

# A.A.S., INFORMATION TECHNOLOGY SPECIALIST

**Concentrations: Computing Technology, Network and Cybersecurity, and Network and System Administration**

## Minimum Requirements for A.A.S. Degree: 60 credits

Students must earn a C- grade or better in each course.

Code	Title	Credits
<b>General University Requirements</b>		
Complete the general university requirements. ( <a href="http://catalog.uaf.edu/certificates-associate">http://catalog.uaf.edu/certificates-associate</a> )		
<b>A.A.S. Degree Requirements</b>		
Complete the A.A.S. degree requirements. ( <a href="http://catalog.uaf.edu/certificates-associate/summary-of-certificate-and-associate-degree-requirements/#associateofappliedsciencetext">http://catalog.uaf.edu/certificates-associate/summary-of-certificate-and-associate-degree-requirements/#associateofappliedsciencetext</a> ) <sup>1</sup>		
<b>Program Requirements</b>		
CITS F204	Introduction to Network Support and Administration	3
Complete one from the following:		3
CITS F205	Introduction to Microcomputer Programming	
CS F103	Introduction to Computer Programming	
CS F201	Computer Science I	
CITS F212	Server Operating Systems	3
CITS F261	Computer and Network Security	3
CITS F281	Professional Practices in IT	3
CITS F284	Independent Project	3
or CITS F285	Cooperative Work Experience	
Additional 6 credits from CIOS, CITS or CS electives		6

## Concentrations

Complete one of the following concentrations:	21-22
Computing Technology	
Network and Cybersecurity	
Network and System Administration	

Pass a certification review requiring students to demonstrate proficiency in the following skill areas: network support and troubleshooting; system administration; cybersecurity; independent thinking; human relations and support; and professional practices.<sup>2</sup>

<sup>1</sup> As part of the A.A.S. degree requirements, complete DEVM F105 or any course at the F100 level or above in mathematical sciences (computer science, math or statistics) for the computation requirement, and ABUS F154, ANTH F100X, SOC F101X for the human relations requirement.

<sup>2</sup> Prior to graduation, all students are required to pass a certification review that includes a hands-on scenario task and the development and presentation of a portfolio of work.

## Concentrations COMPUTING TECHNOLOGY

Code	Title	Credits
Complete 21-22 credits from the following or from program coordinator-approved courses:		21-22
CITS F201	Microcomputer Operating Systems Support	
CITS F203	Information Technology Support Fundamentals	
CITS F219	Microcomputer Operating Systems: Topics	
CITS F220	Implementing Internet Tools and Technologies	
CITS F221	Graphics and Multimedia for the Web	
CITS F222	Website Design	
CITS F240	System and Network Services Administration	
CITS F241	Networking and LAN Infrastructure Basics	
CITS F242	Routing and Switching Essentials	
CITS F243	Intermediate Networking and LAN Infrastructure	
CITS F244	Advanced Network Infrastructure Services	
CITS F262	Cybersecurity Defense and Countermeasures	
CITS F263	Network Security Penetration Testing	
CITS F265	Directory Services Administration	
CITS F282	IT Troubleshooting Skills	
CITS F289	Information Technology: Topics	

## NETWORK AND CYBERSECURITY

Code	Title	Credits
Complete the following:		
CITS F241	Networking and LAN Infrastructure Basics	4
CITS F242	Routing and Switching Essentials	4
CITS F243	Intermediate Networking and LAN Infrastructure	4
CITS F244	Advanced Network Infrastructure Services	4
CITS F262	Cybersecurity Defense and Countermeasures	3
CITS F263	Network Security Penetration Testing	3

## NETWORK AND SYSTEM ADMINISTRATION

Code	Title	Credits
Complete the following:		
CITS F240	System and Network Services Administration	3
CITS F241	Networking and LAN Infrastructure Basics	4
CITS F242	Routing and Switching Essentials	4
CITS F243	Intermediate Networking and LAN Infrastructure	4

CITS F244	Advanced Network Infrastructure Services	4
CITS F265	Directory Services Administration	3

**Note:** Upon admission to the certificate or degree program, each student will be assigned a mentor/committee chair who will be responsible for determining the student's current level of competency in the various skill areas; assisting the student in determining the courses/experiences necessary for gaining competency in the deficient skill areas; setting up the student's committee to consist of the mentor and at least one other individual who may be a UA faculty member, an adjunct faculty member, or an expert in the student's community; arranging for practical experiences in the student's community; and organizing the committee's final assessment of the student's work and recommending award of the certificate or degree.