


































2014 - 2015 Major Map

Software Engineering, BS

School/College: [Ira A. Fulton Schools of Engineering](#)
TSSERBS

Some accelerated combinations are not available to ASU Online students. Interested students should contact their academic advisor for more information.

Term 1 - A 0 - 7 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 CTI 101: Success in Technology & Innovation	1		<ul style="list-style-type: none"> • An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses • ASU Mathematics Placement Test score determines placement in Mathematics course • ASU 101 or College specific equivalent First Year Seminar required of all freshman students
ENG 101 or ENG 102: First-Year Composition OR			
ENG 105: Advanced First-Year Composition OR	3	C	
ENG 107 or ENG 108: First-Year Composition			
Humanities, Arts and Design (HU) AND Cultural Diversity in the U.S. (C)	3		
Term hours subtotal:	7		
Term 1 - B 7 - 13 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 CST 100: Object-Oriented Software Development I	3	C	
 MAT 265: Calculus for Engineers I (MA)	3	C	
Term hours subtotal:	6		
Term 2 - A 13 - 22 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 CST 200: Core Data Structures with Object Oriented Programming	3	C	
 MAT 266: Calculus for Engineers II (MA)	3	C	
ENG 101 or ENG 102: First-Year Composition OR			
ENG 105: Advanced First-Year Composition OR	3	C	
ENG 107 or ENG 108: First-Year Composition			
Term hours subtotal:	9		
Term 2 - B 22 - 29 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 SER 232: Computer Systems Fundamentals I (CS)	3	C	
PHY 121: University Physics I: Mechanics (SQ) AND PHY 122: University Physics Laboratory I (SQ)	4	C	
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	7		
Term 3 - A 29 - 38 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 SER 215: Software Enterprise I: Personal Process	3	C	
 MAT 243: Discrete Mathematical Structures	3	C	

EGR 280: Engineering Statistics (CS)	3		
Term hours subtotal:	9		
Term 3 - B 38 - 44 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 SER 221: Programming Languages and Their Execution Environment	3	C	
Social-Behavioral Sciences (SB)	3		
Complete Mathematics (MA) requirement.			
Term hours subtotal:	6		
Term 4 - A 44 - 53 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
CST 250: Microcomputer Architecture and Programming	3		
 SER 222: Design and Analysis of Data Structures and Algorithms	3	C	
 SER 234: Operating Systems and Networks	3		
Term hours subtotal:	9		
Term 4 - B 53 - 59 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 MAT 267: Calculus for Engineers III (MA) OR MAT 275: Modern Differential Equations (MA)	3		
 SER 216: Software Enterprise II: Testing & Quality	3	C	
Term hours subtotal:	6		
Term 5 - A 59 - 66 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 SER 321: Principles of Distributed Software Systems	3		
Natural Science - Quantitative (SQ) OR Natural Science - General (SG)	4		
Term hours subtotal:	7		
Term 5 - B 66 - 72 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 CST 315: Software Enterprise I: Tools and Process	3		
HST 318: History of Engineering ((L or SB) & G)	3		
Term hours subtotal:	6		
Term 6 - A 72 - 81 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 CST 316: Software Enterprise II: Construction and Transition	3		
 EGR 104: Critical Inquiry in Engineering (L)	3	C	
MAT 343: Applied Linear Algebra	3		
Term hours subtotal:	9		
Term 6 - B 81 - 90 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 SER 322: Principles of Database Management	3	C	
Secondary Focus Area	3		
Upper Division Humanities, Arts and Design (HU) AND Historical Awareness (H)	3		
Term hours subtotal:	9		
Term 7 - A 90 - 99 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 SER 421: Web-Based Applications and Mobile Systems	3	C	

Upper Division Secondary Focus Area	3
Natural Science - Quantitative (SQ) OR Natural Science - General (SG) OR MAT Elective	3
Term hours subtotal:	9

- Any course with MA, SQ, or SG general studies designation OR any course with a math or science prefix/subject fulfills the math or science elective

Term 7 - B 99 - 105 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ CST 415: Software Enterprise III: Inception and Elaboration (L)	3		
★ SER 401: Computing Capstone Project I	3		
Term hours subtotal:	6		

Term 8 - A 105 - 111 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ CST 416: Software Enterprise IV: Project and Process Management	3		
★ SER 402: Computing Capstone Project II	3		
Term hours subtotal:	6		

Term 8 - B 111 - 120 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ SER 422: Web Application Programming	3	C	
Upper Division Secondary Focus Area	3		
Upper Division Humanities, Arts and Design (HU) OR Upper Division Social-Behavioral Sciences (SB)	3		
Term hours subtotal:	9		

- Secondary Focus Area: A secondary focus area is a group of courses comprising of 9 or more credit hours which form a coherent theme. For example, all courses may share a common subject prefix. Students may work with an academic success specialist to identify their secondary focus area from Graphic Information Technology (GIT), Technological Entrepreneurship and Management (TEM), or Industrial and Organizational Psychology (PSY).

Hide Course List(s)/Track Group(s)

Secondary Focus Area
GIT
PSY
TEM

Total Hours: 120

Upper Division Hours: 45 minimum

Major GPA: 2.00 minimum

Cumulative GPA: 2.00 minimum

Total hrs at ASU: 30 minimum

Hrs Resident Credit for

Academic Recognition: 56 minimum

Total Community College Hrs: 64 maximum

General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)

- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Arts and Design (HU)
- Social-Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed next to courses on the major map were valid for the 2014 - 2015 academic year. Please refer to the course catalog for current General Studies designations at time of class registration. General Studies credit is applied according to the designation the course carries at the time the class is taken.