
















2013 - 2014 Major Map

Applied Computer Science, BS

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

ASU is no longer accepting new students to this program. Please explore Degree Search for other similar program options.

Term 1 0 - 13 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 CST 100: Object-Oriented Software Development	3	C	<ul style="list-style-type: none"> • An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses • ASU Math Placement Exam score determines placement in Mathematics course • ASU 101 or College specific equivalent First Year Seminar required of all freshman students • CTI 101 required of all freshman students
 CTI 101: Success in Technology & Innovation	1		
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			
MAT 265: Calculus for Engineers I (MA)	3	C	
Humanities, Arts and Design (HU)	3		
Term hours subtotal:	13		
Term 2 13 - 29 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 CST 150: Computer Systems Fundamentals I (CS)	3	C	
 CST 200: Core Data Structures with Object Oriented Programming	3	C	
 PHY 121: University Physics I: Mechanics (SQ) AND PHY 122: University Physics Laboratory I (SQ)	4	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			
MAT 266: Calculus for Engineers II (MA)	3	C	
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	16		
Term 3 29 - 45 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 CHM 113: General Chemistry I (SQ)	4	C	
 CST 220: Programming Languages and Their Execution Environment	3	C	
 EGR 280: Engineering Statistics (CS)	3	C	
 MAT 243: Discrete Mathematical Structures	3	C	
MAT 267: Calculus for Engineers III (MA)	3	C	
 Complete Mathematics (MA) requirement.			
Term hours subtotal:	16		
Term 4 45 - 61 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes

❗ CST 230: Design and Analysis of Data Structures and Algorithms	3	C
CST 250: Microcomputer Architecture and Programming AND		
❗ CST 251: Microcomputer Architecture and Programming Laboratory	4	C
ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB)	3	
Humanities, Arts and Design (HU) AND Cultural Diversity in the U.S. (C)	3	
Literacy and Critical Inquiry (L)	3	
Term hours subtotal:	16	

- Transfer students- Please speak with an advisor regarding possible substitutions for ECN 211 or ECN 212.

Term 5 61 - 76 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ CST 315: Software Enterprise I: Tools and Process	3		
★ CST 359: Internet Networking Protocol	3		
★ CST 420: Principles of Distributed Software Systems	3		
CST 4** Elective	3		
MAT 275: Modern Differential Equations (MA)	3		
Term hours subtotal:	15		

Term 6 76 - 91 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ CST 316: Software Enterprise II: Construction and Transition	3		
★ CST 335: Applications of Computer Theory	3		
★ CST 386: Operating Systems Principles	3		
MAT 343: Applied Linear Algebra	3		
Upper Division Literacy and Critical Inquiry (L) (TWC 401 OR TWC 446 recommended)	3		
Term hours subtotal:	15		

Term 7 91 - 104 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ CST 433: Principles of Database Management	3		
★ CST 496: Ethics and Professionalism in Computing	1		
★ SER 401: Computing Capstone Project I	3		
CST 4** Elective	3		
Mathematics (MA) OR Natural Science - General (SG) OR Natural Science - Quantitative (SQ)	3		
Term hours subtotal:	13		

Term 8 104 - 120 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ SER 402: Computing Capstone Project II	3		
Upper Division Social-Behavioral Sciences (SB) AND Global Awareness (G) (HST 318 recommended)	3		
Complete 2 courses:			
CST 4** Elective	6		
Social-Behavioral Sciences (SB) AND Historical Awareness (H) OR Humanities, Arts and Design (HU) AND Historical Awareness (H)	3		
Elective	1		
Term hours subtotal:	16		

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 2013 - 2014 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.