COCHISE COLLEGE

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 Science Degree

Location(s) Offered:

Sierra Vista Campus

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

1. Demonstrate mathematical proficiency at the Calculus III level.
2. Create solutions to typical information systems problems.
3. Correctly design modular programs.
4. Correctly design assembler language programs.
5. Apply Java language structures.
6. Test and debug Java programs.
7. Design and implement combinational logic circuits with SSI elements (AND, OR, NOT, NAND, NOR, XOR and XNOR gates).
8. Design and implement combinational logic circuits with MSI elements (multiplexors, decoders, adders, comparators, multipliers, tri-state buffers), and programmable logic devices (PLDs).

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

CHM 151 General Chemistry I requires CHM 130 Fundamental Chemistry, CHM 138 Chemistry for Allied Health, or one year of high school chemistry; MAT 123 Dev Math Level III or higher; and RDG 122 or exemption.
CIS 208 Java Programming requires CIS 130 Programming Logic or a score of 70 or higher on the waiver exam.
CIS 221 Digital Logic requires CIS 129 Introduction to Programming Logic, CIS 130 Programming Logic, or permission of instructor.
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.
PHY 230 Physics with Calculus I requires PHY 111 General Physics or one year of high school physics.

Program Reviewed: ***Feb 22, 2016***

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

Requirements	*Course(s) Recommended*	*Delivery Method*	*Credits*
First Semester (Fall):			
Core Curriculum	CIS 120 Introduction to Information Systems	F2F,VC	3
General Education-Composition	ENG 101 Composition	F2F,VC	3
General Education-Humanities		F2F,VC	3
General Education-Mathematics	MAT 220 Calculus I or higher	F2F,VC	3-5
General Education-Social & Beh Sciences		F2F,VC	3
Second Semester (Spring):			
Core Curriculum	CHM 151 General Chemistry I	F2F	4
Core Curriculum	MAT 227 Discrete Mathematics	F2F	3
General Education-Composition	ENG 102 English Composition	F2F,VC	3
General Education-Social & Beh Sciences		F2F,VC	3
Elective-CIS*		F2F,VC	0-2
Third Semester (Fall):			
Core Curriculum	CIS 208 Java Programming	F2F	4
Core Curriculum	CIS 221 Digital Logic	VC	3
General Education-Add Math/Lab Science	MAT 231 Calculus II	F2F	4
General Education-Arts		F2F,VC	3
General Education-Lab Sciences	PHY 230 Physics with Calculus I	F2F	4
Fourth Semester (Spring):			
Core Curriculum	CIS 206 Assembler with Architecture	F2F	4
Core Curriculum	CIS 220J Data Structures-Java	F2F	4
General Education-Add Math/Lab Science	MAT 241 Calculus III	F2F	4
General Education-Lab Sciences	PHY 231 Physics with Calculus II	F2F	4

Total credits required: 64

Notes:

Six credits of arts, humanities, or social behavioral sciences must be chosen from the current listing of intensive writing courses. See www.cochise.edu/AGEC.

*Elective courses must be transferable to the university or universities to which the student plans to transfer. See www.aztransfer.com.