

Name:

ID #/NET ID:



THE UNIVERSITY OF ARIZONA

College of Engineering

Unofficial Planning Guide

2024-2025 Software Engineering Course Requirements

MAIN CAMPUS

IP = In progress | PL = Planned | X = Completed

*Note: Offering semesters and pre-requisites subject to change frequently

U of A Foundation Requirements:

Course Name	Course # at UA	Units	Offerings	Plan	Comments
Freshman Composition	ENGL 101	3	F/SP/SU		ENGL 107 or 109H allowed
Freshman Composition	ENGL 102	3	F/SP/SU		ENGL 108 or 109H allowed

General Education Requirements: Tiered OR Connections

Connections Program (Admit term Spring 2022 or later)

Course Name	Course # at UA	Units	Offerings	Plan	Comments
Intro to the Gen-ed Experience	UNIV 101	1	F/SP/SU		
Expl Perspectives - Artist		3	F/SP/SU		
Expl Perspectives - Humanist		3	F/SP/SU		
Expl Perspectives - Social Scientist		3	F/SP/SU		
Building Connections		3	F/SP/SU		
Building Connections		3	F/SP/SU		
Building Connections		3	F/SP/SU		
Gen-ed Portfolio	UNIV 301	1	F/SP/SU		

Core Science/Math Requirements:

Course Name	Course # at UA	Units	Offerings	Plan	Comments
General Chemistry I Pre-req: MATH 112 or PPL 60	CHEM 151 or CHEM 161/163	4	F/SP/SU		Fulfills Gen-ed: EP: Natural Scientist – not listed above.
Additional Science Course Pre-req: CHEM 151/varying	CHEM 152, MSE 110 or MCB 181R&L	4	F/SP/SU		
Introductory Mechanics Pre-req: MATH 122B or 125	PHYS 141	4	F/SP/SU		PHYS 161H allowed
Intro Electricity and Magnetism Pre-req: PHYS 141, MATH 129	PHYS 241	4	F/SP/SU		PHYS 261H allowed
Calculus I Pre-req: Appropriate math placement	MATH 125 or MATH 122A/B	3/5	F/SP F/SP/SU		
Calculus II Pre-req: MATH 122B or MATH 125	MATH 129	3	F/SP/SU		
Discrete Math Pre-req: Math 129	MATH 243	3	F/SP/SU		
MATH/PHYS/DATA Elective	MATH 223, 254 or 313	3	F/SP/SU		

Lower Division Engineering Requirements (must be completed with a C or higher grade):

Course Name	Course # at UA	Units	Offerings	Plan	Comments
Intro to Engineering	ENGR 102 (A/B)	3	A(F)/B(SP)		
Intro to Software Engineering Co-req: MATH 122B or 125	SFWE 101	3	F/SP		

Sophomore Colloquium Pre-req: SFWE 101 or ECE 101	SFWE 201	1	F/SP		
Computer Programming I Pre-req: MATH 122B or MATH 125	ECE 101	4	F/SP		ECE 175 equivalent
Computer Programming II Co-req: MATH 120R	ECE 201	3	F/SP		ECE 275 equivalent
Digital Logic Pre-req: ECE 101	ECE 274A	4	F/SP		
Object Oriented Modeling & Design Pre-req: ECE 101	SIE 277	3	F/SP		

Upper Division Engineering Requirements (must be completed with a C or higher grade):					
Upper division courses requiring Advanced Standing as per College of Engineering guidelines					
Course Name	Course # at UA	Units	Offerings	Plan	Comments
SW Requirements Analysis & Test Pre-req: ECE 201 or consent of instructor	SFWE 301	3	F		
SW Design Process Pre-req: SFWE 301	SFWE 302/405	3	SP		
Software Assurance and Security Pre-req: ECE 201	SFWE 401	3	SP		
Software DevOps Pre-req: ECE 201	SFWE 402	4	SP		
Software Project Management Pre-req: SFWE 301	SFWE 403	3	F		
SW Preceptor Pre-req: Department Consent	SFWE 491	1	F/SP		
Engr Probability & Statistics Pre-req: MATH 129	SIE 305	3	F/SP/SU		
Engineering Ethics	ECE 311	1	F/SP		
Computer Organization Pre-req: ECE 101 & ECE 274A	ECE 369a	4	F		CSC 252 allowed
Analysis of Discrete Struc & Alg Pre-req: ECE 201 & MATH 243	CSC 355	3	F/SP		CSC 345 allowed
SFWE Technical Elective 1	Varying	3	Varying		
SFWE Technical Elective 2	Varying	3	Varying		
SFWE Technical Elective 3	Varying	3	Varying		
SFWE Technical Elective 4	Varying	3	Varying		
SFWE Technical Elective 5	Varying	3	Varying		
Engineering Senior Design Pre-req: SIE 277 & SFWE 301, 90+ units Co-req: SFWE 403	ENGR 498A	3	F/SP		
Engineering Senior Design Pre-req: ENGR 498A	ENGR 498B	3	F/SP		

*All CSC courses (except 355) prioritize their own majors and minors for enrollment. Core courses listed in column 2 are recommended for planning. Failure to enroll in a class by a particular semester could result in delayed graduation.

**We do NOT accept substitutions for any courses.

***See advisement report in [UAccess](#) Student Center under "Advising" for full degree requirements.