The certificate program prepares students with the entry-level skills required to provide microcomputer support in a variety of educational, governmental and corporate environments, or to begin their own enterprises in microcomputer support.

The A.A.S. degree program builds on the certificate program to provide additional general education and skill development in microcomputer support, qualifying students for more advanced positions like the state of Alaska's Microcomputer/Network Specialist I and II.

As computer complexity increases, more and more employers are voicing the need for employees with specific training in computer technology and people support skills. The state of Alaska's positions of Microcomputer/Network Technician I and II are examples of the types of positions for which certified personnel would be qualified. Other students, not interested in such employment, may enroll in these programs to improve their computer skills.

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

**UNDERGRADUATE PROGRAM**

**MAJOR**

**Information Technology Specialist—Certificate**

1. Complete the certificate requirements (page 30).
2. Complete the following (or demonstrate competency):
   - ENGL 111X—Introduction to Academic Writing (3)
   - CIOS 110—Microcomputer Operating Systems** (3)
   - CIOS 116—Business Math Using Calculators (3)
   - CIOS 154—Human Relations (3)
   - CIOS 160—Business English (3)
   - CIOS 166—Business English (3)
   - CIOS 167—Business Math (2)
   - CIOS 168—Business Math Using Calculators (3)
   - CIOS 170—Computer Technical Support*** (3)
   - CIOS 210—Hardware and Software Configuration and Troubleshooting*** (3)
   - CIOS 212—Advanced Microcomputer Operating Systems (3)
   - CIOS 211—Advanced Microcomputer Operating Systems (3)
   - CIOS 217—Information Technology Certification I (3)
   - CIOS 218—Information Technology Certification II (3)
   - CIOS 219—Information Technology Certification III (3)
   - CIOS 220—Information Technology Certification IV (3)
   - CIOS 221—Information Technology Certification V (3)
   - CIOS 222—Information Technology Certification VI (3)
   - CIOS 223—Desktop Publishing (3)
   - CIOS 224—Advanced Desktop Publishing (3)
   - CIOS 225—Microcomputer Graphics (3)
   - CIOS 226—Internet Authoring and Design (3)
   - CIOS 227—Microcomputer Programming (3)
   - CIOS 228—Cooperative Work Experience*** (3)

3. Complete the following core courses:
   - CIOS 110—Microcomputer Operating Systems** (3)
   - CIOS 116—Business Math Using Calculators (3)
   - CIOS 154—Human Relations (3)
   - CIOS 160—Business English (3)
   - CIOS 166—Business Math Using Calculators (3)
   - CIOS 170—Computer Technical Support*** (3)
   - CIOS 210—Hardware and Software Configuration and Troubleshooting*** (3)
   - CIOS 212—Advanced Microcomputer Operating Systems (3)
   - CIOS 217—Information Technology Certification I (3)
   - CIOS 218—Information Technology Certification II (3)
   - CIOS 219—Information Technology Certification III (3)
   - CIOS 220—Information Technology Certification IV (3)
   - CIOS 221—Information Technology Certification V (3)
   - CIOS 222—Information Technology Certification VI (3)
   - CIOS 223—Desktop Publishing (3)
   - CIOS 224—Advanced Desktop Publishing (3)
   - CIOS 225—Microcomputer Graphics (3)
   - CIOS 226—Internet Authoring and Design (3)
   - CIOS 227—Microcomputer Programming (3)
   - CIOS 228—Cooperative Work Experience*** (3)

4. Complete 9 credits from the following (or demonstrate competency):
   - CIOS 105—Computer Software Applications (3)
   - CIOS 130—Microcomputer Operating Systems (3)
   - CIOS 133—Microcomputer Presentation Software (3)
   - CIOS 135—Microcomputer Spreadsheets (3)
   - CIOS 146—Using the Internet (3)
   - CIOS 212—Advanced Microcomputer Operating Systems (3)
   - CIOS 217—Information Technology Certification I (3)
   - CIOS 218—Information Technology Certification II (3)
   - CIOS 219—Information Technology Certification III (3)
   - CIOS 220—Information Technology Certification IV (3)
   - CIOS 221—Information Technology Certification V (3)
   - CIOS 222—Information Technology Certification VI (3)
   - CIOS 223—Desktop Publishing (3)
   - CIOS 224—Advanced Desktop Publishing (3)
   - CIOS 225—Microcomputer Graphics (3)
   - CIOS 226—Internet Authoring and Design (3)
   - CIOS 227—Microcomputer Programming (3)
   - CIOS 228—Cooperative Work Experience*** (3)

5. Pass a certification review of the following skill areas:
   - Application Skills
   - Networking Skills
   - Hardware and Software Configuration and Troubleshooting Skills
   - Independent Thinking Skills
   - Human Relations and Support Skills

6. Minimum credits required ....................................................... 32-33

**Information Technology Specialist—A.A.S. Degree**

1. Complete the general university requirements (page 28).
2. Complete the A.A.S. degree requirements (page 31). (As part of the
   human relations requirement complete ABUS 154 or approved
   human relations course.)
3. Complete the following core courses:*  
   - CIOS 110—Microcomputer Operating Systems** (3)
   - CIOS 116—Business Math Using Calculators (3)
   - CIOS 154—Human Relations (3)
   - CIOS 160—Business English (3)
   - CIOS 166—Business Math Using Calculators (3)
   - CIOS 170—Computer Technical Support*** (3)
   - CIOS 210—Hardware and Software Configuration and Troubleshooting*** (3)
   - CIOS 212—Advanced Microcomputer Operating Systems (3)
   - CIOS 217—Information Technology Certification I (3)
   - CIOS 218—Information Technology Certification II (3)
   - CIOS 219—Information Technology Certification III (3)
   - CIOS 220—Information Technology Certification IV (3)
   - CIOS 221—Information Technology Certification V (3)
   - CIOS 222—Information Technology Certification VI (3)
   - CIOS 223—Desktop Publishing (3)
   - CIOS 224—Advanced Desktop Publishing (3)
   - CIOS 225—Microcomputer Graphics (3)
   - CIOS 226—Internet Authoring and Design (3)
   - CIOS 227—Microcomputer Programming (3)
   - CIOS 228—Cooperative Work Experience*** (3)

* Minimum credits required ....................................................... 32-33

The University of Alaska Fairbanks is accredited by the Commission on Colleges and Universities of the Northwest Association of Schools and Colleges. UAF is an affirmative action/equal opportunity employer and educational institution. 4/03
4. Complete 15 credits from the following degree (major) requirements (or demonstrate competency):*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS 105</td>
<td>Computer Software Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 130</td>
<td>Microcomputer Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 133</td>
<td>Microcomputer Presentation Software</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 135</td>
<td>Microcomputer Spreadsheets</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 146</td>
<td>Using the Internet</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 212</td>
<td>Advanced Microcomputer Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 215</td>
<td>Information Technology Certification I</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 216</td>
<td>Information Technology Certification II</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 217</td>
<td>Information Technology Certification III</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 218</td>
<td>Information Technology Certification IV</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 233</td>
<td>Desktop Publishing</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 234</td>
<td>Advanced Desktop Publishing</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 240</td>
<td>Microcomputer Databases</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 242</td>
<td>Advanced Databases</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 246</td>
<td>Advanced Internet</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 247</td>
<td>Advanced Networking and Communications</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 251</td>
<td>Integrated Software</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 255</td>
<td>Microcomputer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 256</td>
<td>Internet Authoring and Design</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 270</td>
<td>Microcomputer Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIOS 275</td>
<td>Information Technology: Special Topics</td>
<td>3</td>
</tr>
</tbody>
</table>

5. Complete CIOS electives* ................................................. 6

6. Complete general electives (may be CIOS courses) ............................................. 6

7. Pass a certification review of the following skill areas:
   Application Skills
   Networking Skills
   Hardware and Software Configuration and Troubleshooting Skills
   Independent Thinking Skills
   Human Relations and Support Skills

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 constitute 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.