Software Engineering BS Graduation Plan (with minor in Mathematics)

First Year

Semester 1	Semester 2
CIS 121 Intro to Programming	CIS 122 Data Structures
MATH 121 Calculus 1	MATH 122 Calculus 2
ENG 101 Writing and Rhetoric	Science Elective
Gen Ed	Gen Ed
(15-18 credits)	(15-18 credits)

Science electives can be chosen from: BIOL 105, 106, CHEM 201, 202, GEOL 121, 122, PHYS 221, 222+232, 223+233, or any 300+ level course. Choose two science courses from different disciplines to meet general education requirements.

Second Year

Semester 1	Semester 2
CIS 223 Algorithms	CIS 224 Computer Architecture
MATH 280 Discrete Math for CS 1	MATH 247 Linear Algebra
Science Elective	CMST 102 or ENG 271W
Gen Ed	Micro- or Macroeconomics
	Gen Ed
(15-18 credits)	(15-18 credits)

Apply for admission to upper-division work-based software engineering major during Second Year.

Academy

SE 301 Core: Intro to Software Engineering	SE 300 Academy Project
SE 303 Core: Intro to Context-aware Software Practices	SE 495 Seminar
SE 304 Preparation for Self-directed Study	MATH 354 Probability and Statistics
(14 credits)	

Third Year

J1 Semester (industry)	J2 Semester (industry)
SE 391 Project 1	SE 392 Project 2
SE 311W Professionalism 1	SE 312W Professionalism 2
SE 495 Seminar	SE 495 Seminar
SE 302 Core: Intro to Software Quality and Testing	MATH 380 Discrete Math for CS 2
Core	Core or Elective
Core or Elective	
(13 credits)	(13 credits)

Core and Elective classes are each 2 credits.

Fourth Year

S1 Semester (industry)	S2 Semester (industry)
SE 491 Capstone 1	SE 492 Capstone 2
SE 411W Professionalism 3	SE 412W Professionalism 4
SE 495 Seminar	SE 495 Seminar
Core or Elective	Elective
Core or Elective	Elective
Elective	Elective
(13 credits)	(13 credits)

Students earn a math minor while completing the requirements for the software engineering degree.