

# Information Technology Specialist

College of Rural and Community Development  
 Bristol Bay Campus (907) 842-5109  
 Chukchi Campus (907) 442-3400  
 Interior-Aleutians Campus (907) 474-5439  
 Kuskokwim Campus (907) 543-4500  
 Northwest Campus (907) 443-2201  
 Tanana Valley Campus (907) 455-2800  
[www.tvc.uaf.edu/its/](http://www.tvc.uaf.edu/its/)

## Certificate; A.A.S. Degree

Minimum Requirements for Certificate: 32–33 credits; for A.A.S. Degree: 60 credits

The certificate program trains students in essential skills required to effectively use and troubleshoot computer systems in educational, governmental and corporate settings. The certificate program is also designed to enable students to continue their education in the Information Technology Specialist A.A.S. or the Applied Business A.A.S. degree program.

The A.A.S. degree program builds on the certificate program through additional general education and skill development in information technology services. Students completing the A.A.S. degree are qualified for more advanced positions such as the state of Alaska’s microcomputer/network specialist I and II.

As computer complexity increases, more and more employers are looking for workers with specific training in computer technology and support skills. The state of Alaska’s microcomputer/network technician I and II are examples of such positions. Students not interested in employment opportunities may enroll in these programs to improve their computer skills.

Minimum computer knowledge is required for admission to either program. An individualized program of courses, projects, readings, practica and other activities is designed with the help of a faculty mentor based on the student’s background and skill level. Students must achieve competency in applications, networking, troubleshooting, hardware and software configuration, and human relations and support.

This degree program is delivered collaboratively within the UA system.

## Certificate Program

- Complete the general university requirements (page 83).
- Complete the following certificate requirements:  
 ENGL 111X—Introduction to Academic Writing (3)  
     or ABUS 170—Business English (3)  
     or approved applied written communication course..... 3  
 ABUS 155—Business Math (2)  
     or approved math course at the 100-level or above (3)..... 3  
 ABUS 154—Human Relations  
     or approved human relations course ..... 3
- Complete the following core courses\*:  
 CIOS 128—Using and Configuring PC Operating Systems  
     or CIOS 110—Microcomputer Operating Systems\*\* ..... 3  
 CIOS 130—Microcomputer Word Processing ..... 3  
 CIOS 135—Microcomputer Spreadsheets..... 3  
 CIOS 146—Using Internet Tools and Technologies (3)  
     or CIOS 246—Implementing Internet Tools and Technologies. 3
- Complete 9 credits from the following (or demonstrate competency)\*:  
 CIOS 105—Computer Software Applications..... 3  
 CIOS 110—Microcomputer Operating Systems ..... 3  
 CIOS 133—Microcomputer Presentation Software..... 3

- CIOS 210—Hardware and Software Configuration and Troubleshooting ..... 3
  - CIOS 233—Desktop Publishing..... 3
  - CIOS 240—Microcomputer Databases..... 3
  - CIOS 246—Implementing Internet Tools and Technologies ..... 3
  - CIOS 251—Integrated Software ..... 3
  - CIOS 255—Microcomputer Graphics..... 3
  - CIOS 256—Internet Authoring and Design..... 3
  - CIOS 275—Information Technology: Special Topics \*\*\*\* ..... 3
- Complete CIOS electives ..... 3
  - Pass a certification review of the following skill areas:  
 Application Skills  
 Operating System Skills  
 Hardware Skills  
 Networking Skills  
 Troubleshooting Skills
  - Minimum credits required ..... 32-33

## Major—A.A.S. Degree

- Complete the general university requirements (page 83).
- Complete the A.A.S. degree requirements. (See page 87. As part of the human relations requirement complete ABUS 154 or approved human relations course.)
- Complete the following core courses\*:  
 CIOS 110—Microcomputer Operating Systems\*\* (3)  
     or CIOS 212—Advanced Microcomputer Operating Systems ..... 3  
 CIOS 210—Hardware and Software Configuration and Troubleshooting\*\*\* ..... 3  
 CIOS 211—Computer Technical Support\*\*\* ..... 3  
 CIOS 244—Introduction to Network Support and Administration (3)  
     or CIOS 245—Introduction to Networking and LAN Infrastructure\*\*\* (4)  
     or CIOS 247—Advanced Networking and Communications..... 3  
 CIOS 276—Independent Project\*\*\*  
     or CIOS 282—Cooperative Work Experience\*\*\* ..... 3
- Complete 15 credits from the following degree (major) requirements (or demonstrate competency)\*:  
 CIOS 105—Computer Software Applications\*\*\*\* ..... 3  
 CIOS 130—Microcomputer Word Processing ..... 3  
 CIOS 133—Microcomputer Presentation Software..... 3  
 CIOS 135—Microcomputer Spreadsheets..... 3  
 CIOS 146—Using Internet Tools and Technologies..... 3  
 CIOS 212—Advanced Microcomputer Operating Systems..... 3  
 CIOS 214—IT Troubleshooting Skills..... 3  
 CIOS 215—Information Technology Certification I ..... 3  
 CIOS 216—Information Technology Certification II..... 3  
 CIOS 217—Information Technology Certification III..... 3  
 CIOS 218—Information Technology Certification IV..... 3  
 CIOS 233—Desktop Publishing..... 3  
 CIOS 234—Advanced Desktop Publishing..... 3  
 CIOS 240—Microcomputer Databases..... 3  
 CIOS 242—Advanced Databases..... 3  
 CIOS 245—Networking and LAN Infrastructure Basics..... 4  
 CIOS 246—Implementing Internet Tools and Technologies ..... 3  
 CIOS 247—Advanced Networking and Communications..... 3  
 CIOS 249—Routers and Routing Basics ..... 4  
 CIOS 251—Integrated Software ..... 3  
 CIOS 255—Microcomputer Graphics..... 3  
 CIOS 256—Internet Authoring and Design..... 3  
 CIOS 257—Digital Video ..... 3  
 CIOS 258—Digital Photography..... 3  
 CIOS 270—Microcomputer Programming ..... 3  
 CIOS 271—Web Databases and Programming ..... 3  
 CIOS 275—Information Technology: Special Topics \*\*\*\* ..... 3



5. Complete CIOS electives\* .....9
6. Complete general electives (may be CIOS courses) .....6
7. Pass a certification review of the following skill areas:  
 Application Skills  
 Operating Systems Skills  
 Hardware Skills  
 Networking Skills  
 Troubleshooting Skills  
 Independent Thinking Skills  
 Human Relations and Support Skills  
 Professional Practices  
 Project Management and Implementation
8. Minimum credits required .....60

\* Student must earn a C grade or better in each course.

\*\* May be satisfied through credit by exam or prior learning.

\*\*\* May not be satisfied through credit by exam or prior learning under any circumstances and constitutes a culminating experience for the course sequence.

\*\*\*\* May be repeated for different topics.

*Note: Upon admission to the certificate or degree program, each student will be assigned a mentor/committee chairperson 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 practica 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.*

*Note: A 9 credit core sequence, required of all students no matter what their level of expertise, will be assessed by a committee of permanent and adjunct faculty for the final granting of the certificate or degree.*

