



## 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:** Cisco and Linux Networking-Associate of Applied Science Degree

**Location(s) Offered:**

Fort Huachuca Center

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

1. Demonstrate proficiency with the Linux file system, commands, and utilities.
2. Describe and apply the methods of securing a network.
3. Describe, configure, and troubleshoot serial and broadband connections including Internet Protocol security (IPsec) tunneling operations.
4. Demonstrate advanced management of Linux users and groups.
5. Configure and troubleshoot basic operations of Cisco routers in a complex routed network for Internet Protocol version 4 (IPv4) and Internet Protocol version 6 (IPv6).

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

CIS 294 Field Experience in Computer Information Systems requires a declared major in a computer information systems discipline and permission of the cooperative education program coordinator.  
ENG 101 Composition requires appropriate English placement score (or see advisor).  
MAT 142 College Mathematics requires appropriate mathematics placement score (or see advisor).

**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>
<b>First Semester (Fall):</b>			
Core Curriculum	CIS 130 Programming Logic	F2F,VC	3
Core Curriculum	CIS 160 Introduction to Information Security	F2F,VC	4
Core Curriculum	CNT 140 Introduction to Cisco Networks	F2F	3
Core Curriculum	CNT 150 Cisco Routing and Switching Essentials	F2F	3
General Education-Technology Literacy	CIS 120 Introduction to Information Systems	F2F,VC	3
<b>Second Semester (Spring):</b>			
Core Curriculum	CIS 128 Linux Operating System	F2F,VC	4
Core Curriculum	CNT 240 Scaling Cisco Networks	F2F	3
Core Curriculum	CNT 250 Connecting Cisco Networks	F2F	3
General Education-Composition	ENG 101 Composition	F2F,VC	3
General Education-Liberal Arts		F2F,VC	3
<b>Third Semester (Fall):</b>			
Core Curriculum	CIS 229 Linux System Administration	F2F,VC	4
Core Curriculum	CIS 248 Perl Scripting	VC	3
General Education-Composition	ENG 102 English Composition	F2F,VC	3
General Education-Mathematics	MAT 142 College Mathematics or higher	F2F,VC	3-5
Elective*		F2F,VC	3
<b>Fourth Semester (Spring):</b>			
Core Curriculum	CIS 259 Advanced Linux Systems Administration	F2F,VC	4
Core Curriculum	CIS 294 Field Experience in CIS	F2F	3
General Education-Liberal Arts		F2F,VC	3
Elective*		F2F,VC	4
Elective*		F2F,VC	0-2

**Total credits required:**

64

**Notes:**

\*The CIS Department recommends any course from the list of department approved electives.