INSTITUTE FOR SOFTWARE RESEARCH
MASTER OF SOFTWARE ENGINEERING
PROFESSIONAL PROGRAMS

2020 - 2021
MSE STUDENT HANDBOOK

MASTER OF SOFTWARE ENGINEERING
MASTER OF SOFTWARE ENGINEERING – SCALABLE SYSTEMS
MASTER OF SOFTWARE ENGINEERING – EMBEDDED SYSTEMS
MASTER OF BUSINESS ADMINISTRATION & MASTER OF SOFTWARE ENGINEERING
MASTER OF SOFTWARE ENGINEERING ONLINE

Updated: August 2020

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*. 
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On behalf of the Master of Software Engineering 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. It is our overarching goal to educate Agents of Change — individuals who will lead the industry and improve the state of the practice in years to come.

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 in our professional master’s program, 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.

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

GRADUATE STUDENT HANDBOOK OVERVIEW

This document is intended to be a source of information for students in the Master of Software Engineering 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 Master of Software Engineering Professional Programs adheres to all University guidelines and procedures as detailed below.

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 Website
- University Policies Website
- Graduate Education Website

The process for handling various academic and non-academic policy violations or other grievances vary from grievance to grievance. A Summary of Graduate Student Appeal and Grievance Procedures can be reviewed at the Graduate Education website.

The process for addressing alleged violations of non-academic policies and appeal procedures can be found on the University Policies website and The Word.

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

THE CARNEGIE MELLON CODE

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

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, and commitments kept.

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

The discovery, advancement and communication of knowledge is 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 to 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 is also available online.

ETHICAL STANDARDS: PROFESSIONAL & ACADEMIC INTEGRITY; ELIGIBILITY REQUIREMENTS

CMU’s Master of Software Engineering 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 of our peers. As such, the MSE Professional Programs holds its students, faculty & 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 for 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 in 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:

- Student leadership positions within the MSE programs, such as Studio Manager and MSELi
- 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 must be willing to provide proof of the such upon request by Program Leadership. Any instances of Academic Integrity Violations (AIVs) or other breaches of ethical standards will render a student to receive program privileges, and any current privileges may be revoked on the basis of this eligibility. MSE Program Leadership may also choose to withhold or remove such privileges and opportunities from students unable to maintain academic performance standards.

The University’s expectations for academic integrity are available online, as is the Carnegie Mellon Code.

**STATUTE OF LIMITATIONS**

As outlined in Carnegie Mellon’s Master’s Students Statute of Limitations, students who have matriculated at Carnegie Mellon beginning Fall 2012 will complete all requirements for the master’s degree within a maximum of seven years from original matriculation as a master’s student, per program-specific policy. Once this time-to-degree limit has lapsed, a student 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.
SAFEGUARDING EDUCATIONAL EQUITY

Sexual Misconduct Policy
The University prohibits sex-based discrimination, sexual harassment, sexual assault, dating/domestic violence and stalking. The University also prohibits retaliation against individuals who bring forward such concerns or allegations in good faith. The University’s Sexual Misconduct Policy is available here. The University’s Policy Against Retaliation is available here. If you have been impacted by any of these issues, you are encouraged to make contact with any of the following resources:

- **Office of Title IX Initiatives**, 412-268-7125
- **Sexual Harassment Advisors**;
- **What to do if You or Someone You Know is a Survivor Sexual Assault or Sexual Violence**;
- **Sexual Harassment Process and Title IX Coordinators**;
- **University Police**, 412-268-2323
- **University Health Services**, 412-268-2157
- **Counseling and Psychological Services**, 412-268-2922

Additional resources and information can be found here.

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 assure healthy professional relationships. This policy is not intended to discourage consensual intimate relationships unless there is a conflicting professional relationship in which one party has authority over the other as in the policy.

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

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

You may read more about the [Student Maternity Accommodation Protocol](#) online.
The **WORD** is Carnegie Mellon University’s student online handbook and is considered a supplement to the department (and sometimes college) handbook. The WORD contains campus resources and opportunities, academic policy information and resources, community standards information and resources. It is designed to provide all students with the tools, guidance, and insights to help them achieve their full potential as a member of the Carnegie Mellon community. Students are encouraged to bookmark the webpage and refer to it often.

[University policies](#) can be found in full online.
DEPARTMENTAL INFORMATION

SOFTWARE ENGINEERING PROFESSIONAL PROGRAMS MISSION STATEMENT

The goal of the Master of Software Engineering 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 Software Engineering Professional Programs includes four (4) 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.
  - Two variants: 16-month, full-time, on campus, requires 195 degree-units; 24-month, part-time, distance, requires 109 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

- **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

Policies and procedures mentioned herein pertain primarily to the above-listed degree programs. Questions may be directed to the Programs Manager Karen Fleischman.
MSE is a degree program with two variants:

- The full-time, on-campus program is designed to be completed in four semesters, and may be pursued in part-time format given special permission.
- The part-time, distance program, MSE Online, is designed to be completed in 6-8 semesters; see separate requirement descriptions below.

MSE-SS is a full-time campus degree program designed to be completed in four consecutive semesters.
- The program may be pursued in part-time format given special permission.

MSE-ES is a full-time campus degree program designed to be completed in four consecutive semesters.
- The program may be pursued in part-time format given special permission.

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

DEFINITION OF FULL-TIME AND PART-TIME STATUS

The Software Engineering 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.

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.

Please note that immigration restrictions do not allow Carnegie Mellon University to issue F1 visa documents to part-time students.
CURRICULAR REQUIREMENTS

Semester Breakdown:

<table>
<thead>
<tr>
<th>Full Semesters: 9 to 12-unit courses</th>
<th>Fall (FA)</th>
<th>Spring (SP)</th>
<th>Summer (SU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini Semesters: 6-unit courses</td>
<td>A1</td>
<td>A3</td>
<td>A5</td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td>A4</td>
<td>A6</td>
</tr>
</tbody>
</table>

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

PLAN OF STUDY

To receive the Master of Software Engineering (MSE), the Master of Business Administration/Master of Software Engineering (MBA/MSE), Master of Software Engineering – Scalable Systems (MSE-SS), or Master of Software Engineering – Embedded Systems (MSE-ES) degree, 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 good academic standing in the Program.

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.

FALL 2020

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>17-611</td>
<td>Statistics for Decision Making</td>
<td>6</td>
</tr>
<tr>
<td>A1</td>
<td>17-612</td>
<td>Business &amp; Marketing Strategy</td>
<td>6</td>
</tr>
<tr>
<td>A1</td>
<td>17-614</td>
<td>Formal Methods</td>
<td>6</td>
</tr>
<tr>
<td>A2</td>
<td>17-622</td>
<td>Agile Methods</td>
<td>6</td>
</tr>
<tr>
<td>A2</td>
<td>17-623</td>
<td>Quality Assurance</td>
<td>6</td>
</tr>
<tr>
<td>A2</td>
<td>17-626 or 17-627</td>
<td>Requirements Course</td>
<td>6</td>
</tr>
<tr>
<td>FA</td>
<td>17-603</td>
<td>Communications for Software Managers</td>
<td>3</td>
</tr>
<tr>
<td>FA</td>
<td></td>
<td>Elective Course(s)</td>
<td>12</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2</td>
<td>17-626</td>
<td>Requirements for Information Systems</td>
<td>6</td>
<td>Required</td>
</tr>
<tr>
<td>A4</td>
<td>17-647</td>
<td>Data-intensive and Scalable Systems</td>
<td>6</td>
<td>Elective</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2</td>
<td>17-627</td>
<td>Requirements for Embedded Systems</td>
<td>6</td>
<td>Required</td>
</tr>
<tr>
<td>A4</td>
<td>17-648</td>
<td>Sensor-based Systems</td>
<td>6</td>
<td>Elective</td>
</tr>
</tbody>
</table>
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 Distributed Systems Fundamentals, which is only 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 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 students both to learn 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.

### FALL 2020

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>17-611</td>
<td>Statistics for Decision Making</td>
<td>6</td>
</tr>
<tr>
<td>A1</td>
<td>17-612</td>
<td>Business &amp; Marketing Strategy</td>
<td>6</td>
</tr>
<tr>
<td>A1</td>
<td>17-614</td>
<td>Formal Methods</td>
<td>6</td>
</tr>
<tr>
<td>A1</td>
<td>17-615</td>
<td>Data Structures and Algorithms</td>
<td>6</td>
</tr>
<tr>
<td>A2</td>
<td>17-622</td>
<td>Agile Methods</td>
<td>6</td>
</tr>
<tr>
<td>A2</td>
<td>17-623</td>
<td>Quality Assurance</td>
<td>6</td>
</tr>
<tr>
<td>A2</td>
<td>17-625</td>
<td>Design Patterns and API Design</td>
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<td>17-626</td>
<td>Requirements for Information Systems</td>
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<tr>
<td>FA</td>
<td>17-601</td>
<td>Communications for Software Engineers I</td>
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### SPRING 2021

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<td>Software Architecture</td>
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<td>Quality Management</td>
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<td>DevOps and Continuous Integration</td>
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<td>17-647</td>
<td>Data-intensive and Scalable Systems</td>
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<td>SP</td>
<td>17-602</td>
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<td>Elective Course(s)</td>
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</table>
### 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.
SPRING 2021

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<td>Quality Management</td>
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<td>17-646</td>
<td>DevOps and Continuous Integration</td>
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SUMMER 2021

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FALL 2021

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

The Master of Software Engineering and Master of Business Administration (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 one, two and three 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.

MASTER OF SOFTWARE ENGINEERING ONLINE (MSE ONLINE)

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 six semesters, one of which is dedicated to thesis writing. The program typically begins in the Fall semester, and consists of synchronous faculty meetings and asynchronous lectures and assignments.

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,
Semester 1 has three mini courses, two that run parallel for the first half of the semester (17-611 and 17-612), and one that runs by itself in the second half of the semester (17-623). The communications classes are 3 units and meet one hour per week for the entire semester. The following is a sample Fall-start plan:

<table>
<thead>
<tr>
<th>Semester</th>
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<th>Course Title</th>
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<td>17-611</td>
<td>Statistics for Decision Making</td>
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<td>A2</td>
<td>17-614</td>
<td>Formal Methods</td>
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<td>Software Project Management</td>
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<td>A4</td>
<td>17-642</td>
<td>Software Management Theory</td>
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<td>Business &amp; Marketing Strategy</td>
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<td>17-626</td>
<td>Requirements for Information Systems*</td>
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<td>Requirements for Embedded Systems*</td>
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<tr>
<td>A2</td>
<td>17-622</td>
<td>Agile Methods</td>
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*Students are expected to take either 17-626 or 17-627, specializing in one track.

<table>
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<th>Course Title</th>
<th>Units</th>
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<tr>
<td>Flex</td>
<td>17-676</td>
<td>Software Engineering Thesis**</td>
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** The Software Engineering Thesis is written during the final semester. Students work with a faculty advisor to choose the subject for the thesis relevant work experience that aligns with one of six key practice areas: Architecture & Design, Software Construction, Planning & Tracking, Quality Management, Requirements Management, and Risk Management. The completed thesis is presented to a committee of MSE faculty and invited students.

**WHAT IS AN ELECTIVE?**

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-SS and MSE-ES students are required to take a minimum of 24 units of elective coursework, whereas MSE students are required to take a minimum of 48 units of electives. Units associated with elective courses vary. All students are advised to discuss their choice of electives with their advisor and receive approval before enrolling. Only those electives that have been approved by the Graduate Academic Advisor will be accepted towards degree completion requirements.

**WHAT COURSES COUNT AS ELECTIVES?**

Generally, electives are chosen from the Institute for Software Research, 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.

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 the Institute for Software Research (ISR) — courses numbered 17-xxx. They may, however, after consultation with their Graduate Academic Advisor, register for elective courses outside the ISR. 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 36 units of electives may be taken outside of ISR, excluding courses numbered 17-xxx. For MSE students, at most 48 units of electives may be taken outside of ISR. All grades must comply with Carnegie Mellon University’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. Each Independent Study course, regardless of the proposed units, will fulfill the requirement of one elective course only. A maximum of (2) Independent Studies is permitted toward 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 Institute for Software Research (ISR) 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, he/she must:

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 Contract Form” must be submitted NO LESS THAN 2 weeks before the end of the semester preceding the term in which the proposed IS 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 online 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 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, Communication, 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 fails a course will have the failure reviewed by the faculty committee during the end-semester academic review. Under advisement from the committee, the Graduate Academic Advisor may require the student to repeat the course in order to complete the degree completion 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

• (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 advisor how to complete the course with a “B-” or above.

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

PROGRAM POLICY ON ACCEPTANCE OF TRANSFER COURSES OR GRADES

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”.

STUDIO AND OTHER PRESENTATIONS

Students are expected to present their coursework as part of individual and group presentations periodically throughout their time in the program. This includes:

- Various group presentations throughout the program duration.
- End-of-semester presentation (EOSP required at the end fall, spring & 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. 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 campus job fairs, visit CMU’s Handshake Events page.

Students must obtain approval of their internship from the programs in order to receive credit towards degree completion. 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 towards their degree.

To prepare students for the summer internship, the MSE-SS and MSE-ES programs 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 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 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.

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, either 17-601 & 17-602 “Communications for Software Engineers I & II” or 17-603 & 17-604 “Communications for Software Managers I & II”.
ACADEMIC STANDING IN THE PROGRAM

Please review the University Policy on Academic Integrity. The policy includes the University expectations around academic integrity and provides definitions of cheating, plagiarism, and unauthorized assistance.

A review of the University’s Academic Disciplinary Actions procedures 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.

ACADEMIC INTEGRITY, CHEATING AND PLAGIARISM

The Software Engineering Professional Programs has the highest expectations of academic integrity. As such, the programs will not tolerate any instance of cheating or academic misconduct.

Cheating includes but is not necessarily limited to:

1. Plagiarism, explained below.
2. Submission of work that is not the student's own 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 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 Software Engineering Professional Programs 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

Software Engineering Professional Program students are expected to conduct and present their work honestly, and to keep informed of and abide by all University policies. If a student chooses 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, mentors and directors are invited to contribute input regarding student performance.
In assessing a student’s performance, faculty, mentors and directors review a 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.

**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. Should a student’s overall QPA drop below 3.0 during a given semester, he or she may be placed on academic probation and required to improve their performance. Failure to improve one’s QPA to 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.

**TRANSFER FROM MASTER TO DOCTORAL PROGRAMS**

Completion of a Master of Software Engineering 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 for the Master of Software Engineering degree have not been completed when a student leaves to pursue another academic program, the MSE degree will not be awarded.

**PARTICIPATING IN CAMPUS COMMENCEMENT**

Graduates of the 16-month MSE programs participate in the commencement ceremony in May of the year following completion of their degree requirements.
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, and MSE Online
Master of Software Engineering

MSE-SS
Master of Software Engineering in the field of Scalable Systems

MSE-ES
Master of Software Engineering in the field of Embedded Systems

MBA/MSE, 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 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 coordinates advising for all students in MSE programs to establish a consistent and coherent advising policy across programs. In addition, students are assigned a faculty co-advisor who is available to assist with technical questions about software engineering and elective coursework. 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 Karen Fleischman.

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 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 **51 units**. Although students may be able to register for up to 63 units, **the total unit load at the end of the drop-add period should be no greater than 51 units**. 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.

### 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.

### ADD/DROP PROCEDURES

Students taking undergraduate and Master’s level courses must follow the procedures and deadlines for adding, dropping, or withdrawing from courses as identified on the academic calendar. Information can be found [here](#). There is a separate calendar for doctoral level courses.

### COURSES WITH RESTRICTED ENROLLMENT

MSE students have priority in MSE-originated courses. The MSE programs cannot, however, 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 Teacher’s Assistant (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). To ensure compliance with federal law, Carnegie Mellon University maintains the Employment Eligibility Verification (I-9) Policy 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, or visit the Human Resources website to learn more about Form I-9 and E-Verify and to schedule an appointment to complete the I-9.

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### DEPARTMENT EXPECTATIONS REGARDING EMPLOYMENT SEARCH

The Software Engineering 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 ‘reneging’ 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 Software Engineering 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, Graduate Education Office offer 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 & team members, and 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.

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 upon the rate effective for that particular semester.

Please note: tuition is not assessed for the MSE-SS & 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 EMPLOYEES REIMBURSEMENT PROCEDURE

Contact the Benefits Office for specific information on tuition benefits.

Note: Because tuition remission is a taxable benefit, employees of Carnegie Mellon University assume the payment of taxes for any graduate courses taken.
FULL-TIME/PART-TIME STATUS REQUIREMENTS

- To be considered a full-time student, a student must be registered for a minimum of 36 units in every semester.
- 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 having a Stafford Loan may not drop below full-time status.

FINANCIAL SUPPORT FROM THE MSE PROGRAM

- The MSE Programs do not provide financial support. The Programs do offer competitive funding opportunities for exceptional performers (see below).
- Carnegie Mellon University, SCS and the MSE Programs do not grant tuition waivers.

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 scholarship 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, ensure that your program advisor is aware of your interest.

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 committee.
POLICY ON OUTSIDE EMPLOYMENT

Full-time graduate students within the Software Engineering 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. Where the programs require a full-time course load during the summer semester, it is highly unadvisable to seek internal or external summer employment.

GENERAL MSE PROFESSIONAL PROGRAMS INFORMATION

MAILING ADDRESS FOR SOFTWARE ENGINEERING PROFESSIONAL PROGRAMS

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

• Lockable storage space and a 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 Marlana Pawlak.

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.
• Elevator and 2nd floor access is made by swiping the student ID card in both locations.
• Doors at the top of the 2nd floor stairway must remain locked at all times.
• Student cabinets located inside the MSE student space are lockable and remain the responsibility of the assigned student.
• Please do not invite friends into the MSE professional areas on a regular basis.
• In case of theft of property, either personal or University, please notify Paul Stockhausen, Campus Security, and MSE Programs Administrator Marlana Pawlak.
• 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 each semester by the Studio Manager (see Canvas), and are available upon request on a first-come, first-reserved basis. These rooms are for team meetings; reservations for individual persons is not allowed.

MEDIA ROOMS
• All 300 South Craig Street student meeting rooms are equipped with overhead projectors and computer projections capabilities.
• All conference rooms are equipped with floor-to-ceiling white boards.
• Telecommunications systems are installed in the faculty conference room and two of the student break-out rooms.

PROGRAM/DEPARTMENTAL LIBRARIES
The James E. Tomayko Memorial Library is located in the Master’s Programs in Software Engineering professional 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) and the Software Engineering Institute Library (SEI 1st Floor).

PARKING
On-campus parking is students’ responsibility. See the parking services website for more information.

REPAIRS
• Computing equipment: Notify ISR IT technical support staff.
• Print/copy/fax equipment: Notify a Program 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 ISR 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.

MAIL AND CORRESPONDENCE

MAILBOXES

Mail slots (arranged in alphabetical order) are located inside the master program’s professional space on 2nd floor, 300 South Craig Street. All mail is delivered to this location. Please check your mail slot regularly. Mail that is left for an extended period of time may be discarded.

EXPRESS MAIL/ UPS/ FEDEX

Students may send materials to project clients using these services. The Program Administrator can supply the packing materials. Deliveries can be sent to you at the program address. Please check your student mailbox regularly to retrieve mail/packages.

FAX

There is a fax machine in the program’s location. Please see an MSE Program Administrator for the access code. Incoming faxes may be received without charge in the fax room at Craig Street (412-268-5413).

COPY MACHINES

There are two copy machines located on the 2nd floor of the Master’s Programs professional facility at 300 South Craig Street. One is located near the mail slots. The other is located in the fax/supply room (SCRG 283).

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

- This student space has been stocked with the following basic office supplies: dry-erase markers, paper clips, push pins, T-pins, scissors and ruler.
- All assigned spaces are stocked with hanging and interior folders and pertinent literature. See administrator for basic supplies.
- Each work area has a stapler and transparent tape dispenser.
- Each work area has a wastebasket and recycling basket.

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 a Program Administrator when the supply runs low.
- Empty 3-ring binders are often available from administrators. When a student is no longer using a 3-ring binder, please empty it and return it to this stock for use by other students.
- The department will not provide special supplies.

CONFERENCE PHONES

- Conference phones are available for business use. Students may use program conference phones to conduct business with project clients, potential employers, or to complete work essential to their plan of study or project work.
- It is recommended that the outside party initiate the conference call. Direct-dial phone numbers for each room are readily available and can be shared with the outside party.
- To make calls internal to the University, it is necessary to dial “8” followed by the last 4 digits of the University office or individual contact number.
- To make calls outside of the University, dial 122 + 13925472 + 9 + (1) + the 7 digit phone number.
- To call outside the US, it is necessary to dial 122 + 13925472 + 9 + 011 + the 7 digit phone number.

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 preapproved 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 Program 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. Proposed initiatives, funding support requests, and budgets are submitted to the Programs Manager for approval.

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 Karen Fleischman 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 drink for a visiting lecturer or student-organized professional development event, 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 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 Master of Software Engineering Professional Programs should contact the Programs Manager.

UNIVERSITY/ COLLEGE/ DEPARTMENT/ PROGRAM BRAND AND LOGOS

The Master of Software Engineering 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 Software Engineering unit mark, please contact the Programs Manager regarding its usage first.
APPENDICIES

APPENDIX A: KEY OFFICES FOR GRADUATE STUDENT SUPPORT

GRADUATE EDUCATION OFFICE

The Graduate Education Office provides central support for all graduate students with a focus on their academic experience at Carnegie Mellon. The goals of the office are to support, advise, and guide individual graduate students as they work to complete their degrees and to provide resources which will enhance the student’s professional development experience.

Resources offered through the Graduate Education Office include, but are not limited to:

- Website with University resources, contact information for CMU programs and services, calendar of events related to graduate students
- Bi-monthly email to all graduate students with information on activities, resources, and opportunities
- Professional Development seminars and workshops
- Graduate Student Assembly (GSA)/Provost Conference Funding Grants
- GSA/Provost Small Research Grants (GuSH)
- Consultations on all issues related to the graduate student experience

The Graduate Education Office also works with the colleges and departments by informing and assisting in forming policy and procedures relevant to graduate students and working with departments on issues related to graduate students. Additionally, they partner with many other offices and organizations, such as the Graduate Student Assembly, to support the advancement of graduate students.

OFFICE OF THE DEAN OF STUDENTS

The Office of the Dean of Students provides central leadership of the meta-curricular experience at Carnegie Mellon, including the coordination of student support. Vice President and Dean of Student Affairs and Dean of Students Gina Casalegno (Warner Hall 301, 412-268-2075) leads the division of Student Affairs which includes the following offices and departments (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 and Psychological Services (CaPS)
- Dining Services
- Office of Community Standards and Integrity (OCSI)
Graduate students will find the enrollment information for Domestic Partner Registration and Maternity Accommodations in the Office of the Dean of Student Affairs and on the website. The Office of the Dean of Student Affairs also manages the Emergency Student Loan (ESLs) process. The Emergency Student Loan service is made available through the generous gifts of alumni and friends of the University. The Emergency Student Loan is an interest-free, emergency-based loan repayable within 30 days. Loans are available to enrolled students for academic supplies, medication, food or other expenses not able to be met due to unforeseeable circumstances.

The Office of Integrity and Community Standards also provides consultation, support, resources and follow-up on questions and issues of Academic Integrity.

College Liaisons are senior members of the Divisions of Student Affairs who work with departments and colleges addressing student concerns across a wide range of issues. College Liaisons are identified on the student SIO page in the Important Contact list.

## CENTER FOR STUDENT DIVERSITY AND INCLUSION

Diversity and inclusion have a singular place among the values of Carnegie Mellon University. The Center for Student Diversity and 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 the family to attend college programs
- LGBTQ+ initiatives
- Race and ethnically-focused programs, including Inter-University Graduate Students of Color Series (SOC) and PhD SOC Network
- Women’s empowerment programs, including Graduate Women’s Gatherings (GWGs)
- Transgender and non-binary student programs

Primary contact: Shernell Smith, Associate Director for the Center for Student Diversity & College Liaison for EPP: UCC LL75, 412-268-2150

## ASSISTANCE FOR INDIVIDUALS WITH DISABILITIES

The Office of Disability Resources at Carnegie Mellon University has a continued mission to provide physical and
programmatic campus access to ensure that students with disabilities have equal access to their educational experience. We work to ensure that qualified individuals receive reasonable accommodations as guaranteed by the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973. Students who would like to receive accommodations can begin the process through Disability Resources’ secure online portal or email access@andrew.cmu.edu 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 for Teaching Excellence & Educational Innovation 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, the goal of the Eberly Center 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 a Future Faculty Program, both of which are designed to help participants be effective and efficient in their teaching roles. The Eberly Center also assists departments in creating and conducting customized programs to meet the specific needs of their graduate student instructors. Specific information about Eberly Center support for graduate students is available online.

**GRADUATE STUDENT ASSEMBLY**

The Graduate Student Assembly (GSA) is a 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. Recent accomplishments are a testament to the difference the GSA making a difference, and steps to implementing the vision laid out by the strategic plan.

The 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 — a great place to study or meet up with friends. GSA also maintains a website of graduate student resources on and off-campus. Through GSA’s continued funding for professional development and research conferences, the GSA/Provost Conference Funding Program and GSA/Provost Research Grants are able to run, as managed by the Graduate Education Office. The GSA relies on the feedback of graduate students to improve the graduate student experience at CMU. Feel free to contact the GSA to get involved, or stop by their office in the Cohon University Center Room 304, or become a representative for your department.
STUDENT ACADEMIC SUCCESS CENTER

Language Support in the Student Academic Success Center is a support service for nonnative English speakers, both newly arrived international students as well as students who attended high school and/or undergraduate programs in the US. The SASC offers seminars, workshops, and one-on-one consultations that develop the language and cross-cultural skills needed to succeed in academic programs at Carnegie Mellon. The SASC provides International Teaching Assistant (ITA) testing, a required test indicating a nonnative speaking TA has the language proficiency required to work with students in classes, labs, or individual meetings. The SASC also supports International Teaching Assistants in developing fluency and cultural understanding to teach successfully at Carnegie Mellon. 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. University policy is detailed here.

OFFICE OF INTERNATIONAL EDUCATION (OIE)

Carnegie Mellon hosts international graduate and undergraduate students who come from more than 90 countries. The Office of International Education (OIE) is the liaison to the University for all non-immigrant students and scholars. The OIE provides many services including: advising on personal, immigration, academic, social and acculturation issues; presenting programs of interest such as international career workshops, tax workshops, and cross-cultural and immigration workshops; supporting international and cultural student groups such as the International Student Union and the International Spouses and Partners Organization; maintaining a resource library that includes information on cultural adjustment, 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 programs.

VETERANS AND MILITARY COMMUNITY

Military veterans are a vital part of the Carnegie Mellon University community. Graduate students can find information on applying veteran education benefits, campus services, veteran’s groups at CMU, non-educational resources and international military service information through the Veterans and Military Community website. There are also links and connections to veteran resource in the Pittsburgh community. The Naval ROTC and Veteran Affairs Offices are located at 4615 Forbes Avenue. The ROTC and Veterans Affairs Coordinator can be reached at 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 relating to:

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

Students, faculty and staff can anonymously file a report online (user name: tartans; password: plaid) or by calling 877-700-7050. All submissions will be reported to the appropriate University personnel.

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

**POLICY AGAINST RETALIATION**

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

ACADEMIC COACHING/CONSULTING — THE STUDENT ACADEMIC SUCCESS CENTER

The Academic Coaching Program is a student assistance program that supports graduate student 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 student 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

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 the community, everyone is responsible for the security of these shared resources. Be sure to review the Safe Computing guidelines and the University Computing Policy.

Visit the Computing Services website to learn more. The Computing Services Help Center is available at or 412-268-4357 (HELP) or via email.

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 can be found by visiting the Research at Carnegie Mellon website.
GuSH Research Funding is a source of small research grant funds provided by the GSA and the Provost’s Office and managed by the Graduate Education Office. Students can find more information about the application process and deadlines [here](#).

### OFFICE OF RESEARCH INTEGRITY AND COMPLIANCE

The [Office of Research Integrity and Compliance](#) (ORIC) is designed to support research at Carnegie Mellon University. The staff work with researchers to ensure research is conducted with integrity and in accordance with federal and Pennsylvania regulation. The ORIC assists researchers with [human subject research](#), conflicts of interest, responsible conduct of research, export controls, intellectual property rights and regulations ([IPP policy](#)), and institutional animal care and use. The ORIC also consults on, advises about and handles 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 issues that are significant for them in a safe, confidential setting. Students sometimes feel confused about why they are feeling upset and unsure about how to deal with it. An initial consultation with a CaPS therapist will clarify options and provide a recommendation to the appropriate mental health resource at Carnegie Mellon or the larger Pittsburgh community. CaPS also provides workshops and group sessions specifically for graduate students on campus. CaPS services are provided at no cost. Appointments can be made in person or by telephone, 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 and 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 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 the University, we believe our individual and collective well-being is rooted in healthy connections to each other and to campus resources. There are a wide variety of resources, opportunities and people that help students thrive inside and outside the classroom. The BeWell@CMU e-newsletter seeks to be a comprehensive resource for CMU regarding all wellness-inspired events, announcements and professional and personal development opportunities. Sign up for Be Well monthly newsletter online or by contacting the Program Director for Student Affairs Wellness Initiatives.

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. The Religious and Spiritual Life Initiatives (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. RSLI also offers programs and initiatives that cross traditional religious boundaries in order to increase knowledge of, and appreciation for, the full diversity of the worldview traditions. The RSLI staff are available to support students across the spectrum of religious and spiritual practice and would be happy to help you make a connection to a community of faith during your time at CMU.

UNIVERSITY POLICE

The University Police Department is located at 300 South Craig Street, Room 199 (entrance is on Filmore Street). The department’s services include police patrols and call response, criminal investigations, shuttle/escort services, fixed officer and foot officer patrols, event security, and crime prevention/education programming. Visit the department’s website for additional information about the staff, escort and shuttle, emergency phone locations, crime prevention, lost and found, fingerprint services, and annual statistic reports.

Carnegie Mellon University publishes an annual campus security and fire safety report describing the University’s security, alcohol and drug, sexual assault, and fire safety policies and containing statistics about the number and type of crimes committed on the campus and the number and cause of fires in campus residence facilities during the preceding three years.

University Police numbers: 412-268-2323 (emergency only), 412-268-6232 (non-emergency).

SHUTTLE AND ESCORT SERVICES

Parking and Transportation coordinates the Shuttle Service and Escort Service provided for CMU students, faculty, and community. Full information about these services, stops, routes, tracking and schedules can be found online.
APPENDIX D: DEPARTMENTAL RESOURCES

DEPARTMENT / PROGRAM PERSONNEL INTRODUCTION

The Software Engineering Professional Programs are a suite of programs within the Institute for Software Research and the School of Computer Science. 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.

<table>
<thead>
<tr>
<th>Name/Title</th>
<th>Office</th>
<th>Contact Info</th>
</tr>
</thead>
<tbody>
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<td>Amy Burkert</td>
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<td><a href="mailto:ak11@andrew.cmu.edu">ak11@andrew.cmu.edu</a></td>
</tr>
<tr>
<td>Vice Provost for Education</td>
<td></td>
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</tbody>
</table>

SCHOOL OF COMPUTER SCIENCE (SCS)

<table>
<thead>
<tr>
<th>Name/Title</th>
<th>Office</th>
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<td>268-5704 <a href="mailto:mhebert@andrew.cmu.edu">mhebert@andrew.cmu.edu</a></td>
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<tr>
<td>Dean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Srinivasan Seshan</td>
<td>GHC 7019</td>
<td>268-8734 <a href="mailto:srini@cs.cmu.edu">srini@cs.cmu.edu</a></td>
</tr>
<tr>
<td>Computer Science Department Head</td>
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</tr>
<tr>
<td>Guy Belloch</td>
<td>GHC 9211</td>
<td>268-6245 <a href="mailto:belloch@cs.cmu.edu">belloch@cs.cmu.edu</a></td>
</tr>
<tr>
<td>Associate Dean for Undergrad Education</td>
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<td>GHC 4218</td>
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<td>Associate Dean for Master’s Programs</td>
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<td>Tom Cortina</td>
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<td>268-3514 t <a href="mailto:cortina@cs.cmu.edu">cortina@cs.cmu.edu</a></td>
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<tr>
<td>Assistant Dean Undergrad Education</td>
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<td>Catherine Copetas</td>
<td>GHC 6203</td>
<td>268-8525 <a href="mailto:copetas@cs.cmu.edu">copetas@cs.cmu.edu</a></td>
</tr>
<tr>
<td>Assistant Dean, Industrial Relations &amp; Special Events</td>
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INSTITUTE FOR SOFTWARE RESEARCH (ISR)

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<thead>
<tr>
<th>Name/Title</th>
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<tbody>
<tr>
<td>Jim Herbsleb</td>
<td>TCS 448</td>
<td>268-8741 <a href="mailto:herbsleb@andrew.cmu.edu">herbsleb@andrew.cmu.edu</a></td>
</tr>
<tr>
<td>Director, ISR</td>
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</table>

# DIRECTOR & ADMINISTRATIVE STAFF

<table>
<thead>
<tr>
<th>Name/Title</th>
<th>Role/Interactions</th>
<th>Contact Info</th>
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</table>
| Travis Breaux  
*Director, Master of Software Engineering  
Professional Programs* | The director controls the vision of the program, provides high-level guidance to students and faculty, is evolved in student evaluations and in resolving any program-level disputes. | 300 South Craig 270  
tdbreaux@andrew.cmu.edu  
Assistant:  
Katharine Carlson, SCRG 269  
kcarlson@andrew.cmu.edu |
| Karen Fleischman  
*Programs Manager* | Oversees all aspects of the master’s 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 274  
268-4359  
karenk@andrew.cmu.edu |
| Jennifer Moritz  
*Alumni and Corporate Relations Manager* | Coordinates alumni outreach efforts, student relations, and job placement. Interacts directly with industry regarding project sponsorship and engagement with program. | 300 South Craig 275  
268-7881  
jmoritz@andrew.cmu.edu |
| Lauren Martinko  
*Graduate Academic Advisor* | Coordinates MSE programs and graduate student advising. Among many other program-related issues, you will likely go to her regarding course planning, registration, commencement, orientation and general program information. | 300 South Craig 272  
268-6441  
laurenma@cs.cmu.edu |
| Marlana Pawlak  
*Senior Academic Programs Administrator* | Coordinates MSE programs. Among many other program-related issues, you will likely go to her regarding admission questions, registration, commencement, orientation and general program information. | 300 South Craig 277  
268-5067  
mpawlak@andrew.cmu.edu |
| Jennifer Potter  
*Courseware & Distance Learning Specialist; Program Marketing & Communications Manager* | The Programs’ Courseware Specialist, as well as managing marketing & branding, external communications, and contributing to website content and the distance program. | Remote  
jspotter@cs.cmu.edu |
| Katharine Carlson  
*Programs Administrative Assistant* | Coordinates events, assists with scheduling, ordering and reimbursement, content editing, catering, technical logistical support, inter-departmental coordination, admissions, and general departmental needs. | 300 South Craig 269  
268-4871  
kcarlson@andrew.cmu.edu |
<table>
<thead>
<tr>
<th>Name/Title</th>
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<th>Office</th>
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268-2843 | TCS 322 |
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*ISR Adjunct Teaching Professor* | vijaysai@cmu.edu  
268-7743 | Bakery Square |
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*ISR Adjunct Faculty  
HCII Senior Technical Staff* | lenbass@cmu.edu | Remote |
| Christian Kästner  
*Director, Software Engineering PhD Program  
ISR Associate Professor* | kaestner@cmu.edu  
268-5254 | TCS 345 |
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*ISR Adjunct Faculty* | spavetti@andrew.cmu.edu | Remote |
<table>
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<th>Name/Title</th>
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<tbody>
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<td>MSE Communications Faculty</td>
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<td>Dave Ambrosio</td>
<td>Video Technician, ISR</td>
<td>TCS 247 <a href="mailto:dabroso@andrew.cmu.edu">dabroso@andrew.cmu.edu</a></td>
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<td>Emanuel Bowes</td>
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<td>Aaron Caldwell</td>
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<td>Ryan Johnson</td>
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<tr>
<td>Name/Title</td>
<td>Role/Interactions</td>
<td>Contact Info</td>
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</tr>
<tr>
<td>John Lombardo</td>
<td>Video Technician for the MSE program.</td>
<td>TCS 246 268-5414 <a href="mailto:lumbo65@cs.cmu.edu">lumbo65@cs.cmu.edu</a></td>
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<tr>
<td>Thomas Pope</td>
<td>Tom is the Systems Manager for the Institute and runs both the IT services team as well as the video production team.</td>
<td>TCS 316 268-8615 t <a href="mailto:pope@cmu.edu">pope@cmu.edu</a></td>
</tr>
<tr>
<td><strong>SCS Building Facilities</strong></td>
<td>The SCS Building Facilities group 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.</td>
<td><a href="mailto:building@cs.cmu.edu">building@cs.cmu.edu</a></td>
</tr>
<tr>
<td>Paul Stockhausen</td>
<td>You may contact Paul regarding any issue you may have with the building or furniture. Also, Paul should be contacted in the event of an accident on the property.</td>
<td>GHC 4107 268-8223 <a href="mailto:stocky@cs.cmu.edu">stocky@cs.cmu.edu</a></td>
</tr>
<tr>
<td>Jamie Gregory</td>
<td>You may contact Jamie regarding any issue you may have with the building, furniture, or phones.</td>
<td>GHC 4107 268-2069 jamie <a href="mailto:g@cs.cmu.edu">g@cs.cmu.edu</a></td>
</tr>
<tr>
<td>Luke Padezan</td>
<td>You may contact Luke regarding any issue you may have with the building, furniture, or phones.</td>
<td>GHC 4105 268-4875 <a href="mailto:lpadezan@cs.cmu.edu">lpadezan@cs.cmu.edu</a></td>
</tr>
<tr>
<td>Michael Malloy</td>
<td>You may contact Michael regarding any issue you may have with the building, furniture, or phones.</td>
<td>GHC 4105 268-4234 m <a href="mailto:malloy@cs.cmu.edu">malloy@cs.cmu.edu</a></td>
</tr>
</tbody>
</table>

**FACILITIES STAFF**