

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: Cybersecurity-Associate of Applied Science Degree

Location(s) Offered:

Sierra Vista Campus

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

1. Describe cybersecurity threats as they relate to confidentiality, integrity, and availability.
2. Describe security ramifications that result from human error and from technology, configuration, and policy weaknesses.
3. Secure workstations and servers running current Windows operating system software and test the effectiveness of various security measures.
4. Investigate measures that can help ensure business continuity in the event of a disaster, such as contingency planning and power and backup options.
5. Analyze network operations risks, conduct network penetration tests, and implement network countermeasures.
6. Identify the basic components of a layered structure for network defense architecture; and describe access control objectives and auditing concepts.

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

ENG 101 Composition requires appropriate English placement score (or see advisor).
MAT 142 College Mathematics requires appropriate mathematics placement score (or see advisor).
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>
<i>First Semester (Fall):</i>			
Core Curriculum	CIS 140 Introduction to Operating Systems	F2F,VC	3
Core Curriculum	CIS 150 Essentials of Networking	F2F,VC	3
Core Curriculum	CIS 160 Introduction to Information Security	F2F,VC	4
General Education-Composition	ENG 101 Composition	F2F,VC	3
General Education-Technology Literacy	CIS 120 Introduction to Information Systems	F2F,VC	3
<i>Second Semester (Spring):</i>			
Core Curriculum	CIS 128 Linux Operating Systems	F2F,VC	4
Core Curriculum	CIS 164 Introduction to Scripting Using Python	F2F	4
Core Curriculum	CIS 236 Microsoft Workstation Operating Systems	F2F	4
General Education-Mathematics	MAT 142 College Mathematics or higher	F2F,VC	3-4
<i>Third Semester (Fall):</i>			
Core Curriculum	CIS 161 Network Security	F2F	4
Core Curriculum	CIS 179 Applied Technical Writing	F2F,VC	3
Core Curriculum	CIS 255 Microsoft PowerShell Scripting	F2F	4
Core Curriculum	CIS 267 Mobile Security	F2F	3
General Education-Liberal Arts	PSY 101 Introduction to Psychology	F2F,VC	3
<i>Fourth Semester (Spring):</i>			
Core Curriculum	CIS 263 Network Defense	F2F	4
Core Curriculum	CIS 275 Computer Forensics	F2F	4
Core Curriculum	CIS 291 Practical Applications in Cybersecurity	F2F	4
General Education-Composition	ENG 102 English Composition	F2F,VC	3
General Education-Liberal Arts		F2F,VC	3

Total credits required: 66-67

Notes: