

Maricopa Community Colleges: Advising Guide

Computer Science 2009-2010 Catalog Year

The Computer Science advising guide is designed for students who plan to transfer to baccalaureate granting colleges and universities. In general, the components of the advising guide will meet requirements for Computer Science majors at Arizona State University, University of Arizona and Northern Arizona University.

The course selection is intended to prepare students to meet university admission requirements, but does not in itself guarantee admission to a university or to programs with pre-professional or selective admissions processes.

The courses listed on this advising guide will satisfy the requirements for a MCCC CD AGEC-S and Associate in Science degree. In addition, all MCCC CD general graduation requirements and academic policies within the catalog apply to this advising guide and 60-64 credits (numbered 100 and above) are required and must be completed with a grade of "C" or higher.

Students are responsible for completing specific program requirements for the major and institution to which they will transfer and should work closely with an advisor on course selection.

Arizona General Education Curriculum (AGEC-S)		AGEC-S 37 Credits	
Area Course Subject/Number	Course Title	Credit Hours	Notes
<i>First Year Composition</i> ENG101/102 [FYC] OR ENG107/108 [FYC]	First-Year Composition	6	
<i>Literacy & Critical Inquiry</i> Select a class that meets both [L] and [HU].	Shared with HU	0-3	For AGEC-S, students should select a course that satisfies both Literacy and Social Behavioral Sciences or Literacy and Humanities and Fine Arts requirement.
<i>Mathematical Studies</i> MAT220 OR MAT221 [MA]	Calculus w/Analytic Geometry I	4-5	
<i>Humanities & Fine Arts</i> Select a course that satisfies [L] and [HU] requirements simultaneously AND Select another course that satisfies [C], [H], or [G] and [HU] requirements simultaneously. (With SB course, satisfy [C] and [G] or [H])		6	Students are encouraged to select course work from more than one discipline.
<i>Social & Behavioral Sciences</i> COM100 or COM110 or COM230 AND Select a course that satisfies [C], [H], or [G] and [SB] requirements simultaneously	Introduction to Human Communication or Interpersonal Communication or Small Group Communication AND Another SB with remaining [C] or [H]/[G] awareness designation	6	COM100, COM110 or COM230 will simultaneously satisfy AGEC [SB] requirement in addition to meeting MCCC CD Oral Communication Requirement.
<i>Natural Sciences</i> CHM151 and CHM152 or CHM154 (w/ labs) OR PHY115 and PHY 116 OR PHY121 and PHY131	General Chemistry I General Chemistry II (or II w/ qual. Lab) University Physics I University Physics II University Physics I: Mechanics University Physics II: Electricity & Magnetism	8-10	
<i>Awareness</i> Cultural Diversity in the US [C] AND Global Awareness [G] OR Historical Awareness [H] (Share with HU and SB)		0-6	It is not necessary for students to exceed 38 credits to complete the Awareness areas because courses can satisfy a Core Area and one or more awareness areas simultaneously. Therefore, no additional semester credits are required to satisfy the Awareness areas.

MCCCD COMPUTER SCIENCE ADVISING GUIDE – 2009-2010

<i>Subject Options</i> MAT230 OR MAT231 AND MAT227	Calculus w/ Analytic Geometry II Discrete Mathematical Structures	7-8	
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MCCCD Additional Requirements	0-6 Credits
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Students must satisfy Oral Communication and Critical Reading areas. It is not necessary for students to exceed the 38 credits to satisfy the MCCCD Additional Requirements.

Area Course Subject/Number	Course Title	Credit Hours	Notes
<i>Oral Communication</i> COM100, COM110 or COM230	Introduction to Human Communication, Interpersonal Communication or Small Group Communication	0-3	If students select a communication course that satisfies both the Oral Communication area and an area within the Core, then the Oral Communication requirement has been satisfied and additional electives may be taken. Each of these Communication courses also meet SB requirement.
<i>Critical Reading</i> CRE101 OR Equivalent as indicated by assessment	Critical Reading	0-3	If students demonstrate proficiency through assessment, the Critical Reading requirement has been satisfied and additional electives may be taken.

Lower-Division Preparation for Computer Science Majors	10-12 Credits
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Course Subject/Number	Course Title	Credit Hours	Notes
CSC100 or CSC110	Introduction to Computer Science (C++) Introduction to Computer Science (Java)	3-4	Or select modular course equivalents (i.e., CSC100AA, CSC100AB or CSC110AA, CSC110AB)
CSC205	Object Oriented Programming and Data Structures	3-4	Or select modular course equivalents of CSC205AA, AB, AC, or AD
CSC230 or EEE230	Computer Organization and Assembly Language	4	

Lower-Division Preparation for Computer Science Majors	13-15 Credits
- RESTRICTED ELECTIVES - Select from the following courses based on the university you plan to attend.	

Course Subject/Number	Course Title	Credit Hours	Notes
LANGUAGE 2nd Semester (UofA)	Elementary Language 102 (see list)	4	
MAT240 or 241 (ASU, UofA)	Calculus w/ Analytic Geometry III	4-5	
CSC120 (ASU) or EEE120 (ASU)	Digital Design Fundamentals	4	
CSC240 (ASU)	Intro. to Different Programming Languages	3-4	Or select modular course equivalent of CSC240AA
ECE102 or ECE102AA (ASU)	Engineering Analysis Tools/Techniques	2	ECE102 & 103 together are equivalent to FSE and EGR courses at ASU
ECE103 or ECE103AB (ASU)	Engineering Problem Solving/Design	2	
BIO181 (ASU, NAU)	General Biology I	4	
MAT206 (NAU)	Elements of Statistics	3	
Additional Liberal Studies Courses (NAU)		6	Choose from NAU's [AHI], [CU] or [SPW]