



Below is the natural sequence of Software Engineering program courses designed for students to register per semester. Other degree requirements and comprehensive details are to be found in the AUIS Academic Catalog.

Course Code and Description	Credits	Prerequisite(s)	✓
1st Semester			
CSC 101 - Computer Science and IT Applications (Core)	3	None	
MTH 101 - College Algebra (Core)	3	None	
ENG 101 - Argument (Core)	3	None	
CIV 101 - Civilization I: The Ancient World (History) (Core)	3	None	
SCI 101 + SCIL101 - Life Science + Life Science Lab (Core)	3	None	
Total Credits	15		
2nd Semester			
ENG 102 - Critical Reading and Writing (Core)	3	ENG 101	
SCI 102 - Physical Science (Core)	3	MTH 101	
STT 201 - Statistics (Core)	3	MTH 101	
ITE 202 - IT Systems (Major)	3	CSC 101	
MTH 235 - Discrete Mathematics (Core)	3	MTH 101	
Total Credits	15		
3rd Semester			
SE 301 - Software Engineering Principles (Major)	3	ITE 202	
ITE 303 - Introduction to Programming (Major)	3	ITE 202 and MTH 235	
SE 311 - System Analysis and Design (Major)	3	SE 301 (Corequisite)	
CIV 203 - Civilization III: The Ancient World (Humanities) (Core)	3	30 Earned Credits	
ENG 203 - Research (Core)	3	ENG 102	
Total Credits	15		
4th Semester			
ITE 301 - Data Communications and Networks (Major)	3	ITE 202	
ITE 305 - Database Management Systems (Major)	3	ITE 202	
SE Elective 1	3	Subject to course selection	
CIV 204 - Civilization IV: The Modern World (Humanities) (Core)	3	30 Earned Credits	
Math and Science (Core Option)*	3	Subject to course selection	
Total Credits	15		
5th Semester			
ITE 409 - Advanced Programming (Major)	3	ITE 303	
ITS 350 - Introduction to Data Structures and Algorithms (Major)	3	ITE 303	
SE 421 - Software Design and Models (Major)	3	ITE 303 and SE 311	
ITE 308 - IT Project Management (Major)	3	ITE 301	
Life Science (Core Option)**	3	Subject to course selection	
Total Credits	15		
6th Semester			
SE 355 - Distributed Computing (Major)	3	ITE 301 and ITS 350	
SE 455 - Software Testing (Major)	3	SE301 and ITE303	
SE 490 - SE Capstone Project I (Major)	3	ITE 303 and SE 311	
Social Science OR Humanities (Core Option)***	3	Subject to course selection	
Minor/Elective Course	3	Subject to course selection	
Total Credits	15		

7th Semester

SE 422 - Concurrent and Parralel Programming (Major)	3	ITE 303	
SE 423 - Enterprise Software Architecture (Major)	3	SE 355	
SE Elective 2	3	Subject to course selection	
Minor/Elective Course	3	Subject to course selection	
Minor/Elective Course	3	Subject to course selection	
Total Credits		15	

8th Semester

SE 491 - SE Capstone Project II (Major)	3	Last Semester	
SE Elective 3	3	Subject to course selection	
SE Elective 4	3	Subject to course selection	
Minor/Elective Course	3	Subject to course selection	
Minor/Elective Course	3	Subject to course selection	
Total Credits		15	

Program Credits

Core	45 credits (15 courses)
Major	48 credits (16 courses)
Minor (or General Electives)	15 credits (5 courses)
Major Electives	12 credits (4 courses)
Total	120 credits (40 courses)

General Tips and Recommendations

* Eligible courses: MTH 340 - Linear Algebra with 15 Earned Credits as Prerequisite

** Eligible courses: BIO, SCI, PHYS, or CHEM up to 300 level

*** Eligible courses: ECO 201, ART, LIT, ENG, POL, HIST, PHI, or GEO up to 300 level

Students from before Fall 2022 can either drop CIV102 or count CIV102 as Social Science/Humanities and take MTH340 instead

Varied Degree Paths:

Student degree paths may vary slightly from this form. If academic record differs from the courses listed in this form, please contact the Registration and Records Office during the advising week for clarification. Independent study, transfer credits or other unique circumstances are typically accounted for in the elective category.