

Name:

ID #/NET ID:

THE UNIVERSITY OF ARIZONA
COLLEGE OF ENGINEERINGElectrical & Computer
Engineering

Unofficial Planning Guide

Software Engineering Degree Requirements:**ARIZONA ONLINE**

**Note: Offering semesters and pre-requisites subject to change frequently*
Students must maintain a 2.5 engineering GPA to progress in the program.
Advanced standing is needed to take 300/400 level coursework.

General Education Requirements:					
Course Name	Course # at UA	Units	Offerings	Plan	Comments
Intro to Gen-ed	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		
Freshman Composition	ENGL 101	3	F/SP/SU		
Freshman Composition Grade of B or higher required for MCW requirement	ENGL 102	3	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 141/145	4	F/SU		Fulfills Gen-ed: EP: Natural Scientist – not listed above.
Additional Science Course Pre-req: CHEM 141/145 / Varying	CHEM 142/146 MCB 181R/ 181L	4	SP/SU F/SP/SU		
Introductory Mechanics Pre-req: MATH 122B or 125	PHYS 141	4	F/SP/SU		
Intro Electricity and Magnetism Pre-req: PHYS 141, MATH 129	PHYS 241	4	F/SP/SU		
Calculus I Pre-req: Appropriate math placement	MATH 125 or MATH 122A/B	3/5	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		
MATH/PHYS/DATA Elective	MATH 223, 254, or 313	3			

Lower Division Engineering Requirements (must be completed with a C or higher grade):					
Course Name	Course # at UA	Units	Offerings	Plan	Comments
Intro to Engr	ENGR 102	3	SP		ENGR 102 not offered online Tech elective = UD
Intro to Software Engineering Pre-req: MATH 112	SFWE 101	3	F/SP		

Sophomore Colloquium Pre-req: SFWE 101 or ECE 101	SFWE 201	1	F/SP		
Programming I Pre-req: MATH 122B or MATH 125	ECE 101	3	SP		
Programming II Pre-req: ECE 101	ECE 201	3	F		
Digital Logic Pre-req: ECE 101	ECE 274A	4	F		
Obj Oriented Modeling & Design Pre-req: ECE 175	SIE 277	3	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	SFWE 301	3	F		
SW Design Process Pre-req: SFWE 301	SFWE 405	3	SP		
Software Assurance and Security Pre-req: ECE 275	SFWE 401	3	SP		
Software DevOps Pre-req: ECE 201	SFWE 402	4	F		
Software Project Management Pre-req: SFWE 301	SFWE 403	3	SP		
SW Preceptor Pre-req: Department Consent	SFWE 491	1	F/SP		
Engr Probability & Statistics Pre-req: MATH 129	SIE 305	3	F		
Engineering Ethics	ECE 311	1	F even yr		
Computer Organization Pre-req: ECE 101 & ECE 274A	ECE 369a	4	F even yr		
Discrete Struc & Alg Pre-req: ECE 201 & MATH 243	CSC 355	3	SP		
SFWE Technical Elective 1	Varying	3	-		
SFWE Technical Elective 2	Varying	3	-		
SFWE Technical Elective 3	Varying	3	-		
SFWE Technical Elective 4	Varying	3	-		
SFWE Technical Elective 5	Varying	3			
Engineering Senior Design Pre-req: SFWE 301, SFWE 302 & 90+ units	ENGR 498A	3	F/SP		
Engineering Senior Design Pre-req: Check with advisor	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.*