Carnegie Mellon University

Academic Year 2024-2025

School of Computer Science Language Technologies Institute

Master's Student Handbook

Degree Programs Covered by This Handbook:

Master of Language Technologies (MLT)

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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 research leaders. While the next two years will be a time of hard work and intense concentration, we hope that your time at the LTI will also be rewarding personally and professionally.

The Master of Language Technologies (MLT) is a research-oriented Master of Science degree offered by the Language Technologies Institute (LTI), a graduate department in the School of Computer Science at Carnegie Mellon University. The MLT program is a 24month program consisting of courses, directed research, and an optional Masters' Thesis. Typical research areas include speech processing, information retrieval, machine translation, natural language processing, machine learning, and computational biology. Many MLT graduates continue on to PhD programs in the LTI or other leading universities. Other graduates go on to work in the computer industry, many at major corporate research laboratories.

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 Master of Science in Language and Information Technologies (MLT). 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 (MSAII)
- Master of Science in Language Technologies Integrated Study (5th Year Masters)

This handbook applies to the LTI MLT.

The MLT in Language Technologies is focused on understanding and extending the state of the art in computational linguistics, natural language processing, dialogue systems, information retrieval, machine translation, speech processing, video understanding, multimodal systems, automated reasoning, and other topics related to analysis and understanding of unstructured information (e.g., machine learning, and software engineering of intelligent systems).

SECTION 3: Departmental Personnel

The people responsible for administering the LTI MLT degree are:

Robert Frederking Program Director Principal Systems Scientist GHC 5501 <u>ref@cs.cmu.edu</u> 412-268-6656

Kate Schaich MLT Program Lead GHC 6415 <u>kschaich@cs.cmu.edu</u> 412-268-4788 Mona Diab LTI Director Professor GHC 5723 <u>mdiab@andrew.cmu.edu</u> 412-268-3669

The LTI Academic Program Team <u>lti-academics@andrew.cmu.edu</u> Julie Nys Employment Processes Manager GHC 6716 jnys@andrew.cmu.edu 412-268-3515 Joan Axelson Office Manager GHC 6716 <u>jaxelson@andrew.cmu.edu</u> 412-268-7517

Students may also confer with the Graduate Education Office (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:

Language Technologies Institute Carnegie Mellon University 5000 Forbes Avenue Gates Hillman Complex 5402 Pittsburgh, PA 15213

412-268-6298 (fax) www.lti.cs.cmu.edu

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.

4.3 Mailboxes and Office Supplies

Mailboxes, printers, copiers, and other departmental resources 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. <u>SCS Computing Facilities</u> publishes a list of printers at <u>https://computing.cs.cmu.edu/desktop/printer-list.</u>

4.5 Computers for MS Students

Students are expected to provide their own laptop computers that can be used to access university resources and complete course assignments. Laptops running Windows, MacOS, and Linux software are all acceptable.

MS students will be given a CS user ID. A CS user ID is required to use the LTI computer cluster, department printers, and other SCS services. The School of Computer Science has a Help Center located at 4203 GHC. They can be contacted at help@cs.cmu.edu, extension 8-4231 from a campus phone, or 412-268-4231 from an outside line.

MS students will be 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.

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.

For all LTI MLT students, full funding (tuition plus stipend) is guaranteed for the first year. This support is normally continued for the duration of the program, subject to continuing satisfactory progress and availability of funding. The fellowship includes full tuition and fees, and a monthly MLT stipend. In addition, the LTI pays a dependency allowance of 10% of the student's monthly stipend to any student with a child, unless they have a spouse who earns more than \$200 per month. If an MLT student receives an outside graduate fellowship (e.g., NSF, Fulbright), the student is expected to accept it in place of the LTI's graduate fellowship. As an extra incentive to do so, the LTI will supplement the award so that the student will receive full tuition and a combined stipend 10 percent higher than that of the standard LTI graduate fellowship. Students are required to inform the LTI about any external funding that they receive.

Until a student finds a specific advisor, the chair 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 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 <u>in-person expectation coursework</u>. 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: Transferring Into the MLT Program

Transfers into the MLT 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; this is a university policy.

Students may request to transfer into the MLT program after completing their first semester.

The student must make the request in writing (or email) to the MLT/PhD Admissions Chair. The MLT/PhD Admissions Chair 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 exams or to produce new transcripts from other universities. The MLT program will conduct an expedited admissions process after receiving such a request.

6.3: Transferring Out of the MLT Program

The MLT 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 MLT 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.

6.4: 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 MLT degree is 24 months. Upon completion of the graduate program degree requirements, the degree will be certified 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. MLT students are only allowed to graduate early in special circumstances, with approval of the Program Director.

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 need to refer to CMU Policy on Master's Student Statute of Limitations

(www.cmu.edu/policies/student-and-student-life/masters-students-statute-of

<u>limitations.html</u>) 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-oflimitations.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-todegree 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.

6.5: 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 MLT 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 <u>leave of</u> <u>absence process</u>.

6.6 Registration Process

MLT students must register for at least 36 units per semester to be considered full-time, and SCS typically requires at least 54 units per semester.

6.7: Required Units for Degree Attainment

In order to complete the Master of Language Technologies degree, the student must satisfy all of the following course requirements with passing grades:

- At least 120 course units of senior-to-graduate-level courses
- At least 72 of the 120 units must be "LTI" courses (see next section for definition)
- At least 24 of the 120 units must be "SCS" courses (see next section for definition)
- One of these LTI courses must be 11-711
- One of these LTI courses must be 11-791 (or an equivalent, see below)
- One of these LTI courses must be a ``Task Orientation Focus" class
- One of these LTI courses must be either:
 - o an LTI lab course,
 - o 11-792, or
 - o project-oriented Masters' thesis;
- 12 of the 120 units must be 11-910 Directed Research;
- The other 12 units are an Open Elective (no additonal restrictions).

The student must also complete two summers of full-time directed research, attend the LTI Colloquium (11-700) each semester, and satisfy the Research Speaking Requirement (described elsewhere).

Since 11-791 is not being offered currently, the faculty have defined a list of acceptable substitute courses:

- 11-727: Computational Semantics for NLP (only if the course project was done as a group project)
- 11-731: Machine Translation
- 11-747: Neural Networks for NLP
- 11-751: Speech Recognition
- 11-775: Large-Scale Multimedia
- 11-776: Multimodal Affective Computing
- 11-777: Multimodal Machine Learning
- 11-785: Deep Learning
- 11-797: Question Answering

Students may request to have other LTI courses with a group engineering project component to be added to this list.

Unless approved by the Program Director in advance, course requirements must be satisfied by actual classroom courses, not credit given for research or independent study. Note that a Masters' Thesis is not required in general, although a thesis project may be used to satisfy the "lab" requirement.

6.8: Definitions of LTI Terminology

We define here some of the terms as used in this handbook:

- An "LTI course" is any 12-unit course with a number of 11-XXX; a 6-unit course with an 11-XXX counts as 1/2 of an LTI course. Unless otherwise specified, "course" means an actual classroom course, not credit given for research or independent study. Note that we will allow any one MLD (10-xxx) graduate-level course to count as an "LTI course."
- An "SCS course" is any 12-unit course with a course number indicating a unit of the School of Computer Science (including LTI); a 6-unit course with such a number counts as 1/2 of an SCS course. Unless otherwise specified, "course" means an actual classroom course, not credit given for research or independent study. Note: Recommended electives that are technically *outside* of the SCS now count towards this requirement; for example, Digital Signal Processing in ECE. Please see the Program Director for approval of electives as "SCS."
- "LTI Focus Areas" are sets of courses defined on the LTI course webpage under "Course Categories." If a student believes a new course should be added to a Focus Area, they should notify the Chair of the LTI Graduate Programs. He will decide, with advice from faculty in the appropriate area, whether it should be in the Focus Area, and if approved it will be added to the LTI Focus Area webpage.
 - o A "Task-Orientation Focus Course" is simply a course belonging to that LTI Focus Area, as listed on the "Course Categories" webpage.
 - o An LTI "lab course" is simply a course in the list of lab courses defined in the LTI "Course Categories" webpage.

6.9: 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. This is an SCS-wide policy.

6.10: Department Policy for Courses Outside the Department/College

Students may take elective courses outside the SCS, at Carnegie Mellon or cross-registered at the University of Pittsburgh, as long as the student fulfills the requirements of their program as described above. The student should discuss any such electives in advance with their advisor. Typical choices might include ECE courses for Speech students, Pitt Linguistics courses, or Statistics courses. Students interested in taking recommended electives outside the SCS should pay particular attention to the following issues:

- Know which recommended electives outside of the SCS count towards the "SCS course" requirement. Please see the Program Director for approval of new electives that can count as an "SCS course."
- Students need advance approval for any courses not covered by their normal tuition (e.g., summer courses).
- The grading of outside courses is the responsibility of the department offering the course; however, the LTI's Minimum Course Grade Policy described in Section 9.1 still applies ("C" is the minimum for MLT).

6.11: 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 particular 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 transfer 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.

6.12: Protocol for Evaluation of Transfer Credit

An equivalent graduate course previously completed at another institution may be permitted to satisfy one of the MLT course requirements. The decision on whether a course may be transferred is made by the MLT 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.

See the section on "Definition of transfer credit versus course exemption."

All MLT students are required to take a minimum of 96 units of coursework at CMU.

6.13: Teaching Requirements/Opportunities

MLT students do not normally serve as Teaching Assistants (TAs). If an MLT student wants to TA a course, they must get the approval of their research advisor.

In the unusual case of an MLT student TAing, note that 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 <u>https://www.cmu.edu/policies/faculty/evaluation-certification-english-fluencyinstructors.html</u>.

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 for all non-native speakers 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: https://www.cmu.edu/student-success/.

6.14: Research Requirements/Opportunities

Resources and Regulations Governing Research at Carnegie Mellon

- Office of Sponsored Programs
- Office of Research Integrity & Compliance
- Intellectual Property Policy
- Policy on Restricted Research
- Human Subjects in Research Policy

MLT students carry out directed research each semester and each summer under the guidance of their research advisor. See section 5.1 regarding the role of the advisor. See section 8.6 for a description of the LTI's end-of-semester review, at which research progress is evaluated and research grades are determined.

6.15: Internship/Co-op Requirements and Opportunities

MLT students may only engage in internships if their advisors recommend it, since the program is 24 months, including summers.

We caution all students to be aware of potential intellectual property (IP) problems with internships, and to review any IP agreements with their advisors before signing them. It is possible to lose ownership of your ideas.

International students are required to consult with the Office of International Education for eligibility for work authorization before starting or seeking an internship/co-op or consulting opportunity. International students will benefit from proactively reviewing OIE guidance regarding off-campus work authorization. Off-campus work authorization processing times can take several weeks or months, and international students will benefit from starting the off-campus work authorization process as early as possible.

Resources to Explore Potential Internships:

- Faculty Recommendations
- College Career Services
- <u>Career and Professional Development Center</u>

6.16: Optional Masters' Thesis

MLT students may **optionally** elect to complete a Masters' Thesis; it is **not** required. Students who intend to apply for the PhD program should consider the MLT Thesis as one of several ways to demonstrate their research potential. Other possibilities include innovative research in a research project or class project work.

The MLT Thesis must be completed according to the following guidelines. **Note in** particular the October 31 proposal deadline!

- There are two course components required for students who elect to complete the M.S. Thesis: 11-928 – Masters' Thesis I (with the chosen thesis advisor, typically for 12 units, typically in the Fall of their second year) and 11-929 – Masters' Thesis II in the following Spring.
- Each of these two courses counts towards 6 units of MLT-level LTI course credit; if the student goes on to an LTI PhD, the second course (11-929) counts towards one PhD lab requirement.
- The MLT thesis may focus on either a significant research result or a significant implementation of a new technology. The student should work with their advisor to define an interesting but bounded thesis research project. The MLT thesis culminates in a publication-quality paper that clearly describes the work in terms of its research significance.

- The MLT thesis committee will be composed of a thesis advisor and two additional readers, to be chosen by the student in consultation with the advisor, during the Fall Masters' Thesis I course. At least 2 of the 3 committee members must be SCS faculty working in Language Technologies.
- To receive a final grade for the first semester's course, the student must have prepared a written proposal of at least five pages, describing the scientific thesis to be investigated, any relevant research already completed by the student, a comparison with related work by others, and a detailed description of the work to be done in the next semester. The proposal MUST be accepted by the committee by the end of October, or the student will not be allowed to enroll in 11-929 Masters' Thesis II!
- Sometime during the semester when the student enrolls in 11-929 Masters' Thesis II (typically, their final semester), the student will distribute a draft of the thesis to the committee for initial review. This should be done as early as feasible, to avoid last minute surprises that could delay final approval of the thesis.
- The thesis work culminates in submission of the final version of the thesis document, followed by a public presentation of the work in an LTI seminar (or another suitable public forum). Since the defense is public, the LTI Academic Team must receive all the information required for a public announcement at least one week before the defense. The Masters' Thesis presentation is somewhat less rigorous than a PhD thesis defense. The presentation must communicate the research work done, similar to a conference paper presentation. The committee will observe the presentation, and then decide whether the thesis and presentation were acceptable, or whether further work is required. Unlike a PhD defense, only a simple majority vote of the committee is required for approval.

Although students are required to enroll in the appropriate course sequence of two Masters' Thesis courses, it is not required that students finish the thesis by the end of that second semester. If a student requires more time to revise the thesis to the committee's satisfaction, and adequately present the work, an incomplete grade will be assessed in the Masters' Thesis course, until such time as the work and presentation are accepted. The student will still be allowed to walk in Spring Commencement, if all other requirements for the MLT degree have been completed. Students should note that any financial support beyond the end of the semester will be on a case-by-case basis, and must be arranged in advance with the project supporting them. Students are strongly encouraged to finish the thesis work within one (1) year following the semester they enroll for the first Masters' Thesis course.

6.17: Requirements for Application/Consideration for Entry into PhD Program

MLT students who wish to enter the LTI PhD program need to apply through the normal School of Computer Science process, via the normal graduate admissions portal:

https://www.cs.cmu.edu/academics/graduate-admissions

If admitted, any courses that they have taken at CMU will be counted as if they were taken during the PhD program. Note that senior undergraduate courses do not normally count towards PhD requirements.

SECTION 7: Department Policies & Protocols

7.1 Department Policy for Withdrawing from a Course

Students taking undergraduate and Masters' level courses must follow the procedures and deadlines for adding, dropping, and withdrawing from courses as identified on the academic calendar. Information can be found at

<u>https://www.cmu.edu/hub/registrar/coursechanges.index</u>. Please note that there is a separate calendar for doctoral courses that does not apply to Masters' students.

7.2: 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 of time.

7.3: Time Away from Academic Responsibilities

MLT students that are supported by sponsored research, fellowships, or scholarships are expected to remain on campus and work full time on their education and research throughout the year, regardless of whether classes are in session or not. 40 hours per week is a common full-time level of effort.

Ordinarily, students are not expected to work during official university holidays; however, students may need to consult their advisor about expectations and alternate arrangements if there are challenges with taking time off during a university holiday, for example, if an experiment requires continuous monitoring. In such situations, the student and their advisor may agree for the student to take an equal number of days off at another time.

Students with full time financial support are entitled to four weeks per year of paid vacation, which must be scheduled in consultation with their advisor.

See also the University expectation on time away <u>https://www.cmu.edu/leadership/the-provost/campus-comms/2022/2022-03-16.html</u>

SECTION 8: Grading & Evaluation

8.1: Grade Requirements

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

Minimum grade: Only courses with a grade of C or higher are counted as satisfying a degree requirement.

The MLT program does **not** have a **minimum QPA** (GPA) requirement. Instead, see section 8.6 regarding the end-of-semester review process.

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.

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

Carnegie Mellon students are expected to complete a course during the academic semester in which the course was taken. However, if the instructor agrees, a grade of I

(incomplete) may be given when a student, for reasons beyond his or her control, has been unable to complete the work of a course, but the work completed to date is of passing quality and the grade of incomplete provides no undue advantage to that student over other students.

In awarding an I grade, an instructor must specify the requirements for completing the work and designate a default letter grade where no further work is submitted. Students must complete the required course work no later than the end of the following academic semester, or sooner if required by prior agreement. The instructor must record the permanent grade by the last day of the examination period of that following semester, or Enrollment Services will administratively assign the default grade.

8.4: Independent Study/Directed Reading

All MLT students register for 11910 Directed Research, to document the research work they do with their advisor. This is typically 24 units each semester, and 36 units each summer.

Separately, a student may wish to pursue a semester-long study with a faculty member and use it to satisfy a course requirement. This would be registered as 11920 Independent Study. For an Independent Study to satisfy an MLT student's coursework requirements, it must be approved by the MLT Program Director in advance. In consultation with the CMU faculty member who will be supervising the Independent Study, the student should produce a short (half-page to one page) description of the goals of the Independent Study, and how the results will be evaluated, and submit it to the Program Director before the end of the Add period of the semester of the proposed study. The study should be planned so that it is finished in time for the supervising faculty member to give a grade at the end of the semester. Independent studies may be undertaken for 6 or 12 units. Normally only one Independent Study would be approved during a student's MLT coursework.

8.5: Satisfactory Academic Standing

If a student does not make satisfactory progress each semester toward completing the degree, the LTI may remove them from the program. See section 8.6 on "End of Semester Evaluation."

Students may appeal any/all of these decisions; see the <u>Summary of Graduate Student</u> <u>Appeal and Grievance Procedures</u> for more information.

8.6: Regular Reviews and Evaluations by Department

The MLT program does not have a minimum QPA requirement. Instead, the LTI faculty reviews each MLT student at the end of the Fall and Spring semesters.

Near the end of the semester, the student must prepare a statement that describes his or her 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. This process also determines the student's grade in 11910 Directed Research for the semester.

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 not expected.

If a student seems to be having trouble, the faculty determines whether it believes 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: Review/Redress of Academic Conflicts

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.

See the university's <u>Summary of Graduate Student Appeal and Grievance Procedures</u> web page for more information.

SECTION 9: Funding & Financial Support

9.1: Graduate Student Funding

For all MLT students, full funding (tuition plus stipend) is guaranteed for the first year. This support is normally continued for the duration of the program, subject to continuing satisfactory progress and availability of funding. The fellowship includes full tuition and fees, and a monthly MLT stipend. In addition, the LTI pays a dependency allowance of 10% of the student's monthly stipend to any student with a child, unless they have a spouse who earns more than \$200 per month.

If an MLT student receives a graduate fellowship or scholarship from another source (e.g., NSF, Fulbright, Apple), the student is expected to accept it in place of the LTI's graduate fellowship. The LTI will supplement the award so that the student receives full tuition and a combined stipend 10 percent higher than that of the standard LTI graduate fellowship.

Students are required to inform the LTI about any external funding that they receive.

9.2 Health Insurance Requirement

Carnegie Mellon has a Student Health Insurance policy requiring full-time, degree seeking students to carry adequate medical insurance. Students must either purchase the plan offered by the University or an application for a waiver can be made if the student is "enrolled as the dependent, partner/spouse or principal in an employer or government-sponsored insurance plan." (See the Carnegie Mellon University Student Health Insurance Policy (SHIP)).

It is the responsibility of each student to make arrangements with Student Health Services to either pay for their insurance at the beginning of the semester or elect a payment plan over the course of the academic year. More information is available at the Student Health Services Web site.

9.3: Travel/Conference and Research Funding

Students funded by research projects receive travel funding according to policies set by the individual projects. Students who have no travel support may request partial travel support from the department once a year. *All forms of travel support must be requested in advance.*

9.4: Funding Payment Schedule

Graduate Student Assistants receive their stipends on a bi-monthly payroll schedule. You can find the payroll calendar at <u>https://www.cmu.edu/hr/service-center/payroll/payroll-calendars.html</u> or contact the LTI Employment Processes Manager (see Section 4).

9.5: Procedure for Written Notification of Change in Financial Support

The LTI does not have a formal procedure for written notification of change in financial support. Instead, it has a set of common practices that are applied and adapted as necessary to fit each individual situation.

Generally, the LTI provides stable financial support through sponsored research funding to MLT students who are making good academic progress. The end-of-semester student evaluation (Section 8.6) provides written feedback to students about their academic progress to help students correct problems. If there is uncertainty or risk related to a student's funding, these written reviews usually discuss it clearly. Common practice is to give the student a semester of warning if there is substantial risk of a significant change in financial support.

If a research sponsor terminates research funding suddenly, the department usually helps the student find new funding and/or provides brief interim funding until a new funding source is in place.

If a student does not meet obligations to a sponsored research project, the sponsored research funding may be withdrawn. Usually, the student receives substantial prior written warning, for example, through semi-annual student evaluations (Section 8.6). If the student is in good standing, the department usually instructs the student to find a new source of funding, for example, from a sponsored research project more compatible with the student's interests and skills. The department may also provide brief interim funding until a new funding source is in place.

If a student loses funding, Carnegie Mellon's Office of Graduate and Postdoctoral Affairs provides information about student emergency support funding, national and international fellowships and scholarships, and other information about alternate funding sources (<u>https://www.cmu.edu/graduate/funding/</u>). Students also may want to see the Lost Funding section in the University-Wide Graduate Student Handbook for more information (<u>https://www.cmu.edu/graduate/resources/</u>).

9.6: Department Policy on Outside Employment

Students funded by LTI research projects are normally expected to work exclusively for those projects. Since consulting may provide useful experience, students are generally permitted to consult, at most, one eight-hour day per seven-day week, only with the advisor's consent. International students must also have approval in advance from the Office of International Education (OIE); otherwise, they may be in violation of their visa status.

Important: Any work for pay outside of the funding research project must be approved in advance by the advisor (and OIE, for international students). This includes paid TAing, consulting, online freelancing, etc.