

MS SOFTWARE ENGINEERING
SAN JOSÉ STATE UNIVERSITY COLLEGE OF ENGINEERING

MSSE Program Requirements

Course Work

Students earn a Master of Science in Software Engineering (MSSE) degree by completing 30 semester units of graduate study, plus meeting a competency in written English requirement. All students are required to complete 6 units of degree core courses, 9 units of required specialization courses, 9 units of elective courses, and 6 units of master's project or thesis to fulfill the 30 unit requirement. Details of these requirements are spelled out below.

Degree Core Courses (6 units)

CMPE 272 (<http://info.sjsu.edu/web-dbgen/catalog/courses/cmpe272.html>). Enterprise Software Overview

CMPE 202 (<http://info.sjsu.edu/web-dbgen/catalog/courses/cmpe202.html>). Software Systems Engineering

Note: Students admitted **before** Spring 2014 can choose to include CMPE 203 (<http://info.sjsu.edu/web-dbgen/catalog/courses/cmpe202.html>), as a degree core class (for a total of 9 degree core units) and complete the two required specialization core (for a total of 6 specialization units).

Required Specialization Courses (9 units)

Take two required specialization core classes from one of the six specializations **plus** one specialization choice class from one of the other five specializations. Visit the web page for each of the specializations for details.

Enterprise Software Technologies ([/enterprise-software-technologies](#)).

Cloud Computing and Virtualization ([/cloud-computing-and-virtualization](#)).

Software Systems Engineering ([/software-systems-engineering](#)).

Networking Software ([/networking-software](#)).

Data Science (<https://msse.sjsu.edu/data-science>).

Cybersecurity (<https://msse.sjsu.edu/cybersecurity>).

Elective Courses (select 9 units)

All CMPE graduate courses (those with a course number of 200 or higher) except CMPE 270, 271, 294, 298, 298I, 295A/B, and 299A/B can be used as elective courses. This also includes specialization core classes from other specializations and all experimental courses (CMPE 296A - CMPE 296Z).

Note: Courses from other departments may be permitted with **prior** advisor approval.

Culminating Experience (choose one of the following)

Masters Project (6 units)

CMPE 295A (<http://info.sjsu.edu/web-dbgen/catalog/courses/cmpe295a.html>). Master's Project I

CMPE 295B (<http://info.sjsu.edu/web-dbgen/catalog/courses/cmpe295b.html>). Master's Project II

Masters Thesis (6 units)

CMPE 299A (<http://info.sjsu.edu/web-dbgen/catalog/courses/cmpe299a.html>). Master's Thesis I

CMPE 299B (<http://info.sjsu.edu/web-dbgen/catalog/courses/cmpe299b.html>). Master's Thesis II

Course-only (6 units plus comprehensive exam)

Additional elective classes (six units)

Take CMPE 298 (<http://info.sjsu.edu/web-dbgen/catalog/courses/cmpe298.html>). Special Topics

(one unit) and Pass Comprehensive Exam ([click here](#)

http://wiki.cmpe.sjsu.edu/doku.php/programs:ms:cmpe:ms_cmpe_faq#what_are_the_format_scope_and_grading_of_the_com Comprehensive Exam details).

Note 1: The degree core and specialization core must be completed before beginning the Culminating Experience. It is advised that the specialization choice and CMPE 294/ENGR 200W be completed before taking CMPE 295A, CMPE 299A, or the comprehensive exam. However, one of the two classes can be taken concurrently with CMPE 295A or CMPE 299A, but NOT both and cannot be taken after CMPE 295A. All degree core, specialization core, specialization choice, and CMPE 294/ENGR 200W classes must be completed before starting CMPE 295B.

Note 2: For **Fall 2014 ONLY**, the above requirement is relaxed and one specialization class (core or choice) and CMPE 294/ENGR 200W may be taken concurrently with CMPE 295A.

Competency in Written English

CMPE 294 (<http://info.sjsu.edu/web-dbgen/catalog/courses/cmpe294.html>) Computer Engineering Seminar

ENGR 200W (<http://info.sjsu.edu/web-dbgen/catalog/courses/engr200w.html>) Engineering Reports

Note: All graduate students are required to demonstrate their competency in written English as a requirement for graduation. The university catalog specifies five ways that competency can be demonstrated (check out the [catalog](http://info.sjsu.edu/web-dbgen/narr/static/catalog/gcw.html) (<http://info.sjsu.edu/web-dbgen/narr/static/catalog/gcw.html>) for details). The Computer Engineering department requires that if a course must be taken to meet the competency in written English requirement, that the course must be CMPE 294 or ENGR 200W.