Program, both of which are designed to help participants be effective and efficient in their teaching roles. The Eberly Center also assists departments in creating and conducting customized programs to meet the specific needs of their graduate student instructors. Specific information about Eberly Center support for graduate students is found at [www.cmu.edu/teaching/graduatestudentsupport/index.html](http://www.cmu.edu/teaching/graduatestudentsupport/index.html).

### **Graduate Student Assembly**

[www.cmu.edu/stugov/gsa/index.html](http://www.cmu.edu/stugov/gsa/index.html)

The Graduate Student Assembly (GSA) is the branch of Carnegie Mellon Student Government that represents, and advocates for the diverse interests of all graduate students at CMU. GSA is composed of representatives from the different graduate programs and departments who want to improve the graduate student experience at the different levels of the university. GSA is funded by the Student Activities Fee from all graduate students. GSA passes legislation, allocates student activities funding, advocates for legislative action locally and in Washington D.C. on behalf of graduate student issues and needs, and otherwise acts on behalf of all graduate student interests. Our recent accomplishments are a testament to GSA making a difference, and steps to implementing the vision laid out by the strategic plan. <https://www.cmu.edu/stugov/gsa/About-the-GSA/Strategic-Plan.html>.

GSA offers an expanding suite of social programming on and off-campus to bring graduate students from different departments together and build a sense of community. GSA is the host of the Graduate Student Lounge on the 3<sup>rd</sup> floor of the Cohon University Center- a great place to study or meet up with friends. GSA also maintains a website of graduate student resources on and off-campus. Through GSA's continued funding for professional development and research conferences, the GSA/Provost Conference Funding Program and GSA/Provost GuSH Research Grants are able to run, as managed by the Graduate Education Office. As we move forward, GSA will continue to rely on your feedback to improve the graduate student experience at CMU. Feel free to contact us at [<gsa@cmu.edu>](mailto:gsa@cmu.edu) to get involved, stop by our office in the Cohon University Center Room 304 or become a representative for your department.

## Office of International Education (OIE)

<http://www.cmu.edu/oie/>

Carnegie Mellon hosts international graduate and undergraduate students who come from more than 90 countries. The Office of International Education (OIE) is the liaison to the University for all non-immigrant students and scholars, as well the repository for study abroad opportunities and advisement. OIE provides many services including: advising on personal, immigration, study abroad, academic, and social and acculturation issues; presenting programs of interest such as international career workshops, tax workshops, and cross-cultural and immigration workshops; international education and statistics on international students in the United States; posting pertinent information to students through email and the OIE website, and conducting orientation and pre-departure programs.

## Veterans and Military Community

<http://www.cmu.edu/veterans/>

Military veterans are a vital part of the Carnegie Mellon University community. Graduate students can find information on applying for veteran education benefits, campus services, veteran's groups at CMU, and non-educational resources through the Veterans and Military Community website. There are also links and connections to veteran resource in the Pittsburgh community. The ROTC and Veteran Affairs Coordinator can be reached at [uro-vaedbenefits@andrew.cmu.edu](mailto:uro-vaedbenefits@andrew.cmu.edu) or 412-268-8747.

## Carnegie Mellon Ethics Hotline

<https://www.cmu.edu/hr/resources/ethics-hotline.html>

The health, safety and well-being of the university community are top priorities at Carnegie Mellon University. CMU provides a hotline that all members of the university community should use to confidentially report suspected unethical activity relating to areas below:

- Academic and Student Life
- Bias Reporting
- Environmental Health and Safety
- Financial Matters
- High-Risk Incident
- Human Resource Related
- Information Systems
- Research
- Threat of Business Interruption
- Threat of Violence or Physical Harm
- Title IX

Students, faculty and staff can anonymously file a report by calling 877-700-7050 or visiting [www.reportit.net](http://www.reportit.net) (user name: tartans; password: plaid). All submissions are reported to appropriate university personnel.

**The hotline is NOT an emergency service. For emergencies, call University Police at 412-268-2323.**

## Policy Against Retaliation

It is the policy of Carnegie Mellon University to protect from retaliation any individual who makes a good faith report of a suspected violation of any applicable law or regulation, university Policy or procedure, any contractual obligation of the university, and any report made pursuant to the Carnegie Mellon University Code of Business Ethics and Conduct.

Additional details regarding the Policy Against Retaliation are available at <https://www.cmu.edu/policies/administrative-and-governance/whistleblower.html>

## Key Offices for Academic & Research Support

### Computing and Information Resources

[www.cmu.edu/computing](http://www.cmu.edu/computing)

Computing Services maintains and supports computing resources for the campus community, including the campus wired and wireless networks, printing, computer labs, file storage, email and software catalog. As members of this community, we are all responsible for the security of these shared resources. Be sure to review the Safe Computing (<https://www.cmu.edu/computing/safe/>) section and the University Computing Policy (<https://www.cmu.edu/policies/information-technology/computing.html>)

Visit the Computing Services website (<https://www.cmu.edu/computing/>) to learn more. For assistance the Computing Services Help Center is available at 412-268-4357 (HELP) or [it-help@cmu.edu](mailto:it-help@cmu.edu).

### Student Academic Success Center

<https://www.cmu.edu/student-success/>  
Student Academic Support Programs

### *Tartan Scholars*

- The Tartan Scholars program was created to provide support for limited resourced students through an intentional first year undergraduate experience with the goals of enhancing the cohort's skill and community building through a lens of self-authorship, growth mindset, and a sense of belonging. As part of the Student Academic Success Center, Tartan Scholars are invited to join the University and participate in summer initiatives and pre-orientation activities prior to their first year at the University.
- There are opportunities for graduate students to serve as accountability, learning, or development partners, workshop facilitators, and presenters. Contact Diane Hightower at [ddhight@andrew.cmu.edu](mailto:ddhight@andrew.cmu.edu) for more details.

### *Learning Support*

- **Supplemental Instruction:** Supplemental Instruction (SI) is an academic support model that utilizes peer-assisted study sessions. The SI program provides regularly scheduled review sessions on course materials outside the classroom. SI is a non-remedial approach to learning as the program targets high-risk courses and is available in select courses based on data related to past student performance and feasibility.
- **Peer Tutoring:** Weekly Tutoring Appointments are offered in a one-on-one and small

group format to students from any discipline who need assistance with a course that may not be supported by our other services. Weekly appointments give students the opportunity to interact regularly with the same tutor to facilitate deeper understanding of concepts. Students can register online through the Student Academic Success website.

- **Academic Coaching:** Academic Coaching provides holistic one-on-one peer support and group workshops to help students find and implement their conditions for success. We assist students in improving time management, productive habits, organization, stress management, and study skills. Students will request support through the Academic Success Center website and attend in-person meetings or meet using video and audio conferencing technology to provide all students with support.
- **“Just in Time” Workshops:** The Student Academic Success team is available to partner with instructors and departments to identify skills or concepts that would benefit from supplemental offerings (workshops, boot camps) to support students’ academic success and learning. We are eager to help convene and coordinate outside of the classroom skill-building opportunities that can be open to any student interested in building skill or reinforcing course concept mastery.
- **Study Partners:** Support for students to create and benefit from their own study groups: The Student Academic Success team assists students in forming and benefiting from peer study groups, whereby all students can reap the benefits of peer-to-peer learning, student agency, and collaboration skill development. Staff from the Student Academic Success Center will be made available to instructors and students to assist with the formation of peer-led study groups. This level of support is open to any course where the instructor requests or agrees such support is appropriate and students are interested in both leading and participating.

### ***Language and Cross-cultural Support***

More than 60% of graduate students at Carnegie Mellon are international students, and others are nonnative speakers of English who have attended high school or undergraduate programs in the US. Many of these students want to hone their language and cross-cultural skills for academic and professional success. Students can choose from sessions on

- how to give a strong presentation,
- writing academic emails,
- expectations and strategies for clear academic writing,
- how to talk about yourself as a professional in the U.S.,
- developing clearer pronunciation,
- using accurate grammar,
- building fluency, and more.
- Students can make an appointment with a Language Development Specialist to get individualized coaching on language or cross-cultural issues.

The Student Academic Success Center is also charged with certifying the language of International Teaching Assistants (ITAs), ensuring that nonnative English speakers have the language proficiency needed to succeed as teaching assistants in the Carnegie Mellon classroom. Students preparing to do an ITA Certification should plan to take classes offered by the language support team at the SASC from the beginning of their first semester. Start by contacting the language support team at the SASC website or attend a Language Support Orientation at the SASC or in your department.

## University Libraries

[www.library.cmu.edu](http://www.library.cmu.edu)

The University Libraries offers a wide range of information resources and services supporting graduate students in course-work, research, teaching, and publishing. The library licenses and purchases books, journals, media and other needed materials in various formats. Library liaisons, consultants and information specialists provide in-depth and professional assistance and advice in all-things information - including locating and obtaining specific resources, providing specialized research support, advanced training in the use and management of data. Sign up for workshops and hands-on topic-specific sessions such as data visualization with Tableau, cleaning data with OpenRefine, and getting started with Zotero. Weekly drop-in hours for Digital Humanities and for Research Data Research Management are scheduled during the academic year. Start at the library home page to find the books, journals and databases you need; to identify and reach out to the library liaison in your field; to sign up for scheduled workshops; and to connect with consultants in scholarly publishing, research data management, and digital humanities.

## Research at CMU

[www.cmu.edu/research/index.shtml](http://www.cmu.edu/research/index.shtml)

The primary purpose of research at the university is the advancement of knowledge in all fields in which the university is active. Research is regarded as one of the university's major contributions to society and as an essential element in education, particularly at the graduate level and in faculty development. Research activities are governed by several university policies. Guidance and more general information is found by visiting the Research at Carnegie Mellon website.

## Office of Research Integrity & Compliance

[www.cmu.edu/research-compliance/index.html](http://www.cmu.edu/research-compliance/index.html)

The Office of Research Integrity & Compliance (ORIC) is designed to support research at Carnegie Mellon University. The staff work with researchers to ensure research is conducted with integrity and in accordance with federal and Pennsylvania regulation. ORIC assists researchers with human subject research, conflicts of interest, responsible conduct of research, export controls, and institutional animal care & use. ORIC also provides consultation, advice, and review of allegations of research misconduct.

## Key Offices for Health, Wellness & Safety

### Counseling & Psychological Services

<https://www.cmu.edu/counseling/>

Counseling & Psychological Services (CaPS) affords the opportunity for students to talk privately about academic and personal concerns in a safe, confidential setting. An initial consultation at CaPS can help clarify the nature of the concern, provide immediate support, and explore further options if needed. These may include a referral for counseling within CaPS, to another resource at Carnegie Mellon, or to another resource within the larger Pittsburgh community. CaPS also provides workshops and group sessions on mental health related topics specifically for graduate students on campus. CaPS services are provided at no cost. Appointments can be made in person, or by telephone at 412-268-2922.

## Health Services

[www.cmu.edu/HealthServices/](http://www.cmu.edu/HealthServices/)

University Health Services (UHS) is staffed by physicians, advanced practice clinicians and registered nurses who provide general medical care, allergy injections, first aid, gynecological care and contraception as well as on-site pharmaceuticals. The CMU Student Insurance Plan covers most visit fees to see the physicians and advanced practice clinicians & nurse visits. Fees for prescription medications, laboratory tests, diagnostic procedures and referral to the emergency room or specialists are the student's responsibility and students should review the UHS website and their insurance plan for detailed information about the university health insurance requirement and fees.

UHS also has a registered dietician and health promotion specialists on staff to assist students in addressing nutrition, drug and alcohol and other healthy lifestyle issues. In addition to providing direct health care, UHS administers the Student Health Insurance Program. The Student Health Insurance plan offers a high level of coverage in a wide network of health care providers and hospitals. Appointments can be made by visiting UHS's website, walk-in, or by telephone, 412-268-2157.

## Campus Wellness

<https://www.cmu.edu/wellness/>

At Carnegie Mellon, we believe our individual and collective well-being is rooted in healthy connections to each other and to campus resources. The university provides a wide variety of wellness, mindfulness and connectedness initiatives and resources designed to help students thrive inside and outside the classroom. The BeWell@CMU e-newsletter seeks to be a comprehensive resource for CMU regarding all wellness-inspired events, announcements and professional and personal development opportunities. Sign up for the Be Well monthly newsletter via <https://bit.ly/BeWellNewsletter> or by contacting the Program Director for Student Affairs Wellness Initiatives, at [alusk@andrew.cmu.edu](mailto:alusk@andrew.cmu.edu).

## Religious and Spiritual Life Initiatives (RSLI)

[www.cmu.edu/student-affairs/spirituality](http://www.cmu.edu/student-affairs/spirituality)

Carnegie Mellon is committed to the holistic growth of our students, including creating opportunities for spiritual and religious practice and exploration. We have relationships with local houses of worship from various traditions and many of these groups are members of CMU's Council of Religious Advisors. We also offer programs and initiatives that cross traditional religious boundaries in order to increase knowledge of and appreciation for the full diversity of the worldview traditions. Our RSLI staff are here to support students across the spectrum of religious and spiritual practice and would be more than happy to help you make a connection into a community of faith during your time at CMU.

## University Police

<http://www.cmu.edu/police/>

412-268-2323 (emergency only), 412-268-6232 (non-emergency)

The University Police Department is located at 300 South Craig Street (entrance is on Filmore Street). The department's services include police patrols and call response, criminal investigations, fixed officer and foot officer patrols, event security, and crime prevention and

education programming as well as bicycle and laptop registration. Visit the department's website for additional information about the staff, emergency phone locations, crime prevention, lost and found, fingerprint services, and annual statistic reports.

Carnegie Mellon University publishes an annual campus security and fire safety report describing the university's security, alcohol and drug, sexual assault, and fire safety policies and containing statistics about the number and type of crimes committed on the campus and the number and cause of fires in campus residence facilities during the preceding three years. Graduate students can obtain a copy by contacting the University Police Department at 412-268-6232. The annual security and fire safety report is also available online at <https://www.cmu.edu/police/annualreports/>.

### Shuttle and Escort Services

Parking and Transportation coordinates the Shuttle Service and Escort Service provided for CMU students, faculty, and community. The [Shuttle & Escort website](#) has full information about these services, stops, routes, tracking and schedules.

### The WORD

<http://www.cmu.edu/student-affairs/theword//>

The WORD is Carnegie Mellon University's student handbook and serves as the foundation for the department (and sometimes college) handbook. The WORD contains university-wide academic policy information and resources, community policies and resources, and describes the university level procedures used to review possible violations of these standards. It is designed to provide all students with the tools, guidance, and insights to help you achieve your full potential as a member of the Carnegie Mellon community. Information about the following is included in The WORD (not an exhaustive list) and graduate students are encouraged to bookmark this site and refer to it often. University policies can also be found in full text at: <http://www.cmu.edu/policies/>.

Carnegie Mellon Vision, Mission  
Statement of Assurance  
Carnegie Code

#### Academic Standards, Policies and Procedures

- Educational Goals
- Academic and Individual Freedom
- Statement on Academic Integrity Standards for Academic & Creative Life
- Assistance for Individuals with Disabilities
- Master's Student Statute of Limitations
- Conduct of Classes
- Copyright Policy
- Cross-college & University Registration
- Doctoral Student Status Policy

- Evaluation & Certification of English Fluency for Instructors
- Final Exams for Graduate Courses
- Grading Policies
- Intellectual Property Policy
- Privacy Rights of Students
- Student's Rights

#### Research

- Human Subjects in Research
- Office of Research Integrity & Compliance
- Office of Sponsored Programs
- Policy for Handling Alleged Misconduct of Research
- Policy on Restricted Research

#### Tax Status of Graduate Student Awards

#### Campus Resources & Opportunities

- Alumni Relations
- Assistance for Individuals with Disabilities
- Athletics, Physical Fitness & Recreation
- Carnegie Mellon ID Cards and Services
- Cohon University Center
- Copying, Printing & Mailing
- Division of Student Affairs
- Domestic Partner Registration
- Emergency Student Loan Program
- Gender Programs & Resources
- Health Services
- Dining Services
- The HUB Student Services Center
- ID Card Services
- Leonard Gelfand Center
- LGBTQ Resources
- Multicultural and Diversity Initiatives
- Opportunities for Involvement
- Parking and Transportation Services
- Shuttle and Escort Services
- Spiritual Development
- University Police
- Student Activities
- University Stores

#### Community Standards, Policies and Procedures

- Alcohol and Drugs Policy
- AIDS Policy
- Bicycle/Wheeled Transportation Policy
- Damage to Carnegie Mellon Property
- Deadly Weapons
- Discriminatory Harassment
- Disorderly Conduct

Equal Opportunity/Affirmative Action Policy  
Freedom of Expression Policy  
Health Insurance Policy Immunization Policy  
Missing Student Protocol  
Non-Discrimination Policy  
On-Campus Emergencies  
Political Activities  
Recycling Policy  
Riotous and Disorderly Behavior  
Safety Hazards  
Scheduling and Use of University Facilities  
Sexual Harassment and Sexual Assault Policy  
Smoking Policy  
Student Accounts Receivable and Collection Policy and Procedures  
Student Activities Fee  
Student Enterprises  
Workplace Threats and Violence Policy