Information Technology Specialist

College of Rural and Community Development
Bristol Bay Campus 907-842-3109
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/

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.

Certification Program

1. Complete the general university requirements (page 86).
2. Complete the following certificate requirements:
   - ENGL F111X—Introduction to Academic Writing (3)
   - or ABUS F170—Business English (3)
   - or approved application communication course ..........3
   - ABUS F155—Business Math (2)
   - or approved math course at the 100-level or above (3) ..........3
   - ABUS F154—Human Relations
   - or approved human relations course .................................3
3. Complete the following core courses*:
   - CIOS F128—Using and Configuring PC Operating Systems
   - or CIOS F110—Microcomputer Operating Systems** ..........3
   - CIOS F130—Microcomputer Word Processing .....................3
   - CIOS F135—Microcomputer Spreadsheets ..........................3
   - CIOS F146—Using Internet Tools and Technologies (3)
   - or CIOS F246—Implementing Internet Tools and Technologies .................................................3
4. Complete 9 credits from the following (or demonstrate competency)*:
   - CIOS F105—Computer Software Applications .....................3
   - CIOS F110—Microcomputer Operating Systems .................3
   - CIOS F133—Microcomputer Presentation Software .............3
   - CIOS F210—Hardware and Software Configuration and Troubleshooting .................................3
   - CIOS F233—Desktop Publishing ....................................3
   - CIOS F240—Microcomputer Databases ...........................3
   - CIOS F246—Implementing Internet Tools and Technologies ....3
   - CIOS F250—Integrated Software .................................3
   - CIOS F255—Microcomputer Graphics ............................3
   - CIOS F256—Internet Authoring and Design ......................3
   - CIOS F275—Information Technology: Special Topics **** ..3
5. Complete CIOS electives .....................................................3
6. Pass a certification review of the following skill areas:
   - Application Skills
   - Operating System Skills
   - Hardware Skills
   - Networking Skills
   - Troubleshooting Skills
7. Minimum credits required ..............................................32-33
Major — A.A.S. Degree

1. Complete the general university requirements (page 86).
2. Complete the A.A.S. degree requirements. (See page 90. As part of the human relations requirement complete ABUS F154 or approved human relations course.)
3. Complete the following core courses:*  
   CIOS F105—Computer Software Applications**** ............................3  
   or CIOS F130—Microcomputer Operating Systems** (3)  
   CIOS F133—Microcomputer Presentation Software ..........................3  
   CIOS F135—Microcomputer Spreadsheets ...................................3  
   CIOS F146—Using Internet Tools and Technologies ..................3  
   CIOS F212—Advanced Microcomputer Operating Systems .........3  
   CIOS F214—IT Troubleshooting Skills .......................................3  
   CIOS F215—Information Technology Certification I ..................3  
   CIOS F216—Information Technology Certification II .................3  
   CIOS F217—Information Technology Certification III ...............3  
   CIOS F218—Information Technology Certification IV ...............3  
   CIOS F233—Desktop Publishing ..................................................3  
   CIOS F234—Advanced Desktop Publishing .................................3  
   CIOS F240—Microcomputer Databases .......................................3  
   CIOS F242—Advanced Databases ..............................................3  
   CIOS F244—Introduction to Networking and Communications ..........3  
   or CIOS F245—Advanced Networking and Communications ........3  
   or CIOS F246—Implementing Internet Tools and Technologies ....3  
   CIOS F247—Advanced Networking and Communications ..............3  
   or CIOS F249—Routers and Routing Basics .................................3  
   CIOS F255—Microcomputer Graphics ..........................................3  
   CIOS F256—Internet Authoring and Design ...............................3  
   CIOS F257—Digital Video ................................................................3  
   CIOS F258—Digital Photography ................................................3  
   CIOS F270—Microcomputer Programming ...................................3  
   CIOS F271—Web Databases and Programming ............................3  
   CIOS F273—Information Technology: Special Topics **** ........3  
   or CIOS F247—Advanced Networking and Communications ........3  
   or CIOS F245—Introduction to Networking and Communications ..........3  
   or CIOS F244—Introduction to Network Support and Administration(3)  
   or CIOS F249—Routers and Routing Basics .................................3  
   or CIOS F256—Internet Authoring and Design ...............................3  
   or CIOS F257—Digital Video ................................................................3  
   or CIOS F258—Digital Photography ................................................3  
   or CIOS F270—Microcomputer Programming ...................................3  
   or CIOS F271—Web Databases and Programming ............................3  
   or CIOS F273—Information Technology: Special Topics **** ........3

4. Complete 15 credits from the following degree (major) requirements (or demonstrate competency):*  
   CIOS F105—Computer Software Applications**** .......................3  
   CIOS F130—Microcomputer Operating Systems** (3)  
   CIOS F133—Microcomputer Presentation Software ..........................3  
   CIOS F135—Microcomputer Spreadsheets ...................................3  
   CIOS F146—Using Internet Tools and Technologies ..................3  
   CIOS F212—Advanced Microcomputer Operating Systems .........3  
   CIOS F214—IT Troubleshooting Skills .......................................3  
   CIOS F215—Information Technology Certification I ..................3  
   CIOS F216—Information Technology Certification II .................3  
   CIOS F217—Information Technology Certification III ...............3  
   CIOS F218—Information Technology Certification IV ...............3  
   CIOS F233—Desktop Publishing ..................................................3  
   CIOS F234—Advanced Desktop Publishing .................................3  
   CIOS F240—Microcomputer Databases .......................................3  
   CIOS F242—Advanced Databases ..............................................3  
   CIOS F244—Introduction to Networking and Communications ..........3  
   or CIOS F245—Advanced Networking and Communications ........3  
   or CIOS F246—Implementing Internet Tools and Technologies ....3  
   CIOS F247—Advanced Networking and Communications ..............3  
   or CIOS F249—Routers and Routing Basics .................................3  
   CIOS F255—Microcomputer Graphics ..........................................3  
   CIOS F256—Internet Authoring and Design ...............................3  
   CIOS F257—Digital Video ................................................................3  
   CIOS F258—Digital Photography ................................................3  
   CIOS F270—Microcomputer Programming ...................................3  
   CIOS F271—Web Databases and Programming ............................3  
   CIOS F273—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.