



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: Mathematics-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 an understanding of mathematical algorithms, definitions, and theorems in solving problems.
2. Create, use, and analyze graphical representations of mathematical ideas.
3. Write mathematical arguments using appropriate language, logic, and symbols.

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

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 I or one year of high school physics.
This program requires RDG 122 Reading Critically or exemption.

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):			
Core Curriculum	CIS 130 Programming Logic	F2F,VC	3
General Education-Add Math/Lab Sci*	PHY 111 General Physics I or add math/lab sciences	F2F	3-4
General Education-Composition	ENG 101 Composition	F2F,VC	3
General Education-Mathematics	MAT 220 Calculus I or higher	F2F,VC	3-5
Elective****		F2F,VC	3-4
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-Humanities		F2F,VC	3
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	MAT 241 Calculus III	F2F	4
General Education-Add Math/Lab Sci*		F2F	3-4
General Education-Lab Sciences	PHY 230 Physics with Calculus I	F2F	4
Fourth Semester (Spring):			
Core Curriculum	MAT 252 Linear Algebra or MAT 262 Differential Equations***	F2F	3
General Education-Arts		F2F,VC	3
General Education-Lab Sciences	PHY 231 Physics with Calculus II	F2F	4
General Education-Social & Beh Sciences		F2F,VC	3
Elective****		F2F,VC	0-5

Total credits required: 64

Notes:

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

*Based on your major and after consulting with an advisor, select PHY III and/or additional mathematics/laboratory science course(s). See www.aztransfer.com/cgi-bin/WebObjects/agecweb.woa for a complete list.

**After consulting with an advisor in the computer science department, select CIS 204 or CIS 208.

***After consulting with an advisor in the mathematics department, select MAT 252 or MAT 262.

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