



Academic Year 2024-2025

School of Computer Science  
Language Technologies Institute

Master's Student Handbook

Degree Programs Covered by This Handbook:

Master of Science in Intelligent Information  
Systems

## Table of Contents

|   |    |
|---|----|
| SECTION 1: Welcome & Introduction.....                  | 3  |
| SECTION 2: Degrees Offered.....                         | 3  |
| SECTION 3: Departmental Personnel .....                 | 4  |
| SECTION 4: Departmental Resources .....                 | 4  |
| 4.1 Pittsburgh Campus Location .....                    | 4  |
| 4.2 Office Space.....                                   | 5  |
| 4.3 Mailboxes and Office Supplies .....                 | 5  |
| 4.4 Photocopies and Printers .....                      | 5  |
| 4.5 Computers for LTI MIIS Students .....               | 5  |
| SECTION 5: Advising .....                               | 6  |
| 5.1: Role of an Advisor and Advisor Assignments .....   | 6  |
| 5.2: Advisor/Advisee Collaboration .....                | 6  |
| SECTION 6: Master’s Degree Requirements.....            | 7  |
| 6.1: Residency Requirements .....                       | 7  |
| 6.2: Registration Process/Procedures .....              | 7  |
| 6.3: Transferring Into the MIIS Program .....           | 7  |
| 6.4: Transferring Out of the MIIS Program .....         | 8  |
| 6.5: Expected Timeline .....                            | 8  |
| 6.6: Leave of Absence .....                             | 10 |
| 6.7: Deferral.....                                      | 10 |
| 6.8: Maximum and Minimum Course Loads .....             | 10 |
| 6.9: Required Units for Degree Attainment.....          | 11 |
| 6.10: Core Requirements .....                           | 11 |
| 6.11: Approved Qualifying Courses.....                  | 12 |
| Breadth Courses: Human Language .....                   | 12 |
| Breadth Courses: Language Technology Applications ..... | 13 |
| Breadth Courses: Machine Learning .....                 | 13 |
| 6.12: Practice Requirements.....                        | 13 |

|   |    |
|---|----|
| 6.13: Drop/Add/Withdraw Procedures .....                                | 14 |
| 6.14: Department Policy on Double Counting Courses .....                | 15 |
| 6.15: Department Policy for Courses Outside the Department/College..... | 15 |
| 6.16: Course Exemptions.....  | 15 |
| 6.17: Protocol for Evaluation of Transfer Credit.....                   | 15 |
| 6.18: Teaching Requirements/Opportunities .....                         | 16 |
| 6.19: Internship/Co-op Requirements and Opportunities.....              | 17 |
| SECTION 7: Department Policies & Protocols .....                        | 17 |
| 7.1: New Policies / “Grandfather” Policy .....                          | 17 |
| 7.2: Time Away from Academic Responsibilities .....                     | 18 |
| SECTION 8: Grading & Evaluation .....                                   | 18 |
| 8.1: Grading Scale/System .....   | 18 |
| 8.2: Department Policy on Pass/Fail, Satisfactory/Unsatisfactory.....   | 18 |
| 8.3: Department Policy for Incompletes .....                            | 19 |
| 8.4: Independent Study Course.....                                      | 19 |
| 8.5: Satisfactory Academic Standing .....                               | 20 |
| 8.6: Regular Reviews and Evaluations by Department .....                | 20 |
| 8.7: Process for Appealing Final Grades .....                           | 20 |
| SECTION 9: Funding & Financial Support .....                            | 21 |
| 9.1: Statement of Department Financial Support .....                    | 21 |
| 9.2: Travel/Conference and Research Funding.....                        | 21 |
| 9.3: Additional Sources of Internal & External Financial Support.....   | 21 |
| SECTION 10: ADDITIONAL DEPARTMENTAL INFORMATION .....                   | 22 |
| 10.1: LTI Orientation .....   | 22 |

## SECTION 1: Welcome & Introduction

Welcome to the Language Technologies Institute, a graduate department in the School of Computer Science at Carnegie Mellon University. You have joined a Masters' program that focuses on excellence, creativity, and training the next generation of industry leaders. While the next year will be a time of hard work and intense concentration, we hope that your time at the LTI will also be rewarding professionally and personally.

There are significant differences between CMU's various departments and degree programs in philosophical approaches, procedures, policies, and regulations. Each department issues a handbook that informs graduate students of their program requirements and procedures, and ensures that students have written access to standard information. This handbook describes the policies, procedures, and requirements for the Masters' in Intelligent Information Systems. All policies not explicitly described in this document conform to School of Computer Science (SCS) policies and university policies.

While this handbook is specific to your academic experience in the Language Technologies Institute, it is just one element of the Graduate Student Handbook Suite. There are several other resources within the suite that you should consult when needed:

- University-Wide Graduate Student Handbook (Office of Graduate & Postdoctoral Affairs)
- [The Word](#) Student Handbook

Welcome! We hope that your time here is a life-changing experience.

## SECTION 2: Degrees Offered

The Language Technologies Institute offers one Ph.D. program and five Masters' degree programs.

- Ph.D. in Language and Information Technologies (LTI Ph.D.)
- Masters in Language Technologies (MLT)
- Master of Science in Intelligent Information Systems (MIIS)
- Master of Computational Data Science (MCDS)
- Master of Science in Artificial Intelligence and Innovation (MSAI)
- Master of Science in Language Technologies – Integrated Study (5<sup>th</sup> Year Masters)

This handbook applies to the LTI MIIS.

The Master of Science in Intelligent Information Systems (MIIS) is a professional degree offered by the Language Technologies Institute (LTI), a graduate department in the School

of Computer Science at Carnegie Mellon University. The MIIS degree provides advanced study and practical experience in areas of Computer Science focused on the processing and analysis of unstructured and semi-structured information, for example, text, image, video, speech, and audio information. It is a practice-oriented professional degree designed for students who want to rapidly master advanced content-analysis, mining, and intelligent information technologies prior to beginning or resuming leadership careers in industry and government.

## SECTION 3: Departmental Personnel

Teruko Mitamura  
MIIS Program Director  
Professor  
GHC 6711  
[teruko@andrew.cmu.edu](mailto:teruko@andrew.cmu.edu)  
412-268-6596

Mona Diab  
LTI Director  
Professor  
GHC 5723  
[mdiab@andrew.cmu.edu](mailto:mdiab@andrew.cmu.edu)  
412-268-3669

Brianna Eriksen  
MIIS Program Lead  
GHC 6415  
[bfreema2@andrew.cmu.edu](mailto:bfreema2@andrew.cmu.edu)  
412-268- 4277

The LTI Academic Program Team  
[liti-academics@andrew.cmu.edu](mailto:liti-academics@andrew.cmu.edu)

Julie Nys  
Employment Processes Manager  
GHC 6716  
[jnys@andrew.cmu.edu](mailto:jnys@andrew.cmu.edu)  
412-268-3515

Joan Axelson  
Office Manager  
GHC 6716  
[jaxelson@andrew.cmu.edu](mailto:jaxelson@andrew.cmu.edu)  
412-268-7517

In addition, students may confer with the Graduate Education Office ([graded@andrew.cmu.edu](mailto:graded@andrew.cmu.edu)) regarding issues of process or other concerns as they navigate conflicts.

## SECTION 4: Departmental Resources

### 4.1 Pittsburgh Campus Location

The Language Technologies Institute is located primarily on the 5th and 6th floors of the Gates Hillman Complex (GHC) on Carnegie Mellon's Pittsburgh campus. The address and contact information of the LTI are shown below.

Language Technologies Institute  
Carnegie Mellon University  
5000 Forbes Avenue  
Gates Hillman Complex  
Pittsburgh, PA 15241-3891  
412-268-6298 (fax)  
<http://www.lti.cs.cmu.edu/>

Office locations for faculty, staff, and MIIS students can be found on the LTI website.

## 4.2 Office Space

To help them create a sense of community, full-time students in the MLT program have access to shared office space.

Offices are assigned by the LTI's Office Manager (see Section 3, Department Personnel, for contact information).

## 4.3 Mailboxes and Office Supplies

Mailboxes and office supplies are in GHC 5404.

## 4.4 Photocopies and Printers

Printers and photocopies are available to LTI students. The use of a photocopier or printer requires you to log in with your CMU ID card. LTI students may use printers/photocopiers scattered throughout the School of Computer Science buildings, but the machines in GHC 5404 and GHC 6604 are the most convenient. [SCS Computing Facilities](#) publishes a list of printers at <https://computing.cs.cmu.edu/desktop/printer-list>.

## 4.5 Computers for LTI MIIS Students

MS students are responsible for having their own laptop computers to support their education and research. Students are free to choose their own operating system (e.g., Linux, MacOS, Windows).

Many MS advisors also provide access to computer clusters, cloud computing, or other resources to support computationally-intense research.

MS students are given access to the LTI's computer cluster on an as-needed basis, to be used for course assignments, directed study projects, and/or capstone projects. The LTI

cluster provides storage and computation for projects involving large datasets and/or lengthy computation.

MS students receive two types of user IDs: An Andrew ID and a CS ID. All CMU students have an Andrew ID. Computer Science students also have a CS ID that provides access to SCS-specific resources (e.g., computer clusters). CS IDs are being phased out very slowly, so it is likely that you will need both types of user ID.

The School of Computer Science has a Help Center in GHC 4201. It can be contacted at [help@cs.cmu.edu](mailto:help@cs.cmu.edu), extension 8-4231 from a campus phone, or 412-268-4231 from an outside line (M-F, 9am-5pm).

## SECTION 5: Advising

### 5.1: Role of an Advisor and Advisor Assignments

Each student has a faculty advisor charged with guiding the education and monitoring the progress of the student through the program. The advisor also supervises the student's directed study projects. This personal student-advisor relationship ensures that every student receives the necessary faculty mentoring. The advisor also provides the student with career advice.

**The Matching Process:** Advisors are selected during the first month of the program. Students are expected to attend the LTI's Orientation lectures, in which faculty describe their interests and areas of expertise, and to be proactive about meeting individually with potential advisors. After meeting with several potential advisors, each student will be asked to indicate a first, second and third choice for advisor. Meanwhile, the potential advisors determine how many new students they can take and indicate their preferences. Finally, the entire LTI faculty meets as a "Matching Committee" to determine the best set of matches.

Until a student finds a specific advisor, the Program Director of the LTI graduate programs serves as the advisor.

### 5.2: Advisor/Advisee Collaboration

**How to Change Advisors:** The initial advisor selection should be made carefully. However, it is possible to change advisors. To do so, the student should find another faculty member willing to serve as an advisor, and then make a request to the Ph.D. Program Director to switch advisors. The LTI follows the long-standing SCS policy that both the new and old

advisors need to agree to the change; typically, this is not a problem (assuming the new advisor has agreed in advance, as described here). It is to the student's advantage to avoid switching advisors, especially late in their graduate studies, because forging a strong student-advisor relationship takes time.

## SECTION 6: Master's Degree Requirements

### 6.1: Residency Requirements

U.S. government regulations require F-1 and J-1 international students to be enrolled in an in-person degree program, with in-person expectation coursework. Even though this immigration requirement is specifically for international students, residency requirements in a degree program must be consistent for both international and domestic students.

### 6.2: Registration Process/Procedures

Students are responsible for registering for their courses. Use the [Stellic Degree Audit Application](#) to monitor your progress and plan your degree. Students can search for relevant courses in a number of ways and share their plan with their advisor directly through the application.

Navigate to the [SIO](#) Academic Info tab and select Enrollment Status and the upcoming semester to confirm the following:

- Enrollment Status is 'Eligible to Enroll' (if not, email [thehub@andrew.cmu.edu](mailto:thehub@andrew.cmu.edu))
- Maximum units for which you can plan to register for (overloads are reviewed and permitted **only after** registration week)
- Class Level, College and Department are correct (if incorrect, please contact your home academic department)

The registration process can be completed within SIO (Student Information Online) by following 4 easy steps: <https://www.cmu.edu/hub/registrar/docs/4-easy-steps.pdf>

If students have any questions about course selection, they may reach out to the MIIS Program Director.

### 6.3: Transferring Into the MIIS Program

Transfers into the MIIS program are not permitted during a student's first semester at CMU. Students must begin their study at CMU in the program that admitted them.



Students may request to transfer into the MIIS program after completing their first semester and before the add/drop deadline of the spring semester. The student must make the request in writing (or email) to the MIIS Program Director. The MIIS Program Director will inform the student about what application materials are required, for example, an explanation of why a transfer is desired, a proposed plan of study, a proposed advisor, and CMU transcripts. Students that are already enrolled in an LTI degree program are not required to retake GRE and TOEFL/IELTS/Duolingo exams or to produce new transcripts from other universities.

The MIIS program will conduct an expedited admissions process after receiving such a request. The program will explicitly consider whether the coursework done prior to the transfer will allow the student to be “on schedule” by the end of the spring semester, so that the student can participate in a capstone project with other MIIS students during the next fall semester.

MIIS students are allowed to switch tracks (MIIS-16 to MIIS-21 and vice versa) after beginning their first semester at CMU. Ideally, all switch requests must be filed within the first semester of the program. **It is highly recommended to not switch tracks more than once!** Though not forbidden, multiple track switching may negatively impact immigration records of international students. Students also must understand that extension of their stay in the program will lead to additional financial obligations. U.S. citizens, virtually, have no restrictions on how many times they can switch if it is done for a legitimate reason. To confirm legitimacy of the reason to switch tracks, ALL students must seek their advisor's approval and the approval of the Director of the MIIS program.

## 6.4: Transferring Out of the MIIS Program

The MIIS program does not prevent students from transferring to another degree program. Each degree program has its own rules about whether and when transfers into the program are permitted. A student that is interested in transferring out of the MIIS degree program should consult the handbook and Program Director of the desired degree program to learn whether transfers are permitted, and if so, how and when to request such a transfer.

## 6.5: Expected Timeline

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. The expected completion time for the MIIS degree depends on the track in which a student is enrolled:

MIIS-16 students enrolled for full-time study are expected to complete the degree in three semesters of academic study and one summer internship (16 months total).

MIIS-21 students enrolled for full-time study are expected to complete the degree in four semesters of academic study and one summer internship (21 months total).

MIIS-16 students enrolled for part-time study are expected to complete the program in six semesters of academic study and one summer internship (27 months total).

MIIS-21 students enrolled for part-time study are expected to complete the program in seven semesters of academic study and one summer internship (31 months total).

See also the "Statute of Limitations" policy.

### **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.

### **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 or who are anticipating longer-than-standard completion should consult with their designated advisor in the Office of International Education (OIE) to ensure compliance with immigration regulations.

### **Statute of Limitations: Time to Degree**

As outlined in the Master's Students Statute of Limitations, <https://www.cmu.edu/policies/student-and-student-life/masters-students-statute-of-limitations.html>. Students will complete all requirements for the masters' degree within a maximum of seven (7) years from original matriculation as a masters' 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 masters' degree only if newly admitted to a currently offered masters' degree program under criteria determined by that program.

## **6.6: Leave of Absence**

The LTI discourages Leaves of Absence (LOA), because students usually do not return, despite good intentions. However, a student in good standing may be granted a LOA of at most 1 year, upon written request to the Ph.D. Program Director and with consent of the student's advisor. It is the responsibility of the student on LOA to contact the LTI to initiate a return to the program.

Students taking or returning from a leave of absence must follow the university's [leave of absence process](#).

## **6.7: Deferral**

MIIS students may not defer their enrollment. Those who decide not to come will need to reapply to the program if they still wish to attend.

## **6.8: Maximum and Minimum Course Loads**

A student in the program may not take more than sixty (60) units per semester without permission from the program director.

A student in the program must be registered for a minimum thirty-six (36) units per semester to be considered a full-time student or twelve (12) units per semester to be considered a part-time student.

All international students are required by US Federal law to maintain full-time status. Reduced Course Load is not permitted for MIIS students. As per MIIS policy, failure to maintain full-time status will result in loss of a student visa (and, therefore, "permit of stay").

## 6.9: Required Units for Degree Attainment

To complete the Master of Science in Intelligent Information Systems, a student must satisfy three types of requirements. Curricular requirements ensure that MIIS students receive instruction in core intelligent information systems technologies while also allowing an opportunity to specialize in areas of personal interest. Practice requirements are opportunities to apply and hone new skills while building state-of-the-art systems. Grade requirements ensure that students have demonstrated a certain level of skill while completing degree requirements. All three types of requirements are described below.

MIIS-16 students must take at least 84 units (typically 7 12-unit courses) of qualifying and elective courses that satisfy human language, machine learning, and language technology applications breadth requirements and 66 practice units for a total of 150 units to attain the Standard MIIS degree.

MIIS-21 students must take at least 108 units (typically 9 12-unit courses) of qualifying and elective courses and 66 practice units to satisfy their degree requirements, making it a total of 174 units to attain the MIIS: Advanced Study degree.

## 6.10: Core Requirements

An MIIS student must complete the following curricular requirements:

### 1. **Qualifying courses:**

MIIS-16 students must pass 72 units (typically 6 12-unit courses) and MIIS-21 students must complete 96 units (typically 8 12-unit courses) in qualifying master's courses.

A qualifying master's course is defined as:

- a. Any graduate course (600-level or higher) offered by the Language Technologies Institute; and
- b. Any graduate course (600-level or higher) from the list of approved qualifying courses (Section 3.2.4).

### 2. **Free elective:** Students must pass 12 units (typically 1 course) in elective master's course(s). A free elective is defined as:

- a. A graduate course (600-level or higher) with content relevant to the MIIS program objectives offered by the School of Computer Science; and
- b. A course approved by the student's advisor and the degree Program Director.

- c. A student may not use the same course to satisfy both a qualifying course requirement and an elective course requirement.
3. **Breadth requirements:** Students must demonstrate breadth by passing one course in each of the following areas. In addition, MIIS-21 students must take two more LTI courses (24 units total) in one of the following areas of concentration:
- Human language;
  - Machine learning; and
  - Language technology applications.

The department maintains and publishes a list of courses that satisfy each of these requirements (Sections 3.2.5 – 3.2.7). Some courses used to satisfy a breadth requirement can also satisfy qualifying course requirements. A student should get approval from the director for the breadth courses, if not listed below.

## 6.11: Approved Qualifying Courses

**Any graduate course (600-level or higher) offered by the Language Technologies Institute is a qualifying course.**

**Any two graduate courses (600-level or higher) offered by departments within the SCS relevant to the MIIS degree other than LTI** (Machine Learning or Computer Science departments, etc.) may be counted as approved qualifying courses.

Any course from the following list is an *approved qualifying course*.

- 02-712, Computational Methods for Biological Modeling and Simulation
- 05-631, Software Structures for User interfaces
- 05-813, Human Factors
- 10-708, Probabilistic Graphical Models
- 16-720, Computer Vision
- 17-631 Information Security, Privacy & Policy
- 17-781, Mobile and IoT Computing Services

### Breadth Courses: Human Language

- 11-611, Natural Language Processing
- 11-624, Human Language for Artificial Intelligence
- 11-711, Advanced NLP
- 11-722, Grammar Formalisms
- 11-724, Human Language for Artificial Intelligence

- 11-727, Computational Semantics for NLP
- 11-737, Multilingual NLP

## Breadth Courses: Language Technology Applications

- 10-615, Arts and Machine Learning
- 11-642, Search Engines
- 11-688, Concepts in Digital Multimedia and Cyber Forensics
- 11-692, Speech Processing
- 11-697, Introduction to Question Answering
- 11-751, Speech Recognition and Understanding
- 11-767, On-Service Machine Learning
- 11-797, Question Answering
- 11-830, Ethics, Social Biases, and Positive Impact in Language Technologies

## Breadth Courses: Machine Learning

- 10-601, Introduction to Machine Learning (Master's)
- 10-605, Machine Learning with Large Datasets
- 10-701, Introduction to Machine Learning (PhD)
- 10-707, Advanced Deep Learning
- 10-708, Probabilistic Graphical Models
- 10-714, Deep Learning Systems
- 10-715, Advanced Introduction to Machine Learning
- 11-641, Machine Learning for Text and Graph-Based Mining
- 11-661, Language and Statistics
- 11-663, Applied Machine Learning
- 11-667, Large Language Models Methods and Application
- 11-747, Neural Networks for NLP
- 11-755, Machine Learning for Signal Processing
- 11-761, Language and Statistics
- 11-777, Multimodal Machine Learning
- 11-785, Introduction to Deep Learning

## 6.12: Practice Requirements

A student must complete at least 66 practice-oriented course units and satisfy the following practice-oriented requirements for both MIIS-16 and MIIS-21 programs.

1. **Directed study requirement:** Students must pass 24 units (typically 12 units x 2 semesters) in directed study under the supervision of their advisor. Directed study is a structured, task-oriented form of independent study that provides deep, hands-on

experience in a particular technology area and an opportunity to work closely with a member of the faculty.

2. **Internship requirement:** Students must complete a one-semester (typically summer) internship at an organization (typically a company or government agency) approved by the MIIS Program Director. Internships are an opportunity to apply new skills in a professional setting and to learn about software development in a 'real world' organization. Students with prior professional experience may petition the MIIS Program Director to waive this requirement.

MIIS students that do an internship during the summer semester are required to present their internship at a poster session at the beginning of the following Fall semester. The poster and the student's participation in the poster session are part of the internship requirement. Participation is required unless waived in writing by the MIIS Program Director.

3. **Capstone requirements:** Students must complete a capstone project (36 units) and a capstone planning seminar (6 units). The capstone requirement gives students experience with collaborative, team-oriented software development; significant hands-on experience with the techniques studied in the classroom; and an opportunity to work on a large software application.
  - a. The capstone project (36 units) is a large, group-oriented demonstration of student skill in one or more areas covered by the degree. Typically, the result of the capstone project is a major software application. The capstone project is supervised by a member of the faculty who meets with students on a weekly basis to monitor progress and provide guidance.
  - b. The capstone planning seminar (6 units) organizes students into groups; defines capstone project goals, requirements, success metrics, and deliverables; and identifies and acquires data, software, and other resources required for successful completion of the project. The planning seminar must be completed in the semester prior to taking the capstone project.

## 6.13: Drop/Add/Withdraw Procedures

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>. Please note that there is a separate calendar for doctoral courses that does not apply to Masters' students.

## 6.14: Department Policy on Double Counting Courses

A Masters student who uses courses taken as part of another degree program (at Carnegie Mellon or elsewhere) toward their program requirements cannot use those same courses toward any other M.S. degree offered by the School of Computer Science without prior approval.

## 6.15: Department Policy for Courses Outside the Department/College

Courses outside the department should be related to the goals of MIIS program. Besides the courses listed as qualifying courses, a student needs to get an approval by the program director.

## 6.16: Course Exemptions

### **Definition of Transfer Credit vs. Course Exemption**

The LTI may grant transfer **credit** or issue an **exemption** for equivalent graduate courses previously completed at another institution. This decision rests with the director of the program. If a student is **exempt** from a required course due to prior courses or experience, the student can replace that course with an open elective. The student does not receive credit for the external course but can take any course that could normally count toward the degree in its place. If a student receives **credit** for prior coursework completed at CMU or elsewhere, the student receives that many units of credit, and the total amount of required coursework is reduced by that amount.

## 6.17: Protocol for Evaluation of Transfer Credit

An equivalent graduate course previously completed at Carnegie Mellon or another institution may be permitted to satisfy **one** of the MIIS breadth requirements. The decision on whether a course may be used to satisfy a breadth requirement is made by the MIIS Program Director. Typically, the student will provide the Program Director with the syllabus of the external course, and the Program Director will use that and the student's transcript to make the decision.

Satisfying a breadth requirement with a course from another institution **does not** reduce the number of CMU course units that must be taken to attain the MIIS degree.



## 6.18: Teaching Requirements/Opportunities

Teaching assistantships are awarded to faculty members who then award these positions to selected students. Teaching assistant 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 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, located in Warner Hall 425. Students who will be T.A.s for the department are encouraged to visit the Teaching Center and to take advantage of the information and services located there.

Students in the professional master's programs are not prohibited from seeking support as Teaching Assistants and Research Assistants. However, typically, full-time master's students do not have time for these activities. Research Assistantships are most likely to be awarded to students in CMU's research-oriented degree programs.

MIIS students can apply for TA positions only with the permission of the program director. Teaching Assistantships are especially discouraged for first semester students.

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. The full university policy can be reviewed at: <https://www.cmu.edu/policies/faculty/evaluation-certification-english-fluency-instructors.html>

The fluency of all instructional personnel will be rated by Language Support in the Student Academic Success Center to determine at what level of responsibility the student can TA. In addition to administering the International Teaching Assistant (ITA) Test (a mandatory screening test for any non-native speaker of English), 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: [www.cmu.edu/student-success](http://www.cmu.edu/student-success)

## 6.19: Internship/Co-op Requirements and Opportunities

All MIIS students are required to obtain a summer internship. Students are responsible for identifying and applying for internships on their own. The LTI and the university provide several types of support for students seeking internships.

An annual poster session helps spread information from MIIS students that recently completed internships to MIIS students that will soon seek internships; other LTI professional master's programs have similar internship-oriented poster sessions that MIIS students may attend. The university offers resume-writing and interviewing workshops to help prepare students, and fall and spring employment fairs to help students connect with companies. The university's Career & Professional Development Center <https://www.cmu.edu/career/> provides other services as well.

If a student cannot find an internship, the MIIS program will arrange an on-campus internship with a university-based project. This internship may be unpaid.

International students are required to consult with Office of International Education for eligibility before seeking an internship/co-op or signing an offer contract (required addition to ensure the university is in compliance with immigration laws for F & J status students).

Resources to Explore Potential Internships:

- Faculty Recommendations
- College Career Services
- [Career and Professional Development Center](#)

## SECTION 7: Department Policies & Protocols

### 7.1: New Policies / "Grandfather" Policy

A student can graduate under the policies in effect at the time that the student entered the program; or, at the student's choice, the student can graduate under policies that are adopted after the student entered the program. If it is not realistic to follow a particular policy exactly, the department may approximate the policy as closely as possible; this situation is rare and typically arises only when a student is enrolled in the program for an extended period.

## 7.2: Time Away from Academic Responsibilities

Graduate students should not assume that their time off follows the academic calendar of courses. Many are coming from an undergraduate environment where their university employment followed their course schedule. For many graduate degree programs, there is an expectation that graduate students continue research during academic breaks and time away from campus which may or may not be negotiated with the students. If there are requirements for student time beyond a typical weekday, this should be specified. Clarify that University Holidays are also student holidays, and students need to consult their faculty about coverage if they have challenges with taking time off during University Holidays. For example, if experiments are running that need to be monitored continuously students should speak with their faculty about arrangements to take an equal number of days off at another time.

## SECTION 8: Grading & Evaluation

### 8.1: Grading Scale/System

Students must demonstrate their mastery of material taught in courses and their success in applying their skills in directed study and capstone projects by satisfying the following grade requirements:

**1. Minimum grade:** A student must obtain a B- or better grade in all courses, which count towards core requirements. If a student receives a C or better, that course may count as an elective towards the degree requirements.

**2. Minimum QPA:** A student must maintain an average QPA of at least 3.0 in courses and projects used to satisfy degree requirements.

### 8.2: Department Policy on Pass/Fail, Satisfactory/Unsatisfactory

Pass/fail grades are not permitted for courses and projects used to satisfy a degree requirement, with the exception of the 11-696 (A) Capstone Planning Seminar and 11-935 (R) LTI Practicum that are a Pass/Fail.

Graduate students who are required to take additional undergraduate courses to build up the core foundations of computer science may not elect the pass/fail option for these courses.

### 8.3: Department Policy for Incompletes

If a student takes an incomplete grade, the student needs to complete the course within the following semester. If the student fails to complete it, the default grade from the previous semester may be given.

### 8.4: Independent Study Course

Independent study courses allow students to cover study of a particular area of interest, and are used when no formal course is available in a given subject area. An independent study can be counted as an Elective course, but it cannot be counted as a Qualifying course.

Each independent study course must be advised and approved by at least one faculty member. Agreement to supervise an independent study course is purely voluntary on the part of the faculty member. It is the duty of the student, therefore, to negotiate the terms and conditions of the independent study with the pertinent faculty members of CMU who will be supervising the study. These individuals are referred to as "independent study supervisors." Once the student finds someone who agrees to supervise such a course, they must:

1. Request approval from the MIIS Program Director and complete proposal before the first day of classes in a given semester;
2. Enter into an agreement with the independent study supervisor that includes course expectations, including deliverables;
3. Secure the "Independent Study Contract Form" from the MIIS program manager;
4. Complete the form, provide a brief description of the work to be done, including deliverables and how they will be graded;
5. Secure signatures of both the student and the supervisor;
6. Return the form to the MIIS program manager in order to obtain approval for the independent study from the MIIS Program Director.

Independent study contracts must be submitted no later than on the last day of the first week of classes in a given semester.

## 8.5: Satisfactory Academic Standing

If a student does not make satisfactory progress each semester toward completing the degree, the LTI may remove the student from the program or strongly encourage the student to consider switching to the four-semester program (MIIS-21) to complete all the requirements.

Students may appeal any/all of these decisions; see the [Summary of Graduate Student Appeal and Grievance Procedures](#) for more information.

## 8.6: Regular Reviews and Evaluations by Department

Near the end of each semester, the student must prepare a statement that describes their achievements in the current semester and plans for the next semester. At the end of the semester, the faculty evaluates each student's academic progress. The student's advisor serves as the student's advocate in this process. The result of the evaluation is a letter from the faculty to the student that indicates whether the student is making *satisfactory progress* towards completing the degree.

A **good letter** typically indicates that the student is making *satisfactory progress*. If the student is doing exceptionally good work, a stronger adjective such as *excellent* might be used, but this is unusual.

If a student seems to be having trouble, the faculty determines whether it believes that the student can finish the degree, and if so, what needs to be accomplished to get back on track. This type of letter should be considered a serious warning. It is **not** a permanent "black mark" on the student's record; if the student begins making satisfactory progress again, there is no official record of the letter in the student's transcript.

In the most serious cases, the faculty gives the student an *N-1 letter* that specifies a list of conditions that the student must satisfy by specific deadlines. Failure to meet all the specified conditions may result in the student's termination from the program.

## 8.7: Process for Appealing Final Grades

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.

[Summary of Graduate Student Appeal and Grievance Procedures - Office of Graduate and Postdoctoral Affairs - Carnegie Mellon University \(cmu.edu\)](#)

## **SECTION 9: Funding & Financial Support**

### **9.1: Statement of Department Financial Support**

The LTI does not provide financial aid or support to students in the professional master's programs. Students are encouraged to seek financial aid and support from other sources. The HUB website (<https://www.cmu.edu/sfs/financial-aid/index.html>) provides the Graduate Financial Aid Guide, information about funding options and how to apply for financial aid and other helpful links. Additional information on financial issues for graduate students can be found on the web at <http://www.cmu.edu/hub/new-grad/>.

### **9.2: Travel/Conference and Research Funding**

LTI supports up to three students per professional program for conference attendance. Consistent with the travel policy, the amount is \$250 for attendance, \$750 for presenting a paper. The amounts are annual and do not cross years.

### **9.3: Additional Sources of Internal & External Financial Support**

#### **External Employment/Consulting**

Since the MIIS program places heavy demands on student time, external employment and/or consulting are strongly discouraged. Exceptional students who wish to consult should discuss this with their Advisor. International students must also have approval in advance from the Office of International Education (OIE) for any outside employment.

## SECTION 10: ADDITIONAL DEPARTMENTAL INFORMATION

### 10.1: LTI Orientation

Prior to the beginning of each Fall semester the LTI provides lectures and faculty research talks to help students learn about the work done by CMU faculty and to provide an opportunity for advisors to recruit new students. Students are expected to attend them and to treat them as seriously as a course, because they provide a good introduction to the broad range of research done at the LTI. Students do not have to register for the LTI Orientation Faculty Research Talks, nor do they receive a grade, however the department is serious about its expectation that new students will attend these talks.

The [LTI Orientation Canvas course](#) is a mandatory course designed to increase incoming LTI graduate students' awareness and understanding of CMU's community standards and the resources that CMU offers the students. The course includes several administrative tasks, training, and educational sessions. The students will be enrolled into the course by the program administrator in early August. All MIIS students are expected to complete all assignments by the end of their first semester in the program. Each assignment has its own due date.

---