

## American University of Iraq, Sulaimani

BSc. In Software Engineering Program Degree Progress Guide (Fall 2022 and Future Fall Cohorts)



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
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
CIV 204 - Civilization IV: The Modern World (Humanities) (Core)	3	CIV 203
Math and Science (Core Option)*	3	Subject to course selection
Total Credits	15	
5th Semester		
ITE 305 - Database Management Systems (Major)	3	ITE 202
ITE 308 - IT Project Management (Major)	3	ITE 301
SE 355 - Distributed Computing (Major)	3	ITS 350 and ITE 301
Life Science (Core Option)**	3	Subject to course selection
Social Science OR Humanities (Core Option)***	3	Subject to course selection
Total Credits	15	
6th Semester		
ITE 409 - Advanced Programming (Major)	3	ITE 303
SE 423 - Enterprise Software Architecture (Major)	3	SE 355
SE 422 - Concurrent and Parralel Programming (Major)	3	ITE 303
SE Elective 1	3	Subject to course selection
Minor/Elective Course	3	Subject to course selection
Total Credits	15	

7th Semester				
SE 455 - Software Testing (Major)		3	SE301 and ITE303	
SE 490 - SE Capstone Project I (Major)		3	ITE 303 and SE 311	
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	
		3	Subject to course selection	
Minor/Elective Course		•	,	

Program Cre	dits
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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.