



Student:		ID#:		Email:	
Advisor:		Starting Semester:		Expected Graduation:	

4-Year Curriculum: 135 Credit Hours Total

Freshman Year - Fall Semester				
Course Code	Course Title	CRNs	Semester Taken	Retake/Transfer
CoE 100	Student Orientation and Academic Success	1		
SE 100	Programming for Engineers	3		
SE 100 L	Programming for Engineers Lab	1		
SE 117	Software Practice and Society	3		
MAT 101	Calculus I	3		
PHU 103	Mechanics and Waves for Engineers	3		
PHU 103 L	Mechanics and Waves for Engineers Lab	1		
ENG 101	University Writing	3		
Total		18		

Freshman Year - Spring Semester				
Course Code	Course Title	CRNs	Semester Taken	Retake/Transfer
SE 120	Object-Oriented Programming I	3		
SE 120 L	Object-Oriented Programming I Lab	1		
CHM 102	Introduction to Chemistry	3		
CHM 102 L	Introduction to Chemistry Lab	1		
MAT 112	Calculus II	3		
PHU 124	Electromagnetism and Optics for Engineers	3		
PHU 124 L	Electromagnetism and Optics for Engineers Lab	1		
ARB 101	Arabic Language I	2		
Total		17		

Sophomore Year - Fall Semester				
Course Code	Course Title	CRNs	Semester Taken	Retake/Transfer
SE 201	Introduction to Software Engineering	3		
SE 214	Algorithms and Data Structures	3		
SE 214 L	Algorithms and Data Structures Lab	1		
SE 220	Object-Oriented Programming II	3		
SE 220 L	Object-Oriented Programming II Lab	1		
MAT 212	Linear Algebra	3		
ISL 101	Islamic Studies I	2		
Total		16		

Sophomore Year - Spring Semester				
Course Code	Course Title	CRNs	Semester Taken	Retake/Transfer
SE 212	Discrete Structure for Software Engineers	3		
SE 225	Software Requirements	3		
SE 225 L	Software Requirements Lab	1		
EE 210	Digital Logic Design	3		
EE 210 L	Digital Logic Design Lab	1		
MAT 224	Numerical Methods	3		
STA 212	Probability and Statistics for Engineers	3		
Total		17		

Junior Year - Fall Semester				
Course Code	Course Title	CRNs	Semester Taken	Retake/Transfer
SE 310	Software Design and Architecture	3		
SE 312	Database Management Systems	3		
SE 312 L	Database Management Systems Lab	1		
SE 314	Operating Systems	3		
SE 314 L	Operating Systems Lab	1		
EE 305	Computer Networks	3		
EE 305 L	Computer Networks Lab	1		
ENG 300	English Elective	3		
Total		18		

Junior Year - Spring Semester				
Course Code	Course Title	CRNs	Semester Taken	Retake/Transfer
SE 322	Internet of Things Application Development	3		
SE 324	Web Application Development	3		
SE 324 L	Web Application Development Lab	1		
SE 328	Mobile Application Development	3		
SE 328 L	Mobile Application Development Lab	1		
SE 330	Introduction to Cybersecurity	3		
ENG 222	Technical Writing	3		
Total		17		

Junior Year - Summer Semester				
Course Code	Course Title	CRNs	Semester Taken	Retake/Transfer
SE 390	Software Engineering Summer Internship	0		
Total		0		

Senior Year - Fall Semester				
Course Code	Course Title	CRNs	Semester Taken	Retake/Transfer
SE 412	Software Testing & Quality Assurance	3		
SE 414	Software Project Management	3		
SE 400	Technical Elective	3		
SE 400	Technical Elective	3		
SE 495	Software Engineering Capstone Project I	3		
GE 400	General Education Elective I	2		
Total		17		

Senior Year - Spring Semester				
Course Code	Course Title	CRNs	Semester Taken	Retake/Transfer
SE 499	Ethics and Professional Development	1		
SE 423	Software Construction and Processes	3		
SE 400	Technical Elective	3		
SE 400	Technical Elective	3		
SE 496	Software Engineering Capstone Project II	3		
GE 400	General Education Elective II	2		
Total		15		

Alfaisal University – Bachelor of Software Engineering
Prerequisites Chart (Effective Fall 2025)

