Information Systems - Master of Software Engineering in Scalable or Embedded Systems - Accelerated Master's Program

Program Eligibility	
Academic requirements	• CMU undergraduate students in the Information Systems major • Strong academic background • Most undergraduate requirements completed
Prerequisite Coursework	Applicants must demonstrate prior coursework in programming, data structures, and the foundations of software engineering. No specific course titles are required; the admissions committee evaluates coursework for coverage of these topics. Relevant coursework should be completed with a grade of "B" or higher.
Apply Junior Year	To be eligible for the IS-MSE-AMP Program, candidates must apply in the Fall or Spring semester of their junior year and will begin taking courses in the Fall of their senior year.
Bachelor's Degree Requirement	The completed bachelor's degree requirement is waived for AMP applicants
International Students	International students are eligible to apply to the IS-MSE-AMP program, however, due to the timing of the internship component, there are limitations on how that requirement can be fulfilled. There are options available that can be discussed in the interview. Please consult with OIE prior to submitting your application.
Application	Apply online: https://mse.s3d.cmu.edu/applicants/mse-amp.html

Required Application Materials

1. Two Letters of Recommendation
   a. At least one (1) of your recommenders should know you in a professional setting (full-time employment, internship, part-time employment, research, non-academic extracurricular activity, etc.)
   b. You may opt to have up to three (3) recommendations submitted in support of your application.
2. Official Transcript(s)
   a. Your official CMU transcript must be requested through the HUB and delivered to the MSE program.
   b. If applicable, official transcript from all colleges or universities attended, regardless of whether credit or degree was obtained.
3. Statement of Purpose
   a. An essay describing your interest in software engineering and how your experience and proposed study will help you reach your career goals.
4. Resume
   a. A current resume with your education information, work experience (including internships and hourly positions) and extracurricular information.
5. Signed AMP Form
   a. Completed Undergraduate Course Requirements form (AMP form) with advisor's signature. See page 3 of this document.
6. Required Interview
   a. Interviews are required. You must Contact the Program Manager by email to schedule your interview. Schedule as soon as possible. (Fall applicants, please plan to have your interview completed before winter break – schedule ahead!) Email: mse-applications@andrew.cmu.edu

MSE Degree Requirements	
Units required	153 total units are required to complete the MSE-SS/ES or ES program
Units taken toward the MSE degree as an undergraduate	The MSE-SS/ES program is typically a four (4) semester program. Students in the IS-MSE-AMP program are spreading the program requirements over five (5) semesters, two (2) in the undergraduate senior year and three (3) as a graduate student. Following the plan of study noted on page 2 of this document, up to 54 units of required MSE classes completed while in the undergraduate senior year and enrolled in the IS-MSE-AMP program may be transferred and counted toward the required total of 153 units. A **grade of B or better** must be earned in order to count the units toward the MSE-SS/ES degree.
Units remaining	Students able to transfer the total 54 units will complete the remaining 99 MSE-SS/ES units in the 5th year. Some MSE-SS/ES courses may fulfill undergraduate requirements. You should discuss this with your undergraduate advisor.

Financial Aid Information

- There will be no change in your undergraduate financial aid package for your senior year (first year taking MSE courses) due to participation in the IS-MSE-AMP program.
- Undergraduate students do not qualify for MSE program financial aid.
- Students are eligible for MSE Scholarships in the final two semesters of the IS-MSE-AMP (after having **completed** a bachelor's degree)

MSE Plan of Study

MSE courses are scheduled in sequence to prepare you for the Practicum capstone experience in the 5th year fall semester. Please make every effort to follow this plan of study. If you are unable to enroll in a course listed here, please consult your MSE Graduate Advisor.

UNDERGRADUATE SENIOR YEAR

Fall
17-611 Statistics for Decision Making, mini-1 (6)
17-626 Requirements for Info Systems, mini-2 (6)
17-623 Quality Assurance, mini-2 (6)
Plus any units needed to complete undergraduate major and minor requirements.

Estimated Total: 18 units + any remaining undergrad units

Spring
17-635 Software Architectures, mini-3 (6)
17-632 Software Project Management, mini-3 (6)
17-514 Principles of Software Construction (12)
17-643 Quality Management, mini-4 (6)
17-647 Data Intensive and Scalable Systems, mini-4 (6)
Plus any units needed to complete undergraduate major and minor requirements.

Estimated Total: 36 units + any remaining undergrad units

5TH YEAR MASTER'S

Summer following Senior Year
17-667 Internship for Software Engineers (3)

Total: 3 units (non-tuition bearing)

Fall
17-603 Communications for Leaders I, full-semester (3)
17-675 Software Engineering Practicum (36)
17-614 Formal Methods, mini-1 (6)
17-622 Agile Methods, mini-2 (6)

Total: 51 units

Spring
17-604 Communications for Leaders II, full-semester (3)
17-619 Product Management Essentials I, mini-3 (6)
17-636 DevOps: Engineering for Secure Development and Deployment (12)
SE Free Elective (12)
SE Free Elective (12)

Total: 45 units

MSE Contact Information

Admissions	Marlana Ivey MSE Senior Admissions Officer 300 South Craig Street, Room 278 mse-applications@andrew.cmu.edu
Advising	Jennifer Britton MSE Senior Academic Program Manager 300 South Craig Street, Room 271 jbritto2@andrew.cmu.edu
Program Leadership	Jonathan Aldrich MSE Program Director TCS Hall, Room 422 jonathan.aldrich@cs.cmu.edu Swarnalatha Ashok MSE Associate Program Director 300 S. Craig St., Room 274 swarnala@andgrew.cmu.edu

IS-MSE-Accelerated Master's Program (AMP)
Undergraduate Course Requirements Form

This form is required as part of the application for admission. Please upload this completed form to your online application.

All students applying to the AMP must complete this form with their undergraduate advisor's signature, listing their undergraduate degree requirements (specific courses that are required, electives AND any other units required to complete their bachelor's degree) that are remaining in their junior and senior years.

Carnegie Mellon undergraduate students are eligible to apply for admission to the AMP only if the student will have the ability to enroll in the necessary number of graduate courses during their senior year, a total of 54 units.

All graduate courses taken during their senior year must have earned grades of B or better.

Student Name: _____

Student Signature: _____ Date: _____

Number of units required to complete bachelor's degree: _____

Please list the remaining required courses needed to complete your undergraduate degree, what semester you plan to take them, and how many units you will earn for each course:

Required Undergraduate Courses Remaining			
Course Number	Course Title	Semester	Units

Advisor Name: _____

Advisor Signature: _____ Date: _____