



SOFTWARE AND SOCIETAL SYSTEMS DEPARTMENT
MASTER OF SOFTWARE ENGINEERING
PROFESSIONAL PROGRAMS

2023 - 2024
STUDENT HANDBOOK

MASTER OF SOFTWARE ENGINEERING
MASTER OF SCIENCE in SOFTWARE ENGINEERING ONLINE
MASTER OF BUSINESS ADMINISTRATION & MASTER OF SOFTWARE ENGINEERING
MASTER OF SOFTWARE ENGINEERING – SCALABLE SYSTEMS
MASTER OF SOFTWARE ENGINEERING – EMBEDDED SYSTEMS
INFORMATION SYSTEMS – MASTER OF SOFTWARE ENGINEERING – ACCELERATED MASTER'S
PROGRAM

Updated: August 2023

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

DEDICATION

To the late Curtis M. Scott (MSE '92), who had a desire to help incoming students and took it upon himself to write *Uncle Rusty's Guide to the Telesoft Environment*.

Table of Contents

WELCOME FROM THE MASTER OF SOFTWARE ENGINEERING PROFESSIONAL PROGRAMS	8
CARNEGIE MELLON UNIVERSITY: VISION & MISSION	8
UNIVERSITY GENERAL INFORMATION	9
GRADUATE STUDENT HANDBOOK OVERVIEW	9
CARNEGIE MELLON UNIVERSITY STATEMENT OF ASSURANCE POLICY	9
THE CARNEGIE MELLON CODE	9
UNIVERSITY POLICIES AND EXPECTATIONS	10
ETHICAL STANDARDS: PROFESSIONAL & ACADEMIC INTEGRITY; ELIGIBILITY REQUIREMENTS	10
SAFEGUARDING EDUCATIONAL EQUITY	11
Assistance for Individuals with Disabilities	11
Sexual Misconduct Policy	11
Consensual Intimate Relationships Policy Regarding Undergraduate Students	12
Gestational and Parental Accommodation	12
Accommodations for Gestational Parents	12
Financial Assistance for Student Parents	13
CARNEGIE MELLON STUDENT HANDBOOK: THE WORD	13
DEPARTMENTAL INFORMATION	13
MASTER OF SOFTWARE ENGINEERING PROFESSIONAL PROGRAMS MISSION STATEMENT	13
DEGREES OFFERED	13
MASTER DEGREE COMPLETION AND CERTIFICATION	14
STANDARD DEGREE REQUIREMENTS & DEGREE CERTIFICATION	14
<i>Early Completion</i>	15
<i>Extended or Longer-than-Standard Completion</i>	15
<i>Additional Guidance for Students</i>	15
Program of Study	15
Financial Aid and Student Account	15
International Students	15
STATUTE OF LIMITATIONS	16
<i>Duration of the Program</i>	16
DEFINITION OF FULL-TIME AND PART-TIME STATUS	16
RESIDENCY REQUIREMENTS	17
DEFERMENT OF START OF PROGRAM	17
PARTICIPATING IN CAMPUS COMMENCEMENT	17
LANGUAGE PROFICIENCY REQUIREMENTS	17
CURRICULAR REQUIREMENTS	17
Plan of Study	18
Required Units for Degree Attainment	18
<i>Master of Software Engineering (MSE) Requirements</i>	18
<i>Master of Science in Software Engineering (MSE Online) Requirements</i>	20

<i>Master of Business Administration & Software Engineering (MBA/MSE) Requirements</i>	22
<i>Master of Software Engineering in Scalable Systems (MSE-SS) Requirements</i>	23
<i>Master of Software Engineering in Embedded Systems (MSE-ES) Requirements</i>	24
<i>Information Systems – Master of Software Engineering – Accelerated Master Program (IS-MSE-AMP) Requirements</i>	26
ELECTIVES	28
WHAT COURSES COUNT AS ELECTIVES?	28
COURSES TAKEN OUTSIDE THE DEPARTMENT	28
INDEPENDENT STUDY COURSES	28
COURSE MATERIALS	29
GRADES AND EVALUATIONS	29
<i>Grade Reports</i>	29
<i>Pass / Fail Grades</i>	29
<i>Withdrawing from a Course</i>	30
<i>Grades Earned for Retaking a Course</i>	30
<i>Incomplete Grades</i>	30
<i>Incomplete Grades Delaying Graduation</i>	30
<i>Process for Appealing Final Grades, Change of Grade, and Missing Grades</i>	31
<i>Transfer Courses and Grades</i>	31
University Policy on Grades for Transfer Courses	31
Program Protocol for Evaluation of Transfer Credit	31
Transfer from Master to Doctoral Programs	32
<i>Required Studio and Practicum Projects</i>	32
<i>Required Summer Internships</i>	33
ACADEMIC STANDING IN THE PROGRAM	33
<i>Professional Integrity</i>	34
<i>Academic Integrity, Cheating and Plagiarism</i>	34
<i>University Policy on Academic Integrity</i>	35
<i>Academic Integrity Violations</i>	35
<i>Academic Performance Reviews</i>	36
<i>Written Notification of Unsatisfactory Progress Toward a Degree</i>	36
<i>Academic Probation</i>	36
<i>Appeal for Academic Actions</i>	36
<i>Graduate Certification and Degree Title</i>	36
<i>Withdrawal of a Degree</i>	37
SCHEDULES	37
<i>Academic Calendar</i>	37
<i>University Schedules</i>	37
<i>Examination Schedules</i>	37
MAKE-UP EXAMS	38
COURSE SELECTION AND ENROLLMENT	38
<i>Academic Advising</i>	38
ROLE OF THE GRADUATE ACADEMIC ADVISOR	38
ROLE OF THE STUDENT	38
<i>Registration Policy</i>	38
<i>Registration Procedures</i>	39

<i>Drop/Add/Withdraw Procedures</i>	39
<i>Courses with Restricted Enrollment</i>	39
<i>Enrollment Verification</i>	39
ADDITIONAL DEPARTMENTAL POLICIES AND PROCEDURES	40
<i>Taking or Returning from a Leave of Absence</i>	40
<i>Employment Eligibility Verification</i>	40
<i>Department Expectations Regarding Employment Search</i>	40
ORIENTATION	41
INTELLECTUAL PROPERTY	41
GRANDFATHER POLICY	41
TUITION AND FINANCIAL AID	41
ASSOCIATED FEES, CONFERENCE TRAVEL	41
UNIVERSITY FINANCIAL AID	41
OFFICE OF THE DEAN OF STUDENTS EMERGENCY SUPPORT FUNDING	42
TUITION PAYMENTS	42
TUITION PAYMENT FOR SUMMER COURSES/FULL- AND PART-TIME STUDENTS	42
TUITION REFUND POLICY FOR FULL-TIME AND PART-TIME STUDENTS	42
SPONSORED STUDENTS	42
CARNEGIE MELLON EMPLOYEE REIMBURSEMENT PROCEDURE	42
FULL-TIME/PART-TIME STATUS REQUIREMENTS	42
FINANCIAL SUPPORT FROM THE MSE PROGRAMS	43
EXTERNAL FELLOWSHIPS	43
MSE FELLOWSHIP	43
JAMES E. TOMAYKO SCHOLARSHIP	43
DIRECTOR'S LIST	43
TEACHING REQUIREMENTS	43
POLICY ON OUTSIDE EMPLOYMENT	44
AVAILABILITY OF SUMMER EMPLOYMENT	44
GENERAL MSE PROFESSIONAL PROGRAMS INFORMATION	44
MAILING ADDRESS	44
PROGRAM RESOURCES	44
<i>Office Spaces and Building Facilities</i>	45
CONFERENCE ROOMS	45
MEDIA ROOMS	45
INTERVIEW BOOTHS	45
PROGRAM/DEPARTMENTAL LIBRARIES	46
PARKING	46
REPAIRS	46
ACCIDENTS ON CMU PROPERTY	46
<i>Printing and Copying</i>	46
PRINTER/COPY MACHINES	46
<i>Office Supplies and Equipment</i>	46
INDIVIDUAL SUPPLIES	46
SHARED SUPPLIES	47

REPLACEMENT SUPPLIES	47
CONFERENCE PHONES	47
COMPUTER MONITORS	47
<i>Financial and Social Resources and Policies</i>	47
EXPENSES	47
SOCIAL COMMITTEE/ ACTIVITIES	47
PURCHASING POLICIES AND PROCEDURES	48
PRESS AND MEDIA RELATIONS	48
UNIVERSITY/COLLEGE/DEPARTMENT/PROGRAM BRAND AND LOGOS	48
APPENDICES	49
APPENDIX A: KEY OFFICES FOR GRADUATE STUDENT SUPPORT	49
OFFICE OF GRADUATE AND POSTDOC AFFAIRS	49
OFFICE OF THE DEAN OF STUDENTS	49
The Division of Student Affairs	49
CENTER FOR STUDENT DIVERSITY AND INCLUSION	50
ASSISTANCE FOR INDIVIDUALS WITH DISABILITIES	50
EBERLY CENTER FOR TEACHING EXCELLENCE AND EDUCATIONAL INNOVATION	50
GRADUATE STUDENT ASSEMBLY	51
OFFICE OF INTERNATIONAL EDUCATION	51
VETERANS AND MILITARY COMMUNITY	51
CARNEGIE MELLON ETHICS HOTLINE	52
POLICY AGAINST RETALIATION	52
APPENDIX B: KEY OFFICES FOR ACADEMIC AND RESEARCH SUPPORT	52
STUDENT ACADEMIC SUCCESS CENTER	52
ACADEMIC COACHING/CONSULTING — THE STUDENT ACADEMIC SUCCESS CENTER	52
COMMUNICATION AND LANGUAGE SUPPORT	53
Language and Cross-cultural Support	53
LEARNING SUPPORT	54
UNIVERSITY LIBRARIES	54
COMPUTING AND INFORMATION RESOURCES	55
RESEARCH AT CMU	55
OFFICE OF RESEARCH INTEGRITY AND COMPLIANCE	55
APPENDIX C: KEY OFFICES FOR HEALTH, WELLNESS AND SAFETY	55
COUNSELING AND PSYCHOLOGICAL SERVICES	55
HEALTH SERVICES	56
CAMPUS WELLNESS	56
RELIGIOUS AND SPIRITUAL LIFE INITIATIVES	56
UNIVERSITY POLICE	56
SHUTTLE AND ESCORT SERVICES	57
APPENDIX D: DEPARTMENTAL RESOURCES	57
DEPARTMENT / PROGRAM PERSONNEL INTRODUCTION	57

SCHOOL OF COMPUTER SCIENCE	57
SOFTWARE AND SOCIETAL SYSTEMS DEPARTMENT	58
MASTER OF SOFTWARE ENGINEERING	58
<i>Director and Administrative Staff</i>	58
<i>Faculty</i>	59
<i>Technical Staff</i>	60
<i>Facilities Staff</i>	61

WELCOME FROM THE MASTER OF SOFTWARE ENGINEERING PROFESSIONAL PROGRAMS

On behalf of the Master of Software Engineering (MSE) Professional Programs directorship, faculty, administration, and its extended community of students and alumni, we take this opportunity to welcome you to Carnegie Mellon! Our programs are designed for professionals who are eager to expand their knowledge of the discipline. We strive to produce some of the world's best software engineers — those who don't just deliver the next revolutionary software product but those who can, in the process, begin to shape and guide the industry itself as lifelong Agents of Change.

Through its challenging curriculum, innovative courses, and technical emphasis, students learn and apply practices, tools, and techniques in a real-world project environment. Our academic standards are high, with an emphasis on state-of-the-art research and educational breadth in software engineering, computer science, robotics, embedded and distributed systems, human-computer interaction, and language and information technologies. While those admitted to our programs come to us technically strong, they leave with an even deeper understanding of process, development, architecture, methodology, best practices, and team dynamics.

As a newly admitted student, you should be optimistic about your future career prospects. We look forward to learning more about you — your plans and your dreams, your aspirations, and your reality. We are excited about working with you on a plan to attain those short- and longer-term goals.

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 Postdoctoral Affairs, the Office of the Dean of Students, and others are included in Appendix A of this handbook.

Welcome to Carnegie Mellon! We are certain that you will flourish here in our academic community and enjoy all it has to offer you in the months to come.

CARNEGIE MELLON UNIVERSITY: VISION & MISSION

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.

UNIVERSITY GENERAL INFORMATION

GRADUATE STUDENT HANDBOOK OVERVIEW

This document is intended to be a source of information for students in the MSE Professional Programs in the School of Computer Science. Herein, you may find information on a broad range of policies, procedures, and University- and program-specific resources, ranging from academic policies to campus wellness options. We hope that you will find the guide useful. Be aware that the MSE Professional Programs adheres to all University guidelines and procedures as detailed below.

CARNEGIE MELLON UNIVERSITY STATEMENT OF ASSURANCE POLICY

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.

Information regarding the applicable grievance procedures for alleged violations of the Statement of Assurance is available at www.cmu.edu/policies/forms-and-documents/soa-violations [pdf].

The [Office for Institutional Equity and Title IX](#) may be reached at 412-268-7125 or institutionalequity@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 online.

UNIVERSITY POLICIES AND 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](#)
- [Academic Integrity Policy](#)
- [University Policies Website](#)
- [Office of Graduate and Postdoctoral Affairs](#)
- Additional Policy Resources (e.g., college/department-specific policies)
- Due to the changing nature of conditions and expectations surrounding public health and safety requirements please visit www.cmu.edu/coronavirus for the most up-to-date information.

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

ETHICAL STANDARDS: PROFESSIONAL & ACADEMIC INTEGRITY; ELIGIBILITY REQUIREMENTS

CMU's MSE Professional Programs educates its students to excel in industry and serve society with integrity. As professional programs, MSE's commitment extends beyond academics; our graduates enter the workforce prepared to succeed in positions of responsibility and leadership. We are innovators, designers, managers, and creators; this work requires the trust and confidence of the public and our peers. As such, the MSE Professional Programs hold its students, faculty, and staff to the highest professional and ethical standards.

These standards include unwavering honesty and transparency in action and speech, reliability, fairness, respect, and consideration for others and our work environment. MSE will not tolerate cheating or plagiarism, misrepresentation of the extent of individual work in a group project, falsification of records, or any behavior that is disruptive to the safety of our community.

In the presentation or submission of work – creative, artistic, research, etc. – it is the ethical responsibility of each student to identify and properly cite any sources used in the work submitted. Failure to do so is dishonest and is the basis for a charge of cheating or plagiarism, which is subject to disciplinary action as detailed in the handbook section titled “Academic Standing in the Program”.

Furthermore, MSE students are afforded privileges and opportunities based on the expectation of shared ethical standards. In pursuing these opportunities, students indicate that they are willing to take on the responsibility of acting as a representative for the MSE Programs and CMU as a whole. Therefore, MSE requires an unbroken commitment to academic excellence and ethical integrity from any student who would seek to receive certain program privileges, including but not limited to:

- Competitive scholarships and fellowships, including the James E. Tomayko Scholarship
- Internal student employment, such as Teaching Assistantships
- Invitations to participate in small-group meetings with alumni and industry

To be eligible for the above, students must maintain good academic standing as well as a clean [Student Conduct Record](#), and be willing to provide proof of such upon request by Program Leadership. Any instances of Academic Integrity Violations (AIVs) or other breaches of ethical standards will render a student ineligible to receive program privileges, and any current privileges may be revoked on this basis. MSE Program Leadership may also choose to withhold or remove such privileges and opportunities from students unable to maintain academic performance or ethical standards.

The University’s expectations for [academic integrity](#) are available online, as is the [Carnegie Mellon Code](#).

SAFEGUARDING EDUCATIONAL EQUITY

ASSISTANCE FOR INDIVIDUALS WITH DISABILITIES

The Office of Disability Resources at Carnegie Mellon has a continued mission to provide physical, digital, and programmatic access to ensure that students with disabilities have equal access to their educational experience. The Office works 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 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, or call 412-268-6121.

SEXUAL MISCONDUCT POLICY

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

You may review the [University Policy on Sexual Misconduct](#) and the [University Policy Against Retaliation](#) online.

If you have been affected by any of these issues, you are encouraged to use the following resources:

- [Office for Institutional Equity and Title IX](#)
412-268-7125
institutionalequity@cmu.edu
- [University Police](#)
412-268-2323

[Additional resources and information](#) can be found online.

CONSENSUAL INTIMATE RELATIONSHIPS POLICY REGARDING UNDERGRADUATE STUDENTS

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 ensure 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.

You may review the [University Policy on Consensual Intimate Relationship](#) online.

GESTATIONAL AND PARENTAL ACCOMMODATION

Providing holistic student support is a top priority at Carnegie Mellon. The protocols are designed to support the parental needs of students and their families.

Students seeking any of the Parental Accommodations described below must register with the Office of the Dean of Students by contacting the office for an appointment by calling 412-268-2075.

Students are encouraged to register with the Office of the Dean of Students ninety (90) days in advance of the anticipated arrival of the child as applicable in the individual circumstance. At the time of registering, students will have the opportunity to consult about resources, procedures, funding options and preparation for discussing academic accommodations with the student's academic department. Students should also consult with their academic advisors either before or in conjunction with registering with the Office of the Dean of Students.

You may review the [Student Parental Accommodation Protocols](#) online.

Accommodations for Gestational Parents

The birth of a child is a significant life event that may require time away from academic pursuits for delivery and recovery from delivery of a newly born child. Students whose anticipated delivery date is during the course of a semester may need to take time away from their academic responsibilities. Carnegie Mellon students seeking time away are afforded two options as possible accommodation:

- **Short-Term Accommodation for Gestational Parents** – A short term absence from academic responsibilities up to a maximum of six (6) weeks. Short-Term Accommodation may be extended by two (2) weeks, for a total of eight (8) weeks, where a longer absence is medically necessary. Prior to the absence students must work with relevant university faculty and staff to adjust their course work, research, teaching and other academic responsibilities during the period of

absence. This may include extensions of time to complete assignments, incomplete grades, and/or dropping courses, shifting research responsibilities and adjusting TA assignments. Students who take a Short-Term Accommodation will remain enrolled.

- **Formal Leave of Absence** – A formal leave of absence under the Student Leave Policy. Generally, the Student Leave Policy permits students to take a leave of absence for a full-semester, mini-semester, or for the time remaining in the semester during which the leave is taken. Students who take a [Formal Leave of Absence](#) drop all remaining courses for the semester and are unenrolled for the semester. International students must consult with the [Office of International Education](#) before considering this option due to visa implications.

Financial Assistance for Student Parents

The Office of the Dean of Students offers an [interest-free parental loan](#) to any student who becomes a parent while enrolled.

CARNEGIE MELLON STUDENT HANDBOOK: THE WORD

[The WORD](#) is Carnegie Mellon's student online 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 be found in full online.

DEPARTMENTAL INFORMATION

MASTER OF SOFTWARE ENGINEERING PROFESSIONAL PROGRAMS MISSION STATEMENT

The goal of the MSE Professional Programs is to develop future leaders of industrial software engineering practice – chief engineers, lead architects, and principal technical officers. Graduates of the program are expected not only to understand but be able to apply the best of current practice, and to act as agents of change to improve the practice in this evolving discipline.

DEGREES OFFERED

The MSE Professional Programs includes five (5) degrees:

- **Master of Software Engineering (MSE)**
 - For software developers who have at least two years of experience and who want to become technical and strategic leaders.
 - 16-month, full-time, on campus, requires 195 degree-units;

- **Master of Science in Software Engineering (MSE Online)**
 - For experienced software professionals with more than two years of experience who have an aptitude for reflective practice. The flexibility of the online program gives you the opportunity to apply coursework to your active, ongoing industrial experience.
 - 24-month, part-time, distance, requires 108 degree-units.
- **Master of Business Administration / Master of Software Engineering (MBA/MSE)**
 - For engineering or science professionals who have at least two years of experience and who want to earn a dual degree; 24-month plus internship, on campus. (Offered jointly with Carnegie Mellon's Tepper School of Business). Required degree units: 195*
*for the MSE portion only; consult Tepper's handbook for the MBA requirements
- **Master of Software Engineering – Scalable Systems (MSE-SS)**
 - For recent graduates and junior software professionals who want to enhance their software development and leadership skills in large-scale, data-intensive and intelligent systems design and engineering; 16 months, full-time, internship required, on campus. Required degree units: 153
 - **IS-MSE-AMP** students concentrating in Scalable Systems will graduate with this degree.
- **Master of Software Engineering – Embedded Systems (MSE-ES)**
 - For recent graduates and junior software professionals who want to enhance their software development and leadership skills in embedded, cyber-physical systems; 16-month, full-time, internship required, on campus. Required degree units: 153
 - **IS-MSE-AMP** students concentrating in Embedded Systems will graduate with this degree.

Policies and procedures mentioned herein pertain primarily to the above-listed degree programs. Questions may be directed to the Programs Manager, [Jennifer Britton](#).

MASTER DEGREE COMPLETION AND CERTIFICATION

STANDARD DEGREE REQUIREMENTS & DEGREE CERTIFICATION

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 requirement

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](#) 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.

STATUTE OF LIMITATIONS

As outlined in the [Master's Students Statute of Limitations Policy](#) students 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.

DURATION OF THE PROGRAM

DEFINITION OF FULL-TIME AND PART-TIME STATUS

The MSE Professional Programs define full-time enrollment as no less than 36 units per semester, and part-time enrollment as less than 36 units and typically 6-18 units per semester. Please note that immigration restrictions do not allow Carnegie Mellon to issue F1 Visa documents to part-time students. As such, international students are not eligible for part-time status.

MSE is a full-time, on-campus degree program designed to be completed in four semesters.

MSE Online is a part-time, distance program designed to be completed in 6-9 semesters.

MBA/MSE is a full-time on-campus degree program to be completed in seven consecutive semesters. Study is divided between Tepper School of Business and the MSE Program, three semesters towards the MBA and four semesters towards the MSE.

MSE-SS is a full-time on-campus degree program designed to be completed in four consecutive semesters.

MSE-ES is a full-time on-campus degree program designed to be completed in four consecutive semesters.

IS-MSE-AMP is a full-time on-campus 5th-year master's program designed to be completed in four or five semesters – two during the undergraduate senior year, two as a dedicated graduate student, and a summer internship may be required between senior year and Masters-level study if one that satisfies the MSE internship requirement was not completed in the undergraduate semesters. All IS-MSE-AMP students will take a concentration track of either the MSE-SS or MSE-ES program.

RESIDENCY REQUIREMENTS

All MSE students in full-time, on-campus programs are expected to be in residence in Pittsburgh, PA except when the curriculum requires some time off-campus, e.g. in the case of off-campus internships for MSE-SS and MSE-ES students.

MSE Online students are not required to be in residence in Pittsburgh, PA as they are completing a part-time, fully remote program.

DEFERMENT OF START OF PROGRAM

An applicant who is accepted into an MSE program is eligible to enter the program in the year of acceptance. Accepted students may request a one-year deferment, which will be considered on a case-by-case basis. A written deferment request must be received by the Programs Manager and if approved following its review, the deferment entitles the student to start their program in the following year. Only one deferment will be granted to each student. If a student does not attend in the year following acceptance, the student must re-apply to the program.

Per the [Statute of Limitations](#), all programs must be completed within 7 years of matriculation save by special permission, such as in cases of Leave of Absence.

PARTICIPATING IN CAMPUS COMMENCEMENT

Graduates of the MSE programs participate in the commencement ceremony in May of the year following completion of their degree requirements.

LANGUAGE PROFICIENCY REQUIREMENTS

In order to be successful academically and professionally, students should be able to express themselves clearly via spoken and written English, as well as through presentations. English language proficiency is demonstrated and verified as a part of the admissions process.

In addition, the MSE Programs require the successful completion of a two-part Communications course series, 17-603 & 17-604 Communications for Software Leaders I & II.

CURRICULAR REQUIREMENTS

Semester Breakdown:

1 unit is approximately 1 hour of study/work time, though this varies based on the course.

Full Semesters: 9 to 12-unit courses	Fall (FA)		Spring (SP)		Summer (SU)	
	Mini Semesters: 6-unit courses	A1 On-campus D1 Online	A2 On-campus D2 Online	A3 On-campus D3 Online	A4 On-campus D4 Online	A5 On-campus D5 Online

PLAN OF STUDY

To receive any of the listed MSE Professional Programs degrees, students must successfully complete the appropriate courses with an overall quality point average (QPA) of 3.0. If a grade lower than “B-” (B minus) is earned in any core, required or project course, the course must be repeated regardless of the QPA. Receiving a “B-” or less in any course may jeopardize the student’s academic standing in the Program.

REQUIRED UNITS FOR DEGREE ATTAINMENT

MSE students must complete a total of 195 units – 60 units of core courses, 6 of communications, 84 of studio project, and 45 units of electives.

MSE Online students must complete a total of 108 units – 78 units of core courses, 6 units of communications, 24 units of electives.

MSE-SS students must complete 153 units – 84 units of core courses, 6 units of communications, 3 units of internship, 36 units of project, and 24 units of electives.

MSE-ES students must complete 153 units – 84 units of core courses, 6 units of communications, 3 units of internship, 36 units of project, and 24 units of electives.

MSE/MBA students must complete 195 units for the MSE degree. During the MBA portion of the program, students must abide by all the rules and regulations of the Tepper School of Business MBA program.

MSE-IS-AMP students must complete IS-MSE-AMP students must complete a total of 153 units as described in the MSE-ES & MSE-SS requirements sections. Up to 48 units of classes completed as an undergraduate IS major may be transferred after commencement and counted towards the required 153 total graduate-level units. Therefore, IS-MSE-AMP students may complete their master’s degree in only one dedicated year of graduate school, rather than 18 months.

MASTER OF SOFTWARE ENGINEERING (MSE) REQUIREMENTS

The MSE is a 16-month program consisting of four semesters. The program begins in the fall semester and concludes the following year in December. Project work begins in the spring, with the summer and second fall sessions devoted primarily to the Studio. Courses in the first year are divided into 7-week mini-semesters to allow students to concurrently learn a wider range of topics, while scaffolding learning to more advanced topics later in the program. For example, Semester A2 is the second half of the first semester, normally in the fall. MSE Students must complete 60 units of core courses, 6 of communications, 84 of studio project, and 45 units of electives. On-campus students must seek permission to register for distance sections of MSE classes.

FALL 2023			
Semester	Course Number	Course Title	Units
A1	17-611	Statistics for Decision Making	6
A1	17-612	Business and Marketing Strategy	6
A1	17-614	Formal Methods	6
A2	17-622	Agile Methods	6
A2	17-623	Quality Assurance	6
A2	17-626 or 17-627	Requirements Course	6
FA	17-603	Communications for Software Leaders I	3
FA	Variable	Elective Course(s)	12

SPRING 2024			
Semester	Course Number	Course Title	Units
A3	17-632	Software Project Management	6
A3	17-635	Software Architectures	6
A4	17-642 or 17-655	Software Management Theory or Advanced Architecture Design	6
A4	17-643	Quality Management	6
SP	17-604	Communications for Software Leaders II	3
SP	17-671	Studio Project I	12
SP	Variable	Elective Course(s)	12

SUMMER 2024			
Semester	Course Number	Course Title	Units
SU	17-672	Studio Project II	36
SU	Variable	Elective Course(s)	12

FALL 2024			
Semester	Course Number	Course Title	Units
FA	17-673	Studio Project III	36
FA	Variable	Elective Course(s)	12

MSE students may tailor coursework to their professional goals by choosing one of two system tracks.

Scalable Systems: this track emphasizes the design and construction of systems that process large datasets and/or manage large numbers of requests, or that are composed of multiple systems moving at different rates. The following courses are offered within this track, in addition to the internship and project experience that offer additional scalable systems emphasis.

Scalable Systems Track				
Semester	Course Number	Course Title	Units	Notes
A2	17-626	Requirements for Information Systems	6	Required
A4	17-647	Engineering Data Intensive and Scalable Systems	6	Elective

Embedded Systems: this track emphasizes the design and construction of systems where software is used to improve control in physical systems and where it must operate in resource-constrained environments. This includes Internet-of-Things and cyber-physical systems, and industrial control systems. The following courses are offered within this track, in addition to the internship and project experience that offer additional embedded systems emphasis.

Embedded Systems Track				
Semester	Course Number	Course Title	Units	Notes
A2	17-627	Requirements for Embedded Systems	6	Required
A4	17-648	Sensor Based Systems	6	Elective

Each track has one required requirements course taught in A2, and one optional systems course taught in A4. The systems courses have the 6-unit prerequisite 17-636 Applied Distributed Systems, which is offered in A3. Students who wish to take the optional systems course should plan to use 12-units of electives in the spring for 17-636 and either 17-647 or 17-748.

MASTER OF SCIENCE IN SOFTWARE ENGINEERING (MSE ONLINE) REQUIREMENTS

The MSE Online is a part-time, distance learning, 24-month variation of the full MSE program. Targeted at experienced software professionals with an aptitude for reflective practice, MSE Online allows students to apply coursework to their active, ongoing industrial experience. The program consists of 6 to 9 semesters depending on course load. The first 5 to 7 include both synchronous and asynchronous lectures and assignments, additional time dedicated to synchronous faculty meetings, and recitations.

The final semester is dedicated to writing the term paper.

Courses are typically divided into 7-week mini-semesters that allow students to concurrently learn a wider range of topics, while scaffolding learning to more advanced topics later in the program. For example, Sample Semester 1 below includes Quality Assurance, which is continued and advanced in Sample Semester 2 with Quality Management. Communications classes are 3 units and meet one hour per week for the entire semester.

Sample Semester 1			
Semester	Course Number	Course Title	Units
FA	17-603	Communications for Software Leaders I	3
D1	17-612	Business and Marketing Strategy	6
D1	17-614	Formal Methods	6
D2	17-623	Quality Assurance	6

Sample Semester 2			
Semester	Course Number	Course Title	Units
SP	17-604	Communications for Software Leaders II	3
D3	17-635	Software Architectures	6
D3	17-643	Quality Management	6
Variable	Variable	Elective Course(s)	12

Sample Semester 3			
Semester	Course Number	Course Title	Units
D5	17-636	Applied Distributed Systems	6
D6	17-646	DevOps and Continuous Integration	6
Variable	Variable	Elective Course(s)	6

Sample Semester 4			
Semester	Course Number	Course Title	Units
D1	17-611	Statistics for Decision Making	6
D2	17-622	Agile Methods	6
D2	17-626	Requirements for Information Systems*	6*
D2	17-627	Requirements for Embedded Systems*	6*

*Students are expected to take either 17-626 or 17-627, specializing in one track.

Sample Semester 5			
Semester	Course Number	Course Title	Units
D3	17-632	Software Project Management	6
D4	17-642 or 17-655	Software Management Theory or Advanced Architecture Design	6
Variable	Variable	Elective Course	6

Sample Semester 6			
Semester	Course Number	Course Title	Units
Flex Summer or Fall	17-679	Thesis Writing for Industrial Software Research**	6**

** The term paper is written during the final semester. Students should complete all core coursework before enrolling in 17-679. Please speak with the Graduate Academic Adviser to determine the best time to enroll in 17-679. Students work with a faculty advisor to choose the subject for their term paper, accounting for relevant work experience, aligning with one of six key practice areas: Architecture & Design, Software Construction, Planning & Tracking, Quality Management, Requirements Management, and Risk Management. More information on the content and format of the term paper can be found on the [MSE website](#). Students should submit a [Proposal Form](#) in the semester prior to enrolling in 17-679.

MASTER OF BUSINESS ADMINISTRATION & SOFTWARE ENGINEERING (MBA/MSE) REQUIREMENTS

The MBA/MSE is a seven-semester dual-degree program. The program begins yearly in fall. It is designed for candidates exceptionally strong technically, and across disciplines such as business and economics. Semesters 1, 2 and 3 are taken at the Tepper School of Business, with students beginning the on-campus

software engineering aspect of the dual degree program in the second fall term. During the MBA portion of the program, students must abide by all the rules and regulations of the Tepper School of Business MBA program. The MSE Portion of the plan is as shown in the above listed MSE Requirements section.

MASTER OF SOFTWARE ENGINEERING IN SCALABLE SYSTEMS (MSE-SS) REQUIREMENTS

The MSE in Scalable Systems is a 16-month program and consists of three semesters plus one summer internship semester. The program begins in the fall and concludes the following year in December. While the summer session is reserved exclusively for the required internship, the second fall semester is dedicated to an intensive practicum project.

Courses in the first year are divided into 7-week mini-semesters to allow both a wider range of topics, and scaffolding learning to more advanced topics later in the program. For example, Semester A2 is the second half of the first program semester, normally in the fall.

MSE-SS students must complete 84 units of core courses, 6 units of communications, 3 units of internship, 36 units of project, and 24 units of electives. Students should register for in-person courses to fulfill all MSE core requirements. The Graduate Academic Advisor may approve remote courses to fulfill elective requirements on a case-by-case basis.

FALL 2023			
Semester	Course Number	Course Title	Units
A1	17-611	Statistics for Decision Making	6
A1	17-612	Business and Marketing Strategy	6
A1	17-614	Formal Methods	6
A1	17-695	Design Patterns	6
A2	17-622	Agile Methods	6
A2	17-623	Quality Assurance	6
A2	17-625 or 17-624	API Design or Advanced Formal Methods	6
A2	17-626	Requirements for Information Systems	6
FA	17-603	Communications for Software Leaders I	3

SPRING 2024			
Semester	Course Number	Course Title	Units
A3	17-632	Software Project Management	6
A3	17-635	Software Architectures	6
A3	17-636	Applied Distributed Systems	6

A4	17-643	Quality Management	6
A4	17-646	DevOps and Continuous Integration	6
A4	17-647	Engineering Data Intensive and Scalable Systems	6
SP	17-604	Communications for Software Leaders II	3
SP	Variable	Elective Course(s)	12

SUMMER 2024

Semester	Course Number	Course Title	Units
SU	17-667	Internship for Software Engineers	3

FALL 2024

Semester	Course Number	Course Title	Units
FA	17-675	Software Engineering Practicum	36
FA	Variable	Elective Course(s)	12

MASTER OF SOFTWARE ENGINEERING IN EMBEDDED SYSTEMS (MSE-ES) REQUIREMENTS

The MSE in Embedded Systems is a 16-month program and consists of three semesters and one summer internship semester. The program begins in the fall and concludes the following year in December. While the summer session is reserved exclusively for the required internship, the second fall semester is dedicated to an intensive practicum project.

Courses in the first year are divided into 7-week mini-semesters to allow students to concurrently learn a wider range of topics, while scaffolding learning to more advanced topics later in the program. For example, Semester A2 is the second half of the first program semester, normally in the fall.

MSE-ES Students must complete 84 units of core courses, 6 units of communications, 3 units of internship, 36 units of project, and 24 units of elective. Students should register for in-person courses to fulfill all MSE core requirements. The Graduate Academic Advisor may approve remote courses to fulfill elective requirements on a case-by-case basis.

FALL 2023

Semester	Course Number	Course Title	Units
A1	17-611	Statistics for Decision Making	6
A1	17-612	Business and Marketing Strategy	6
A1	17-614	Formal Methods	6

A1	17-638	Engineering Embedded Systems	6
A2	17-622	Agile Methods	6
A2	17-623	Quality Assurance	6
A2	17-625 or 17-624	API Design or Advanced Formal Methods	6
A2	17-627	Requirements for Embedded Systems	6
FA	17-603	Communications for Software Leaders I	3

SPRING 2024

Semester	Course Number	Course Title	Units
A3	17-632	Software Project Management	6
A3	17-635	Software Architectures	6
A3	17-636	Applied Distributed Systems	6
A4	17-643	Quality Management	6
A4	17-646	DevOps and Continuous Integration	6
A4	17-648	Sensor Based Systems	6
SP	17-604	Communications for Software Leaders II	3
SP	Variable	Elective Course(s)	12

SUMMER 2024

Semester	Course Number	Course Title	Units
SU	17-667	Internship for Software Engineers	3

FALL 2024

Semester	Course Number	Course Title	Units
FA	17-675	Software Engineering Practicum	36
FA	Variable	Elective Course(s)	12

INFORMATION SYSTEMS – MASTER OF SOFTWARE ENGINEERING – ACCELERATED MASTER PROGRAM (IS-MSE-AMP) REQUIREMENTS

The IS-MSE-AMP is a 5th-year master's program for undergraduate Information Systems majors in the Dietrich College of Humanities and Social Sciences. It is a full-time, on-campus program, the classes for which begin the fall of Senior year and continue after undergraduate commencement into a 5th year of dedicated graduate school within the Software and Societal Systems Department (S3D).

IS-MSE-AMP students may choose to pursue a degree in one of two concentrations: Scalable Systems (MSE-SS), or Embedded Systems (MSE-ES). Details for both may be found in the relevant sections above.

Courses are taught over 7-week mini-semesters. The 4 mini-semesters of the main academic year allow students to concurrently learn a wider range of topics, while scaffolding learning to more advanced topics. The IS-MSE-AMP Program includes a required internship during the summer between the student's undergraduate Senior year and graduate 5th year, unless an equivalent internship is completed during their undergraduate studies and is subsequently approved by MSE's Corporate Relations Manager.

IS-MSE-AMP students must complete a total of 153 units as described in the MSE-ES & MSE-SS requirements sections. Up to 48 units of classes completed as an undergraduate IS major may be transferred after commencement and counted towards the required 153 total graduate-level units. Therefore, IS-MSE-AMP students may complete their master's degree in only one dedicated year of graduate school, rather than 18 months. Course selections and semester allocations will depend on the chosen concentration.

PREREQUISITE COURSEWORK: prerequisite courses in programming, data structures, and the foundations of software engineering must be successfully completed prior to enrolling in the program. Students must meet the prerequisites with "B" grades or higher in order to enroll.

The following is a sample plan for the IS-MSE-AMP with the Scalable Systems Concentration:

Undergrad. Senior Year FALL			
Semester	Course Number	Course Title	Units
FA	95-422	Managing Digital Transformation	9
FA	Variable	Concentration Research	12
FA	Variable	General Education Requirement	9
A1	17-611	Statistics for Decision Making	6
A2	17-626	Requirements for Information Systems	6
A2	17-623	Quality Assurance	6

Undergrad. Senior Year SPRING			
Semester	Course Number	Course Title	Units
SP	Variable	Innovation & Entrepreneurship Requirement	12
A3	17-635	Software Architectures	6
A3	17-632	Software Project Management	6
A4	17-643	Quality Management	6
SP	17-514	Principles of Software Construction	12
A4	17-647	Engineering Data Intensive and Scalable Systems	6

SUMMER following Senior Year			
Semester	Course Number	Course Title	Units
SU	17-667	Internship for Software Engineers	3

Graduate 5th Year FALL			
Semester	Course Number	Course Title	Units
FA	17-603	Communications for Software Leaders I	3
FA	17-675	Software Engineering Practicum	36
A1	17-614	Formal Methods	6
A2	17-622	Agile Methods	6

Graduate 5th Year SPRING			
Semester	Course Number	Course Title	Units
SP	17-604	Communications for Software Leaders II	3
A3	17-612	Business and Marketing Strategy	6
A3	17-636	Applied Distributed Systems	6
A4	17-646	DevOps and Continuous Integration	6
SP	Variable	Software Engineering Free Elective	12

SP	Variable	Software Engineering Free Elective	12
----	----------	------------------------------------	----

ELECTIVES

An elective is a course taken in addition to the core, project, pre-requisite and required courses, is in an area of interest to the student, and is applicable to their software engineering degree. MSE-SS and MSE-ES students should plan to select technical courses as their electives, although some exceptions to this rule will be considered. All MSE Online, MSE-SS and MSE-ES students are required to successfully complete 24 units of elective coursework, whereas MSE and MSE/MBA students are required to successfully complete 45 units of electives. Units associated with elective courses vary. All students are advised to discuss their choice of electives with the Graduate Academic Advisor and receive approval before the Add/Drop deadline. Only electives approved by the Graduate Academic Advisor will be accepted towards degree completion requirements.

WHAT COURSES COUNT AS ELECTIVES?

Generally, electives are chosen from Software and Societal Systems Department (S3D), but they can come from any school or department within Carnegie Mellon as long as:

- the student has not already taken the course;
- the course has been approved by the student's Graduate Academic Advisor.

Only one undergraduate course (300+ level or higher) may apply toward the degree's elective requirement.

Although elective courses may be taken on a pass/fail basis, be advised that only elective courses with letter grades (A, B, C, D) can be used toward degree completion requirements.

COURSES TAKEN OUTSIDE THE DEPARTMENT

Students are strongly encouraged to take electives offered by S3D — courses numbered 17-xxx. They may, however, after consultation with their Graduate Academic Advisor, register for elective courses outside the S3D. Generally, these are courses offered by, but not limited to, SCS, Tepper, Robotics, Heinz College, and ECE. Only those approved by the Graduate Academic Advisor will be counted toward the completion of elective requirements. When in doubt, talk to your Advisor.

For MSE-SS and MSE-ES students, at most 24 units of electives may be taken outside of S3D, excluding courses numbered 17-xxx. For MSE students, at most 45 units of electives may be taken outside of S3D. All grades must comply with Carnegie Mellon's [grading policy](#).

INDEPENDENT STUDY COURSES

An Independent Study (IS) course is one that is:

- designed by the student for further study in a particular area of interest, and
- used when there is no formal course available in a given subject area.

Independent study courses may be 6, 9 or 12 units. A maximum of 24 units of Independent Study are

permitted toward elective degree completion requirements.

Each Independent Study course must be advised and approved by at least one faculty member, as well as the Graduate Academic Advisor. 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 member(s) or members of the S3D staff who will be supervising the study. These individuals are referred to as “Independent Study Supervisors”.

Once the student identifies the individual who will supervise, they are required to:

1. Enter into an agreement with the supervisor that clearly defines learning expectations, schedules and timelines, and IS deliverables
2. Retrieve an [Independent Study Contract Form](#), completing the form in its entirety
3. Develop a detailed IS proposal that includes the work to be done, the deliverables, and the agreed-upon expectations as defined with the IS supervisor
4. Submit the form (electronic and hard copy), inclusive of signatures of the student and the supervisor, to the Graduate Academic Advisor for review and signature
5. Following additional revisions and once approved by the Graduate Academic Advisor, the IS form will be processed

The Independent Study Proposal Form must be submitted *no less than 2 weeks* before the start of the semester in which the proposed independent study will take place.

COURSE MATERIALS

All course materials are available as announced by the instructor. Books may be purchased at the Carnegie Mellon Bookstore or from the student’s favorite bookseller.

GRADES AND EVALUATIONS

All courses offered through the program are graded on the 4.33 [grading standard](#).

- All students must maintain a “B” or better overall average. “B” is equivalent to a 3.0 QPA.
- Failure is an “R” grade. This grade is not acceptable for any graduate student.
- MSE program policy specifies that a student who earns an “R” grade in any core course must retake the course and potentially assume supplemental tuition costs for the retaken course.
- If a grade lower than “B-” (B minus) is earned in any core, communications, required or project course, those courses must be repeated, regardless of QPA.

GRADE REPORTS

Grades can be found on the student’s [Student Information Online](#) site.

PASS / FAIL GRADES

All courses to be used toward degree completion requirements must be letter-bearing. Students may

take elective courses for their educational enrichment on a pass/fail basis, with the understanding that they will not fulfill degree requirements.

WITHDRAWING FROM A COURSE

The School of Computer Science does not grant “W,” or “withdrawal” grades. Therefore, any student wishing to withdraw from a course without negatively affecting their QPA must do so in advance of the posted Course Drop deadline. This date is listed on the University’s [academic calendar](#).

GRADES EARNED FOR RETAKING A COURSE

Any student who does not successfully complete a course (a B- grade or above in MSE core courses, and a D or above grade in elective courses) will be reviewed in the academic progress review meeting. Students will need to repeat the course and earn a passing grade in order to complete degree requirements.

INCOMPLETE GRADES

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” or “Incomplete” may be given when a student has been unable to complete the work of a course. Moreover, the work completed up to that date must be 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 the completion of the work and designate a default letter grade in the event that the student fails to complete the remaining work.

Students must complete the required course work by no later than the end of the following academic semester, or sooner if required by the instructor.

The instructor must record the permanent course grade by the last day of the examination period of the following semester, or the default grade will be automatically assigned by the Registrar.

INCOMPLETE GRADES DELAYING GRADUATION

If an Incomplete grade is earned during the semester in which the student expects to graduate, the student may choose to:

- Accept the grade of “I” (Incomplete), thus delaying graduation until the successful completion of the course

OR

- Accept the default grade assigned by the instructor; certification eligibility for graduation will be determined by final grades including the default grade, and the resulting final cumulative QPA must meet the minimum 3.0 program requirement. This option *is not* available for MSE core, required, communications and project courses where a grade of “B-” or above is required; for

these courses, students must discuss with their Graduate Academic Advisor how to complete the course with a “B-” or above.

PROCESS FOR APPEALING FINAL GRADES, CHANGE OF GRADE, AND MISSING 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 instructor who assigned the grade did so in violation of a University policy.

A graduate student who believes that the final grade assigned for a course is incorrect should:

1. Discuss the matter informally with the course instructor responsible for the course in which the student believes an inappropriate grade has been awarded.
2. Provide evidence that the grade issued was not the grade earned.
3. If the instructor agrees, the instructor will complete, or will ask the Program Administrator to process for the instructor’s signature, a Change of Grade form in order to correct the grade that was issued in error.

If the instructor and the student do not agree, and the student is not satisfied with the instructor’s grade decision, the student may appeal to the department head within fourteen (14) days of the final grade award. This is done with a formal, written letter and provision of the appropriate documentation. The University’s full policy on [grade appeals](#) is available online.

If a grade has not been assigned, please notify the instructor for completion of a Missing Grade form.

TRANSFER COURSES AND GRADES

UNIVERSITY POLICY ON GRADES FOR TRANSFER COURSES

Carnegie Mellon offers students the opportunity to take courses for credit through a cross-registration program and through the receipt of transfer credit from other accredited institutions. The Carnegie Mellon 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 grades. Such courses will not be taken into account for academic actions, honors or QPA calculations.

You may review the [University Policy on Transfer Credit Evaluation and Assignment](#) online.

NOTE: Suspended students may take courses elsewhere; however, they may receive transfer credit only if their college's and department's policies allow this.

PROGRAM PROTOCOL FOR EVALUATION OF TRANSFER CREDIT

Students who have taken and successfully completed graduate-level courses in software engineering

and related areas such as computer science, information technology or management, may petition for these credits to apply toward their elective credit requirements, as long as the following conditions are met:

1. No course credit will be given for courses that were already used to obtain a graduate degree.
2. The petitioned course must be in an area/discipline closely aligned with the student's intended area of graduate study.
3. Students must obtain and present a transcript with the final earned grade from the institution where the course was taken, as well as supporting artifacts specific to the course at the time it was taken (i.e., course description, syllabus, learning/educational outcomes, student work product such as project, report, analysis, etc.)
4. Final earned grade in petitioned courses must be "B-" or better.
5. All petitioned courses must be graduate level, or equivalent to a CMU 500-series (or higher) course.

Each transfer request is evaluated on a case-by-case basis. A decision will be made on the course's transferability by the Graduate Academic Advisor only after the applicant has been notified of their acceptance to the program. A maximum of (2) courses may be accepted in transfer and applied toward degree completion elective or pre-requisite requirements. All remaining elective courses, and all core curriculum and project courses, must be completed through Carnegie Mellon. Courses approved for transfer will appear on the student transcript as "transfer credits".

TRANSFER FROM MASTER TO DOCTORAL PROGRAMS

Completion of an MSE Professional Programs degree does not guarantee admission into any doctoral degree program at Carnegie Mellon. The courses completed as part of the MSE programs may enhance a student's application to doctoral programs but do not ensure admittance.

If the requirements have not been completed when a student leaves to pursue another academic program, the master's degree will not be awarded.

REQUIRED STUDIO AND PRACTICUM PROJECTS

Students are expected to work in teams and present their coursework as part of individual or group presentations periodically throughout their time in the program. Teamwork is an essential part of participating in the MSE programs. While a member of a studio, practicum, or other team, students are expected to conduct themselves ethically in all interactions with team members, mentors, and clients.

This includes:

- Scheduling and participating in team meetings
- Communication with all stakeholders
- Working on shared group projects
- Various group presentations throughout the program duration
- End-of-semester presentation (EOSP required at the end of fall, spring and summer semesters)
- Final internship presentation at the conclusion of the summer semester; generally, the first week of September

- As required by individual courses, including possible mid-semester presentations

REQUIRED SUMMER INTERNSHIPS

The MSE-SS and MSE-ES programs require students to fulfill a summer internship as part of their program curriculum. IS-MSE-AMP students may need to complete an internship over the summer semester following senior year if an internship that meets MSE requirements was not completed in the undergraduate semesters. Internships must be approved by the [Corporate and Alumni Relations Manager](#).

The internship is an integral part of these programs and works to prepare students for their practicum project coursework in the fourth semester. **Upon arrival in their first semester, students are responsible for identifying prospective employers, preparing their resumes, improving their interviewing skills, and obtaining and accepting an offer from an employer to perform a summer internship.** Guidance and resources are available from the Carnegie Mellon Career and Professional Development Center (CPDC) and specifically from the two CPDC Career Advisors designated to support School of Computer Science students (see Appendix). For CPDC information and updates, visit their [website](#). For details on on-campus job fairs, visit CMU's [Handshake Events page](#). Students who are unable to obtain an internship may be able to find a summer research assistant position or other on-campus position that can satisfy the learning objectives of the internship. Campus positions may be paid or unpaid depending on the work and placement details.

All MSE-SS, MSE-ES, and IS-MSE-AMP students must obtain approval for their internship from the programs in order to receive credit toward degree completion. Internships should be at least 10 weeks long, including any orientation and off-boarding, and take place within the dates of the university [summer internship calendar](#). In addition, international students must obtain approval from the Office of International Education (OIE) to ensure that they have complied with the policies and procedures of the OIE regarding the University's compliance with Federal immigration and employment laws. Students who do not receive approval before starting their internship will not receive credit for their degree.

To prepare students for the summer internship, program staff will advise students on preparation and provide guidance for internship applications, in addition to vetting all internship offer letters. The internship must be completed satisfactorily to remain in good standing within the program. Students participating in internships should adhere to the ethical standards of the program.

Students who successfully obtain internships will enroll in a 3-unit internship course 17-667 Internship for Software Engineers in the third semester (summer), in addition to completing an internship entrance survey in the third semester, and an internship exit survey in the fourth semester. During the internship, students will participate in a supplemental canvas course to track progress and submit a final report and/or poster upon their return to receive a grade in the internship course. Students who are unable to obtain an internship will participate in a graded, on-campus program arranged by the MSE programs to satisfy the learning objectives of the internship.

ACADEMIC STANDING IN THE PROGRAM

Please review the [University Policy on Academic Integrity](#). The policy includes the University's

expectations around academic integrity and provides definitions of cheating, plagiarism, and unauthorized assistance.

A review of the [University's Academic Disciplinary Actions](#) procedures 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.

PROFESSIONAL INTEGRITY

Professional integrity is the ongoing practice of being honest with an unwavering and consistent adherence to strong moral principles and ethics. Moral principles describe the values that a particular group expects to guide their interactions with others. In the MSE Professional Programs, we adhere to the following moral principles:

- **Honesty.** Be clear and correct in your communication and actions. Do not misrepresent your skills, qualifications, or accomplishments.
- **Reliability.** Plan well in advance to keep your promises and commitments.
- **Fairness.** Be a strong contributor, never take advantage of others for your personal gain, and avoid blaming others.
- **Respect.** Learn and understand the culture and customs of others. Be kind.
- **Citizenship.** Know, understand, and follow all laws, policies, and procedures.

It is a requirement of the MSE Professional Programs that all students adhere to these principles. In addition, students may wish to become members of the [Association for Computing Machinery](#), which has its own Code of Ethics. Students who fail to abide by the program's moral principles in their coursework, project activities, and meetings with faculty, staff, mentors, team members or other students, may be placed on academic probation.

ACADEMIC INTEGRITY, CHEATING AND PLAGIARISM

The MSE Professional Programs has the highest expectations of academic integrity. As such, any instance of cheating or academic misconduct will not be tolerated.

Cheating includes but is not necessarily limited to:

1. Plagiarism, explained below.
2. Submission of work that is not the student's own work for papers, assignments, or exams.
3. Submission or use of falsified data.
4. Theft of or unauthorized access to an exam.
5. Use of an alternate, stand-in or proxy during an examination.
6. Use of unauthorized material including textbooks, notes or computer programs in the preparation of an assignment or during an examination.
7. Supplying or communicating in any way unauthorized information to another student for the preparation of an assignment or during an examination.
8. Collaboration in the preparation of an assignment. Unless specifically permitted or required by the instructor, collaboration will usually be viewed by the University as cheating. Each student, therefore, is responsible for understanding the policies of the department offering any course as

they refer to the amount of help and collaboration permitted in the preparation of assignments.

9. Submission of the same work for credit in two courses without obtaining the permission of the instructors beforehand.

Plagiarism includes, but is not limited to failure to indicate the source with quotation marks or footnotes where appropriate if any of the following are reproduced in the work submitted by a student:

1. A phrase, written or musical.
2. A graphic element.
3. A proof.
4. Specific or paraphrased language.
5. An idea derived from the work, published or unpublished, of another person.

UNIVERSITY POLICY ON ACADEMIC INTEGRITY

The University has a very clear and specific [protocol for responding to alleged violations of academic integrity](#). Accordingly, the MSE adheres to this policy. Carnegie Mellon's policy on [Academic Disciplinary Actions Overview for Graduate Students](#) describes procedures for disciplinary actions against graduate students in cases of alleged violations of academic regulations and the appeal process.

You may review the [University Policy on Academic Integrity](#) online.

ACADEMIC INTEGRITY VIOLATIONS

MSE Professional Programs students are expected to conduct and present their work honestly, and are required to keep informed of and abide by all University policies. Should a student choose to cheat or otherwise misrepresent their work and is caught doing so, they may expect the following:

- The student will receive course-level consequences determined by the course instructor(s). These may range from penalization on the relevant assignment to course failure.
- The [Academic Integrity Violation \(AIV\)](#) will be reported to CMU's [Office of Community Standards and Integrity \(OCSI\)](#); the report will become part of the student's [Student Conduct Record](#), and the student's program leadership and advisors will be informed. An OCSI representative will contact and arrange a counseling meeting with the student, following which the student has the option to submit an appeal.
- A severe violation or second incident will result in [Second Level Review](#) as conducted by the OCSI. Second Level Review may result in university-level consequences such as disciplinary probation, suspension, or dismissal from the program.
- Students with an Academic Integrity Violation are ineligible for MSE program privileges, including leadership positions, MSE competitive funding opportunities, and internal employment during, among others, their time in the program. See the handbook section entitled "Ethical Standards".

All students should review and familiarize themselves with the University's Academic Integrity Policy. The policy and further guidelines may be found on the [Office of Community Standards and Integrity Website](#).

ACADEMIC PERFORMANCE REVIEWS

The MSE faculty conducts academic performance reviews twice each semester, once at mid-semester and one at the end of the semester in the fall and spring terms in order to monitor individual student and project team performances. All core and associated faculty, program director, project mentors, MSE Programs Manager and Graduate Academic Advisor are invited to contribute input regarding student performance.

In assessing a student's academic performance MSE faculty, the program director, project mentors, MSE Programs Manager and Graduate Academic Advisor review each student's academic achievement, leadership, teamwork, personal responsibility in meeting ethical standards, and overall progress. Should a student's performance fall below expectations by failing to meet standards established by Carnegie Mellon or the MSE programs, the student will be appropriately notified, presented with a suggested plan for improvement, and notified of the risks associated with a failure to improve. These risks may include being placed on academic probation.

WRITTEN NOTIFICATION OF UNSATISFACTORY PROGRESS TOWARD A DEGREE

Following the posting of mid-semester and end-of-semester grades, students are notified in writing of unsatisfactory progress in their plan of study. Recommendations for a plan of action will be offered and expectations set for the student to demonstrate a return to satisfactory progress. Failure to meet stated expectations can lead to dismissal from the program.

ACADEMIC PROBATION

Student progress is continually monitored. If a student fails to satisfy any of their program requirements or their overall QPA drops below 3.0 during a given semester, the student may be placed on academic probation and required to improve their performance. Failure to improve one's performance, including maintaining a QPA of 3.0 (or better) within the following semester can result in dismissal from the program.

APPEAL FOR ACADEMIC ACTIONS

Students should discuss any issue associated with academic matters with the Graduate Academic Advisor. Appeals should then be made to the [Office of Community Standards and Integrity](#). If an issue continues to be unresolved, the student may appeal by following the University's [policy on academic actions](#).

GRADUATE CERTIFICATION AND DEGREE TITLE

Upon successful completion of all coursework, students will be certified for graduation by the appropriate Program Administrator. Degree Titles appear on the degree as follows:

MSE

Master of Software Engineering

MSE Online

Master of Science in Software Engineering

MSE-SS, and IS-MSE-AMP SS-Track

Master of Software Engineering in the field of Scalable Systems

MSE-ES, and IS-MSE-AMP ES-Track

Master of Software Engineering in the field of Embedded Systems

MSE/MBA, students will receive two diplomas which read respectively:

Master of Software Engineering

Master of Business Administration

WITHDRAWAL OF A DEGREE

The University reserves the right to [withdraw a degree](#) even though it has been granted should there be discovery that the work upon which it was based or the academic records in support of it had been falsified. In such a case, the degree will be withdrawn promptly upon discovery of the falsification.

SCHEDULES

ACADEMIC CALENDAR

The [Academic Calendar](#) provides information on all deadlines including registration dates, class start dates, add deadlines, drop deadlines, exam dates, and more.

UNIVERSITY SCHEDULES

The University issues schedules of courses for each semester. These are generally available in mid-April for the summer session, late-April for the fall semester, and mid-November for the spring semester. The most current course schedule for all courses (including MSE courses) can be found on [The Hub](#) website.

The schedule lists course number, title, instructor and section, days and times, classroom, and any course prerequisites. Course schedules may change given such circumstances as low class size, unexpectedly high enrollment, or faculty availability.

It is the responsibility of the student to refer to the latest course schedules.

EXAMINATION SCHEDULES

- The University's official final examination period begins on the Monday immediately following the last day of classes and continues through the last day of scheduled final examinations, with the exception of reading day(s).
- [Scheduled final examinations](#) are those scheduled by Enrollment Services.
- An instructor may choose not to set a schedule for the final examination, rather allowing each student to choose their examination time. Such exams are called self-scheduled examinations.

MAKE-UP EXAMS

Make-up exams remain at the discretion of the individual course instructors and will be scheduled as appropriate.

COURSE SELECTION AND ENROLLMENT

ACADEMIC ADVISING

ROLE OF THE GRADUATE ACADEMIC ADVISOR

The Graduate Academic Advisor, [Lauren Martinko](#), coordinates advising for all students in MSE programs to establish a consistent and coherent advising policy across programs. An open line of respectful and confidential communication is encouraged, as is the timely follow up and response to inquiries and requests for meeting times. Advising sessions are key in addressing conflicts and seeking guidance when needed. The Graduate Academic Advisor's role is to:

- offer advice on appropriate elective courses to meet individual career goals;
- monitor student progress throughout the program;
- evaluate student performance as related to English language proficiency and suggest appropriate intervention, as needed;
- recommend and help arrange for tutoring, if needed;
- recommend disciplinary action to the Program Director, if needed;
- meet at the conclusion of each semester to discuss student progress and to provide progress documentation to the student.

If you have an issue with your Advisor, please contact the MSE Programs Manager, [Jennifer Britton](#).

ROLE OF THE STUDENT

Initial advising is done at the MSE Orientation. **Students are responsible for making subsequent appointments with the Graduate Academic Advisor.** Periodic check-ins with the Graduate Academic Advisor are encouraged in order to discuss personal and professional career goals and a Plan of Study that targets those objectives. Recommended times for advising sessions include the week prior to registration to review elective course options, consideration of Independent Study opportunities, discussion of academic challenges, feedback on matters of academic integrity/conflict, and evaluation of professional job prospects.

REGISTRATION POLICY

As a general rule, the recommended number of units per semester is:

- In the first fall and spring semesters, 51 units for on-campus students
- In the summer semester, 48 units for MSE Professional students, 3 units for MSE-SS and MSE-ES students
- In the second fall semester, 48 units for all on-campus students
- MSE Online students are in a part-time program and take as many units as their course of study

and schedule allow in any given semester.

Although students may be able to register for up to 60 units, the total unit load at the end of the drop-add period should be no greater than 51 or 48 units, depending on the semester. By the final drop/add date, students must complete a registration approval form that lists all of the courses they are enrolled for and any teaching or research assistantships they are involved in. The Graduate Academic Advisor must approve and sign each student's registration approval form according to the guidelines outlined in this document. Registration for greater than 51 units requires the advance permission and approval/signature of the Graduate Academic Advisor. Permission for overloads is rarely approved.

REGISTRATION PROCEDURES

- [Course registrations](#) are completed by the student online.
- It is the responsibility of each student to register for courses. This can be done at any time, beginning with the pre-registration period lasting until the add period ends. Dates can be found on the official academic calendar.
- The MSE programs (and the University) reserves the right to withdraw any announced course if the enrollment is too low. The MSE programs also reserve the right to make changes in the schedule of hours, units, or in instructional staff.
- Students must register for each course, whether for-credit or an audit. Any student whose name is not on the roster for a particular course on the first day of class may be denied admission to the course.

DROP/ADD/WITHDRAW PROCEDURES

Students taking undergraduate- and graduate-level courses must follow the procedures and deadlines for adding, dropping, or withdrawing from courses as identified on the [academic calendar](#). There is a separate calendar for doctoral level courses.

COURSES WITH RESTRICTED ENROLLMENT

MSE students have priority in MSE-originated courses on a first-come, first-served basis. If a course has multiple sections, seats will be reserved for MSE students, however, if MSE students fill a section, an MSE student still seeking to register should select the section with open seats.

The MSE programs cannot lobby with other departments on behalf of its students in order to secure seats in other courses. All departments reserve seats for their specific students. Any open seats remaining are generally assigned on a first-come, first-served basis. Students can, on occasion, contact the assigned course instructor to plead their case for admission to the course. Admission may be granted at the discretion of the instructor. The policy of the department offering the course(s) is always followed.

ENROLLMENT VERIFICATION

Enrollment Services is the only University office that can provide an official letter of enrollment, official

transcript and enrollment verification. Enrollment verification can be requested online through [The HUB](#).

ADDITIONAL DEPARTMENTAL POLICIES AND PROCEDURES

TAKING OR RETURNING FROM A LEAVE OF ABSENCE

- Students may apply for a Leave of Absence (LoA) from the Program. They should first speak with the Graduate Academic Advisor before beginning a formal request. Such a leave of absence is usually granted for a maximum of one year. Leave be formalized by a written request, and by completing and obtaining the appropriate signatures for the [Leave of Absence form](#).
- After a Leave of Absence, the student must contact the department for possible re-entry into the Program. A [Return from Leave of Absence form](#) must be completed and all processes followed.
- The MSE Program reserves the right to set re-entry conditions that must be met when a student returns from a Leave of Absence. A student will be granted only one LoA from the MSE Program.
- Refer to the University's policy on [Leave of Absence and Return from Leave](#).

EMPLOYMENT ELIGIBILITY VERIFICATION

If you are receiving a stipend, are a TA, or 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 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 if required.
- 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.
- Students who fail to complete the Form I-9 in a timely manner may have stipend payments suspended. If employed by the university, an individual who fails to timely complete the Form I-9 may be subject to disciplinary action up to and including termination of employment.

DEPARTMENT EXPECTATIONS REGARDING EMPLOYMENT SEARCH

The MSE Professional Programs aim to support each student's professional development; academic performance, however, remains the priority. It is unacceptable for students to miss classes or coursework in order to attend career fairs or interviews. Students should conduct employment searches in a manner that does not impede their academic progress. Furthermore, students are expected to

exhibit certain ethical behavior when pursuing employment, such as arriving prior to the scheduled time for interviews, being truthful about their qualifications, and honoring their agreements with recruiters when applying for jobs. Once a student accepts an offer of employment, they may not continue searching for, applying to, or interviewing for other positions.

The Career and Professional Development Center (CPDC) reserves the right to limit access to [Handshake](#) for any users that do not follow the [ethical job and internship search policy](#).

Accepting an employment offer after you previously accepted an offer with another employer is defined as 'renewing' and is considered dishonest, unethical, and carries serious implications. If a student reneges on an offer that they have previously accepted, then that student will permanently lose access to career services provided by the MSE Professional Programs and the University.

ORIENTATION

The MSE programs offer a mandatory orientation to new students during the week prior to the beginning of fall classes. This orientation may also be attended by continuing students and may be followed shortly thereafter with a "refresher" of procedures.

INTELLECTUAL PROPERTY

The MSE Professional Programs adhere to the University's [intellectual property policy](#).

GRANDFATHER POLICY

When policies change, it is because the department recognizes that the newly-adopted rule is an improvement. Students enrolled in a degree program that is affected by a change in policy may, in some cases, choose to be governed by the policy in effect at the time of their matriculation.

TUITION AND FINANCIAL AID

ASSOCIATED FEES, CONFERENCE TRAVEL

The [applicable fees](#) for students enrolled in all School of Computer Science programs can be found online.

Should a student choose to travel to a conference for professional development, the Graduate Education Office offers funding opportunities. Information on this [funding and the application process](#) is available online. Please note that any student who chooses to travel for conferences or otherwise miss class or project time is responsible for coordinating absences and potential missed work beforehand with their faculty, project mentors and team members, and the Graduate Academic Advisor.

UNIVERSITY FINANCIAL AID

Information pertaining to [graduate student financial aid information](#) is available on the HUB website. The site includes funding options, the Graduate Financial Aid Guide, how to apply for financial aid, as

well as 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](#) to inquire about an Emergency Student Loan.

TUITION PAYMENTS

Students are responsible for ensuring that tuition payments are made on time: see [Invoice & Student Accounts](#). The HUB can offer you [clarity on your invoice](#), payment options, etc.

Students are advised to handle all tuition matters directly with the HUB. The MSE Program Administrator is unable to resolve tuition problems on behalf of individual students.

TUITION PAYMENT FOR SUMMER COURSES/FULL- AND PART-TIME STUDENTS

Students enrolled in the full-time campus programs are charged the per-semester tuition based on the rate effective for that particular semester.

Please note: tuition is not assessed for the MSE-SS and MSE-ES required 3-unit summer course 17-667 Internship for Software Engineers.

TUITION REFUND POLICY FOR FULL-TIME AND PART-TIME STUDENTS

The MSE programs adhere to the University [policy pertaining to tuition refunds](#).

SPONSORED STUDENTS

A [sponsored student](#) is one who has another party (such as an embassy or sponsor company) under agreement to pay the student's tuition. Students are responsible for ensuring that tuition payments are made on time: see [Invoice & Student Accounts](#).

CARNEGIE MELLON EMPLOYEE REIMBURSEMENT PROCEDURE

Contact the Benefits Office for specific [information on tuition benefits](#).

Please note: Because tuition remission is a taxable benefit, employees of Carnegie Mellon assume the payment of taxes for any graduate courses taken.

FULL-TIME/PART-TIME STATUS REQUIREMENTS

- To be considered a full-time student, a minimum of 36 units each semester is required.
- International students in F-1 or J-1 status are required by federal law to maintain full-time student status. Failure to maintain full-time status will result in loss of a student visa and, therefore, "permit of stay" as per the Office of International Education (OIE)'s [Maintaining Legal Status page](#).
- All students who have a Stafford Loan may not drop below full-time status.

FINANCIAL SUPPORT FROM THE MSE PROGRAMS

- The MSE Programs do not provide financial support. The Programs do offer competitive funding opportunities for exceptional performers (see below).
- Carnegie Mellon, SCS and the MSE Programs do not grant tuition waivers.
- IS-MSE-AMP students may maintain their undergraduate financial aid in their undergraduate senior year. Once certified for their IS degree, IS-MSE-AMP students will be charged the MSE tuition rate. For further aid options after receiving their bachelor's degree and beginning 5th Year Summer, students may see the [graduate student financial aid information](#) online.

EXTERNAL FELLOWSHIPS

- The MSE Programs accepts students with external fellowships.
- The MSE Programs seek to list applicable third-party funding sources. You may view the working list of fellowships and scholarships for which you may be eligible: [External Funding Opportunities](#).
- The receipt of outside funding sources will not adversely affect the student's eligibility for the MSE Fellowship. However, as financial need is a factor considered for the James E. Tomayko Scholarship, it may impact the student's eligibility for that scholarship.

MSE FELLOWSHIP

The MSE programs offer a one-year fellowship to an outstanding student who completes their studies, yet wishes to remain engaged with the program conducting research. Such fellowship candidates are recommended by program advisors and/or program faculty, are formally reviewed, and must be unanimously approved. If you are interested in this fellowship, notify the Program Manager.

JAMES E. TOMAYKO SCHOLARSHIP

The James E. Tomayko Scholarship is awarded to one or more students who demonstrate academic excellence, leadership potential, strong communication skills, exceptional personal initiative, and financial need. Prospective awardees are generally identified upon the completion of one or two full semesters in the program, with recipients chosen by committee.

DIRECTOR'S LIST

It pays to work hard and apply yourself. The Director's List recognizes the top 5-10% of the class who demonstrate academic excellence, leadership potential, strong communication skills, and exceptional personal initiative. Unlike the James E. Tomayko Scholarship, financial need is not a factor. Prospective awardees are generally identified upon the completion of one full semester in the program, with recipients chosen by a committee.

TEACHING REQUIREMENTS

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](#) online.

Students working as Teaching Assistants (TA) in the MSE programs should meet with their course instructor to discuss their role in the course. A TA may be tasked with grading assignments, leading recitations, coordinating with other TAs, and other duties as assigned.

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

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.

POLICY ON OUTSIDE EMPLOYMENT

Full-time graduate students within the MSE Professional Programs are ordinarily expected to devote their full attention and energy to their educational endeavors. Classwork and project assignments are deliberately planned so as to occupy full-time students, thus effectively precluding outside employment and consulting.

All full-time students are advised to decline such work and concentrate on their graduate studies, with exception of a summer internship that is required as part of a program plan of study.

AVAILABILITY OF SUMMER EMPLOYMENT

The MSE programs do not provide summer employment opportunities. As the programs require a full-time course load during the summer semester, it is highly inadvisable to seek summer employment.

GENERAL MSE PROFESSIONAL PROGRAMS INFORMATION

MAILING ADDRESS

Master of Software Engineering Professional Programs
Carnegie Mellon University
300 South Craig Street, 2nd floor
Pittsburgh, PA 15213, USA

PROGRAM RESOURCES

OFFICE SPACES AND BUILDING FACILITIES

All students are provided with a working area and general access to the professional space. This includes:

Keys

- General access keys are distributed to each student at Orientation. It is the responsibility of the student to return the keys upon leaving the program.
- Lost keys may be replaced; the student is responsible for replacement costs. Please contact [Alisha Roudebush](#).
- Each student is assigned a locker with a combination code for personal items at orientation

Security

- In the event of an emergency, contact Campus Police at: (412) 268-2323
- The door leading from South Craig Street will be kept locked at all times.
- Access to the building is made by swiping a valid and activated Carnegie Mellon student identification card at the front door access area.
- Student lockers located inside the MSE student space are lockable and remain the responsibility of the assigned student.
- **For the security, safety, and privacy of your fellow MSE students, please do not invite friends into the MSE space, including the Cave and student meeting rooms, on a regular basis.**
- In case of theft of property, either personal or University, please notify [Paul Stockhausen](#), [Campus Security](#), and MSE Programs Manager, [Jennifer Britton](#).
- Emergency egress can be made by using any of the exit stairways. These can be found inside the MSE professional area, or in the 2nd floor main hallway.

The University's [on-campus emergency procedure](#) can be reviewed online.

CONFERENCE ROOMS

Student meeting rooms are available for student teams to assemble collectively or with project clients. These rooms are scheduled via Google calendars and are available to project teams on a first-come, first-reserved basis. These rooms are for team meetings; reservations for individuals are not allowed. Students are not allowed to reserve the faculty/staff conference room, SCRG 271.

MEDIA ROOMS

- All 300 South Craig Street student meeting rooms are equipped with computer projection capabilities.
- All student meeting rooms are equipped with whiteboards.

INTERVIEW BOOTHS

Two sound-reducing booths have been installed between the elevator and the kitchenette. These booths are reserved via Google Calendars on a first come, first-serve basis. These booths may be reserved for job or internship interviews. Maximum reservation is two hours.

PROGRAM/DEPARTMENTAL LIBRARIES

The James E. Tomayko Memorial Library is located in the MSE Professional Programs space, 300 South Craig Street, 2nd floor. This collection is the generous donation of Dr. Jim “Coach” Tomayko, former director, faculty member, and SEI researcher. Program students may sign out books from his collection for their personal and professional use. Students may also use the Engineering and Science Library (Wean Hall 4615).

PARKING

On-campus parking is the student’s responsibility. See the [parking services](#) website for more information.

REPAIRS

- Computing equipment: Notify S3D IT technical support staff.
- Print/copy/fax equipment: Notify the [MSE Programs Administrator](#).
- Furniture: Notify [SCS Building Facilities](#).
- Services: For furniture, lighting, heating, cooling, etc., contact [SCS Building Facilities](#).
- Computers: contact the Andrew help desk (Ext. 4357) or the S3D Systems Mgr. (Ext. 7138).

ACCIDENTS ON CMU PROPERTY

Please report all accidents to [Paul Stockhausen](#) and the MSE Office. You will be asked to complete an accident report

PRINTING AND COPYING

PRINTER/COPY MACHINES

There is one printer/copier on the 2nd floor of the MSE Professional Programs’ facility at 300 South Craig Street located between the elevator and the kitchenette.

COMPUTER LABS

There are a number of computer labs located throughout the CMU campus. A [list of locations](#) is available online.

OFFICE SUPPLIES AND EQUIPMENT

INDIVIDUAL SUPPLIES

- Student spaces have been stocked with the following basic office supplies: dry-erase markers, paper clips, push pins, scissors and ruler.
- Each work area has a stapler and transparent tape dispenser.
- Each work area has a wastebasket and recycling basket.
- If additional office supplies are needed, please contact the program’s Administrative Associate, [Alisha Roudebush](#).

SHARED SUPPLIES

- Shared office supplies, such as heavy-duty stapler, 3-hole punch, etc., are in the public copy/printing area on the 2nd floor. Students are asked to use the supplies in the designated areas.

REPLACEMENT SUPPLIES

- A small quantity of replacement supplies is kept in the student public area.
- When taking replacement supplies from the MSE stock, be respectful and reasonable. Inform the MSE Program Administrative Associate when the supply runs low.
- The department will not provide special supplies.

CONFERENCE PHONES

- All student meeting rooms are equipped with conference call speakers that can connect to computers or phones via bluetooth. Students may use them to conduct business with project clients, potential employers, or to complete work essential to their plan of study or project work. Each speaker should remain in its assigned room.

COMPUTER MONITORS

- MSE students participating in a year-long Studio project are provided with a computer monitor and keyboard. These items should remain in the MSE student space at 300 S. Craig St.
- MSE students participating in a semester-long practicum project will be provided with some computer monitors to be shared amongst teams. Any monitors provided should remain in the MSE student space at 300 S. Craig St.
- Any adaptors needed to use program provided equipment with a student's individual laptop are the responsibility of the student.

FINANCIAL AND SOCIAL RESOURCES AND POLICIES

EXPENSES

- Any expenses incurred on behalf of the program and approved **in advance** by the Programs Manager may be reimbursed. Expenses requiring the signature of a contract must be pre-approved by the University Contracts Office; no one save a designated UCO officer is authorized to sign a contract on CMU's behalf, and this includes software Click-Through Agreements (CTAs).
- Expenses associated with projects that have been pre-approved by the Programs Manager may be reimbursed by the program.
- Receipts that verify purchases and/or expenses should be presented to the MSE Programs Administrator for reimbursement within 30 days of the purchase or expense occurring.

SOCIAL COMMITTEE/ ACTIVITIES

With each academic year, a call is made for interested students to serve in social and leadership positions as a part of the MSE Leadership Initiative (MSELi). This student organized and led organization strives to address the professional interests of MSE students. Initiatives run the gamut from hosting

guest lecturers, coordination of technical and soft skills workshops, and group knowledge-sharing sessions. Funding for MSELi events and initiatives is provided by the [Graduate Student Assembly \(GSA\)](#).

In addition, the MSELi is charged with discussing and organizing social activities that include recreation, entertainment, socializing, sport and leisure. The MSE programs may partially-support reasonable and pre-approved expenses associated with these periodic (generally one per semester) outings. Ideas and a proposed budget should be given to the Programs Manager, [Jennifer Britton](#), for approval.

PURCHASING POLICIES AND PROCEDURES

Students may petition the program for the purchase of supplies in support of professional or social activities that benefit a sizable portion of the program community. Examples of supplies may include food and non-alcoholic drinks for a visiting lecturer or student-organized professional development event, and materials or supplies used in support of projects.

In every instance, approval from the Programs Manager is needed prior to the purchase being made. Once approved, the appropriate Programs Administrator can finalize the transaction.

PRESS AND MEDIA RELATIONS

The Programs Manager [Jennifer Britton](#), is the point of contact between news media and the MSE community, including faculty, students, administrators, and staff. If any student, staff, or faculty member of the Program is contacted by a media representative, they are encouraged to immediately inform the Programs Manager. Persons are not required to answer any questions from journalists without first seeking counsel from program leadership.

Persons interested in publicizing a program, project, event, or other activity affiliated with the MSE Professional Programs should contact the Programs Manager.

UNIVERSITY/COLLEGE/DEPARTMENT/PROGRAM BRAND AND LOGOS

The MSE Professional Programs adheres to the University's established guidelines regarding brand identity and logo usage. For more information on the use of University logos and suggested brand identity markers (color scheme, typeface, etc.), please consult the [Office of Marketing Communications](#) website.

If you would like to use the MSE unit mark, please contact the Programs Manager regarding its usage first.

APPENDICES

APPENDIX A: KEY OFFICES FOR GRADUATE STUDENT SUPPORT

OFFICE OF GRADUATE AND POSTDOC AFFAIRS

The [Office of Graduate and Postdoctoral Affairs](#) provides university-wide support for all graduate students and academic programs, with a focus on supporting graduate student success at Carnegie Mellon. Examples of resources offered through the Office of Graduate and Postdoctoral Affairs include, but are not limited to:

- Website with university resources, contact information for CMU programs and services, possible financial assistance and potential funding opportunities, and various procedural and policy information
- Newsletter to all graduate students with information on activities, resources, and opportunities
- Professional development seminars and workshops, and various programming and events for the graduate student community

The Office of Graduate and Postdoctoral Affairs also works directly with the colleges and departments on issues related to graduate students and serve as a resource for developing policy and procedures. The Office of Graduate and Postdoctoral Affairs partners with many other offices and organizations, such as the Graduate Student Assembly, to support the holistic graduate student educational experience. The Office of Graduate and Postdoctoral Affairs can be contacted at graded@cmu.edu.

OFFICE OF THE DEAN OF STUDENTS

The [Office of the Dean of Students](#) provides central leadership of the metacurricular experience at Carnegie Mellon including the coordination of student support. Graduate students will find the enrollment information for Domestic Partner Registration and Parental 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 currently three forms of support funding for enrolled students: emergency student loans, student parental loans, and the Tartan Emergency Support Fund. Inquiring 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.

College Liaisons and the Student Support Resources team serve as additional resources for graduate students. 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 Important Contacts list in Student Information Online (SIO). The Student Support Resources team offers an additional level of support for students who are navigating 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

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 AND INCLUSION

[Diversity and inclusion](#) have a singular place among the values of Carnegie Mellon. 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)

ASSISTANCE FOR INDIVIDUALS WITH DISABILITIES

The Office of Disability Resources at Carnegie Mellon has a continued mission to provide physical, digital, and programmatic access to ensure that students with disabilities have equal access to their educational experience. The Office works 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 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, or call (412) 268- 6121.

EBERLY CENTER FOR TEACHING EXCELLENCE AND EDUCATIONAL INNOVATION

The [Eberly Center](#) offers 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 and as future faculty members at other institutions. Regardless of one's current or future teaching context and duties, Eberly's 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](#) can be found online.

GRADUATE STUDENT ASSEMBLY

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. GSA's recent accomplishments are a testament to their making a difference, and steps to implementing the vision laid out by the [strategic plan](#).

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 3rd floor of the Cohon University Center. GSA also maintains a website of graduate student resources on and off-campus. GSA continues to rely on student feedback to improve the graduate student experience at CMU. Feel free to contact them at gsa@cmu.edu to get involved, stop by their office in the Cohon University Center Room 304 or become a representative for your department.

OFFICE OF INTERNATIONAL EDUCATION

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. 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

[Military veterans](#) are a vital part of the Carnegie Mellon 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 urovaedbenefits@andrew.cmu.edu or 412-268-8747.

CARNEGIE MELLON ETHICS HOTLINE

The health, safety and well-being of the university community are top priorities at Carnegie Mellon. [CMU provides a hotline](#) that all members of the university community should use to confidentially report suspected unethical activity, violations of university policy, or violations of law. Students, faculty and staff can anonymously file a report by calling 1-844-587-0793 or visiting the [EthicsPoint](#) website. All submissions are reported to appropriate university personnel and handled discreetly.

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 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 Code of Business Ethics and Conduct.

Additional details regarding the [Policy Against Retaliation](#) are available online.

APPENDIX B: KEY OFFICES FOR ACADEMIC AND RESEARCH SUPPORT

STUDENT ACADEMIC SUCCESS CENTER

The [Student Academic Success Center's](#) (SASC) work to support success focuses on creating spaces for students to engage in their coursework and approach to learning through many group and individual program options. SASC supports student success by providing academic coaching, subject-specific tutoring, effective communication strategies, accommodations for students with disabilities, and language support for multilingual learners. SASC engages with faculty and staff to improve the coordination and professional development for academic advisors. Visit the SASC website for more information about services offered in areas such as communication and language support; language and cross-cultural support; and learning support.

ACADEMIC COACHING/CONSULTING — THE STUDENT ACADEMIC SUCCESS CENTER

The [Academic Coaching Program](#) is a student assistance program that supports graduate students in the development and/or improvement of skills, strategies, and processes that are necessary for a productive and successful experience at CMU and beyond. Support for graduate students comes in two forms: Individualized Sessions and Group Workshops. Individualized Sessions are the primary focus and can be best understood as working with a personal consultant. Academic Coaches/Consultants meet with students regularly, in a one-on-one capacity, in order to assess a student's needs and implement strategies to satisfy those needs, while providing a variety of support throughout the process. Areas of focus include, but are not limited:

- Self-Management
 - Developing and/or adjusting your organizational system
 - Managing time and combating stress and procrastination
 - Prioritization and decision making

- Advancing mindset, self-efficacy, and belongingness
- Balancing coursework, research, and professional development opportunities
- Study Skills
 - Identifying and modifying your learning process
 - Metacognition
 - Test-taking and note-taking strategies
 - Content comprehension and retention

COMMUNICATION AND LANGUAGE SUPPORT

The program offers free consultations for all CMU students on their written, oral, and visual projects. Trained communication consultants help students to convey ideas clearly and effectively on a variety of STEM and humanities topics. Consultants support communication excellence on essays, technical reports, oral presentations, slides, data visualization, advanced English language learning, and many other project types. Clients can bring in a project at any stage including brainstorming ideas, organizing thoughts, responding to instructor feedback, or putting finishing touches on the final draft.

Support is offered in several modes:

- One-on-one communication tutoring (in-person or Zoom synchronous meeting) — Clients meet with a consultant to improve the logic, clarity, and flow of writing or presentation and receive expert feedback that will strengthen a project. When making an appointment, clients upload a draft, instructor prompts, and rubrics so consultants can use specific criteria to give relevant feedback. See the [appointment types](#) offered.
- Video response (asynchronous) — Clients upload documents in advance, then receive a 20- to 30-minute recorded video with a consultant's feedback. The feedback video will be received within 5 days after the scheduled appointment.
- Group appointments — Participate with your group to accomplish peer reviews or focus on collaborative presentation strategies.
- [Workshops](#) — Workshops are available on a variety of topics and help attendees learn research-backed communication strategies.
- [Resources](#) — An online collection of handouts and videos that concisely explain specific communication strategies are available.

LANGUAGE AND CROSS-CULTURAL SUPPORT

More than 60% of graduate students at Carnegie Mellon are international students, and others are non-native 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 make an appointment with a Language Development Specialist to get individualized coaching on language or cross-cultural issues.

Students can choose from sessions on

- how to give a strong presentation
- writing academic emails

- analyzing expectations and strategies for clear academic writing
- how to talk about oneself/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.

LEARNING SUPPORT

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.

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.

“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.

UNIVERSITY LIBRARIES

The [University Libraries](#) offers a wide range of information, resources, and services supporting graduate students in coursework, 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.

COMPUTING AND INFORMATION RESOURCES

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](#) section and the [University Computing Policy](#).

Visit the [Computing Services website](#) to learn more. For assistance the Computing Services Help Center is available at 412-268-4357 (HELP) or ithelp@cmu.edu.

RESEARCH AT CMU

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 are found by visiting the Research at Carnegie Mellon website.

OFFICE OF RESEARCH INTEGRITY AND COMPLIANCE

The [Office of Research Integrity & Compliance](#) (ORIC) is designed to support research at Carnegie Mellon. 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 and use. ORIC also provides consultation, advice, and review of allegations of research misconduct.

APPENDIX C: KEY OFFICES FOR HEALTH, WELLNESS AND SAFETY

COUNSELING AND PSYCHOLOGICAL SERVICES

[Counseling and 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

[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

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.

RELIGIOUS AND SPIRITUAL LIFE INITIATIVES

Carnegie Mellon is committed to the holistic growth of our students, including creating opportunities for [spiritual and religious practice and exploration](#). RSLI has relationships with local houses of worship from various traditions and many of these groups are members of CMU's Council of Religious Advisors. They 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. RSLI staff are available 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

The [University Police Department](#) is located at 4551 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 publishes an annual campus security and fire safety report describing the university's security, alcohol and drug, sexual assault, and fire safety policies. The report also contains 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 x2323. The [annual security and fire safety report](#) is also available.

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.

APPENDIX D: DEPARTMENTAL RESOURCES

DEPARTMENT / PROGRAM PERSONNEL INTRODUCTION

The MSE Professional Programs are a suite of programs within the Software and Societal Systems Department (S3D) and the School of Computer Science (SCS). We recommend that you become familiar with the leadership of both of these organizations as well as our own.

Below you will find information on all associated leadership and staff; including the possible ways in which you may interact with them. A list of [MSE Faculty contact information](#) may be found online.

Name/Title	Office	Contact Info
Amy Burkert <i>Vice Provost for Education</i>	GSIA 354	ak11@andrew.cmu.edu

SCHOOL OF COMPUTER SCIENCE

Name/Title	Office	Contact Info
Martial Hebert <i>Dean</i>	NSH 4113	268-5704 mhebert@andrew.cmu.edu
Guy Blelloch <i>Associate Dean for Undergrad Education</i>	GHC 9211	268-6245 blelloch@cs.cmu.edu
Tom Cortina <i>Assistant Dean Undergraduate Education</i>	GHC 4117	268-3514 tcortina@cs.cmu.edu
Catherine Copetas <i>Assistant Dean, Industrial Relations and Special Events</i>	GHC 6203	268-8525 copetas@cs.cmu.edu
Jodi Forlizzi <i>Associate Dean for Diversity, Equity and Inclusion</i>	NSH 3519	606-1702 forlizzi@cs.cmu.edu
David Garlan <i>Associate Dean for Master's Programs</i>	GHC 4218	268-5056 garlan@cs.cmu.edu
Srinivasan Seshan <i>Computer Science Department Head</i>	GHC 7019	268-8734 srini@cs.cmu.edu

SOFTWARE AND SOCIETAL SYSTEMS DEPARTMENT

Name/Title	Office	Contact Info
Jim Herbsleb <i>Director, S3D</i>	TCS 448	268-8741 herbsleb@andrew.cmu.edu

MASTER OF SOFTWARE ENGINEERING

DIRECTOR AND ADMINISTRATIVE STAFF

Name/Title	Role/Interactions	Contact Info
Travis Breaux <i>Director, MSE Professional Programs</i>	Controls the vision of the program, provides high-level guidance to students and faculty, is involved in student evaluations and in resolving any program-level disputes.	TCS Hall tdbreaux@andrew.cmu.edu Assistant: Alisha Roudebush aroudebu@andrew.cmu.edu
Jennifer Britton <i>Programs Manager</i>	Oversees all aspects of the master programs administration. You will likely speak to her regarding admissions, performance review issues, personal and professional conflicts, course and faculty concerns, program management, and direction.	300 South Craig 270 268-4359 jbritto2@andrew.cmu.edu
Sasha Balobeshkina <i>Alumni and Corporate Relations Manager</i>	Coordinates alumni outreach efforts, student relations, and job placement. Interacts directly with industry regarding project sponsorship and engagement with the program.	300 South Craig 278 268-7881 abwalker@andrew.cmu.edu
Lauren Martinko <i>Senior Graduate Academic Advisor</i>	Coordinates graduate student advising. Among many other program-related issues, you will likely go to her regarding course planning, registration, and commencement.	300 South Craig 272 268-6441 laurenma@cs.cmu.edu
Marlana Pawlak <i>Senior Admissions Officer</i>	Handles admission processes for all MSE Programs. First point-of-contact for prospective and newly admitted students.	300 South Craig 278 268-7881 mpawlak@andrew.cmu.edu
Jennifer Potter <i>Courseware Specialist; Program Marketing & Communications Manager</i>	Handles marketing and branding, external communications, and contributing to website content.	Remote jspotter@cs.cmu.edu

<p>Alisha Roudebush <i>Programs Administrative Assistant</i></p>	<p>Coordinates events, assists with scheduling, ordering, reimbursement, content editing, catering, technical logistical support, inter-departmental coordination, admissions, and general departmental needs.</p>	<p>300 South Craig 270 268-5009 aroudebu@andrew.cmu.edu</p>
--	--	--

FACULTY

Name/Title	Office	Contact Info
<p>Travis Breaux <i>Director, MSE Professional Programs</i></p> <p>Assistant: Alisha Roudebush</p>	<p>300 South Craig 277</p> <p>300 South Craig 270</p>	<p>tdbreaux@andrew.cmu.edu 268-7334</p> <p>aroudebu@andrew.cmu.edu 268-5009</p>
<p>Jonathan Aldrich <i>S3D Professor</i></p>	<p>TCS 422</p>	<p>jonathan.aldrich@cs.cmu.edu</p>
<p>Swarna Ashok <i>MSE Core Faculty Associate Teaching Professor</i></p>	<p>TCS 273</p>	<p>swarnala@andrew.cmu.edu 268-7494</p>
<p>Andrew Begel <i>Associate Professor of Computer Science, S3D</i></p>	<p>TCS 441</p>	<p>abegel@andrew.cmu.edu 268-8813</p>
<p>Len Bass <i>S3D Adjunct Faculty HCII Senior Technical Staff</i></p>	<p>Remote</p>	<p>lenbass@cmu.edu</p>
<p>Jim Berardone <i>MSE Core Faculty Professor of Product Management</i></p>	<p>SCRG 275</p>	<p>jberardone@cmu.edu</p>
<p>Nick Frollini <i>MSE Core Faculty Communications Instructor</i></p>	<p>SCRG 274</p>	<p>dfx2@andrew.cmu.edu 268-5359</p>
<p>David Garlan <i>SCS Associate Dean for Master's Programs, S3D Professor of Computer Science</i></p>	<p>TCS 420</p>	<p>garlan@cs.cmu.edu 268-5056</p>
<p>Jeff Gennari <i>S3D Adjunct Faculty SEI Senior Technical Staff</i></p>	<p>SEI & Remote</p>	<p>jgennari@andrew.cmu.edu 268-1404</p>
<p>Eunsuk Kang <i>S3D Assistant Professor</i></p>	<p>TCS 322</p>	<p>eskang@cmu.edu 268-2843</p>

Christian Kästner <i>Director, Software Engineering PhD Program</i> <i>S3D Associate Professor</i>	TCS 345	kaestner@cmu.edu 268-5254
Eduardo Miranda <i>MSE Core Faculty</i> <i>Teaching Professor</i>	SCRG 268	mirandae@andrew.cmu.edu 268-8450
Scott Pavetti <i>MSE Core Faculty</i> <i>Assistant Teaching Professor</i>	SCRG 276	spavetti@andrew.cmu.edu
Michael Riley <i>S3D Adjunct Faculty</i> <i>SEI Senior Embedded Software Resiliency Engineer</i>	SEI 4202	mariley@sei.cmu.edu
Bradley Schmerl <i>S3D Principal Systems Scientist</i>	TCS 421	schmerl@andrew.cmu.edu
Chris Timperley <i>S3D Systems Scientist</i>	TCS 362	ctimperly@cmu.edu
Vijay Sai Vadlamudi <i>S3D Adjunct Teaching Professor</i>	Bakery Square	vijaysai@cmu.edu 268-7743
Hasan Yasar <i>S3D Adjunct Faculty</i> <i>SEI Technical Manager</i>	SEI 3201	hyasar@andrew.cmu.edu 268-9219

TECHNICAL STAFF

Name/Title	Role/Interactions	Contact Info
S3D Technical Support	Handles requests for technical support in student meeting rooms and for temporary equipment	TCS Hall s3d-help@cs.cmu.edu
Emanuel Bowes <i>Assistant Systems Manager, S3D</i>	Maintains servers and provides tech support for the MSE programs	TCS 220 268-3369 peb2@andrew.cmu.edu
James Tobin <i>Videography Team Manager, S3D</i>	Coordinates requests for video services	WEN 4116 268-7695 jtobin@andrew.cmu.edu
		<hr/>

FACILITIES STAFF

Name/Title	Role/Interactions	Contact Info
SCS Building Facilities	Manages all initiatives and issues pertaining to the physical spaces occupied by the School of Computer Science, from facility, furniture, electrical issues and office/room access to space and maintenance resources	building@cs.cmu.edu
Paul Stockhausen <i>Senior Manager, SCS Building Facilities</i>	Handles issues with the building or furniture and should be contacted in the event of an accident on the property	GHC 4107 268-8223 stocky@cs.cmu.edu
Jamie Gregory <i>Associate Building Facilities Manager, SCS</i>	Handles issues with the building, furniture, or phones	GHC 4107 268-2069 jamiereg@cs.cmu.edu