

DEGREE MAP

The following sequence is an example of how this degree can be completed in two years. This sequence is based on satisfaction of all Basic Skills requirements and prerequisites, and presumes a fall start date. An individual's program may vary depending on transfer institution, career objectives, or individual needs. See your counselor for other options and to monitor your progress.

Program Name: Computer Science-Associate of Arts Degree

Location(s) Offered:

Sierra Vista Campus

Learning Outcomes: *Students who successfully complete this program will be able to do the following:*

1. Describe the mechanics of information transfer and control within a digital computer system.
2. Design, code, test, and debug Java programs using object-oriented programming techniques in the command line environment.
3. Design, code, test, and debug medium-difficulty C programs using structured and modular techniques.
4. Correctly employ appropriate utility programs and libraries.
5. Correctly design modular programs.
6. Design and implement combinational logic circuits with SSI elements (AND, OR, NOT, NAND, NOR, XOR, and XNOR gates).
7. Use data structures in solving programming problems.

Course or program prerequisite(s) not included in the degree:

CIS 204 C Programming requires CIS 130 Programming Logic or score of 70 or higher on the waiver exam.
CIS 208 Java Programming requires CIS 130 Programming Logic or score of 70 or higher on the waiver exam.
ENG 101 Composition requires appropriate English placement score (or see advisor) .
MAT 220 Calculus I requires appropriate mathematics placement score (or see advisor), MAT 187 Precalculus, or both MAT 151 Precalculus Algebra and MAT 182 Precalculus Trigonometry.

Program Reviewed: Feb 22, 2016

Key:

IW=Intensive Writing
F2F=Face-to-Face Instruction
ITV=Instructional Television
VC=Virtual Campus/Online

<i>Requirements</i>	<i>Course(s) Recommended</i>	<i>Delivery Method</i>	<i>Credits</i>
First Semester (Fall):			
General Education-Composition	ENG 101 Composition	F2F,VC	3
General Education-Elective*		F2F,VC	4
General Education-Humanities		F2F,VC	3
General Education-Mathematics	MAT 220 Calculus I	F2F,VC	5
Second Semester (Spring):			
Core Curriculum	MAT 227 Discrete Mathematics	F2F	3
Core Curriculum	MAT 231 Calculus II	F2F	4
General Education-Composition	ENG 102 English Composition	F2F,VC	3
General Education-Lab Sciences		F2F,VC	4
General Education-Social & Beh Sciences		F2F,VC	3
Third Semester (Fall):			
Core Curriculum	CIS 204 C Programming or CIS 208 Java Programming	F2F	4
Core Curriculum	CIS 221 Digital Logic	VC	3
General Education-Arts		F2F,VC	3
General Education-Social & Beh Sciences		F2F,VC	3
Language Requirement		F2F,VC	4
Fourth Semester (Spring):			
Core Curriculum	CIS 206 Assembler with Architecture	F2F	4
Core Curriculum	CIS 220C Data Structures-C or CIS 220J Data Structures-Java	F2F	4
General Education-Lab Sciences		F2F,VC	4
Language Requirement		F2F,VC	4

Total credits required: 65

Notes:

Six credits of arts, humanities, social and behavioral sciences, or general education electives must be chosen from the current listing of intensive writing courses. See www.cochise.edu/AGEC.
University non-English language requirements vary. Check with your advisor.

*General education electives must be chosen from general education list. See www.cochise.edu/AGEC.