

A.A.S., INFORMATION TECHNOLOGY SPECIALIST

Program Requirements

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

Minimum Requirements for Information Technology Specialist A.A.S.: 60 credits

CONCENTRATIONS: COMPUTING TECHNOLOGY (P. 1), NETWORK AND CYBERSECURITY (P. 1), AND NETWORK AND SYSTEM ADMINISTRATION (P. 1)

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (https://catalog.uaf.edu/archives/2020-2021/certificates-associate/) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (https://catalog.uaf.edu/archives/2020-2021/certificates-associate/summary-of-certificate-and-associate-degree-requirements/#associateofappliedsciencetext) ¹ | | |
| Information Technology Specialist Program Requirements | | |
| CITS F204 | Introduction to Computer Networks | 3 |
| CITS F205 | Introduction to Coding and Programming | 3 |
| or CS F103 | Introduction to Computer Programming | |
| or 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.²

¹ As part of the A.A.S. degree requirements, complete MATH 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.

² 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 | Operating Systems Support | |
| CITS F203 | Information Technology Support Fundamentals | |
| CITS F219 | 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.