South Central College
Program Design

AAS 3277 Networking Services

Program Information

Instructional Level  Associate Degree
Career Cluster  Arts, Communications, & Information Systems

Description
This program prepares the learner with the core skills necessary for a technical support position with a focus on networking services. Training is emphasized in the areas of installing, maintaining, and troubleshooting personal computers, computer networks, and peripheral devices utilizing current industry hardware and software products. Learners also receive an orientation on IBM mid-range and mainframe computer systems that are frequently integrated into corporate networks. Hands-on labs are included in the curriculum to give learners exposure to current and upcoming technology.

Program Admission Dates (Fall and/or Spring)
Fall and Spring

Program Location (North Mankato and/or Faribault)
North Mankato

Program Student Learning Outcomes
1  Design and administer computer networks.
2  Maintain and repair personal computer systems.
3  Support common business application software.
4  Support current computer operating systems.

Program Configurations

Fall Starts

Credits

<table>
<thead>
<tr>
<th>Technical Course</th>
<th>25</th>
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</thead>
<tbody>
<tr>
<td>Liberal Arts &amp; Sciences</td>
<td>15</td>
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<tr>
<td>Elective</td>
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Total Credits 60

Semester 1
<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Function</th>
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<tbody>
<tr>
<td>COMP 1200</td>
<td>Hardware and Software Essentials</td>
<td>4</td>
<td>Technical Course</td>
</tr>
<tr>
<td>COMM Choice</td>
<td>COMM110 or COMM120 or COMM140</td>
<td>3</td>
<td>Liberal Arts &amp; Sciences</td>
</tr>
<tr>
<td>COMP 1140</td>
<td>Web For Business</td>
<td>3</td>
<td>Technical Course</td>
</tr>
<tr>
<td>COMP1120</td>
<td>Foundations of Computing</td>
<td>4</td>
<td>Technical Course</td>
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**Semester 2**

<table>
<thead>
<tr>
<th>Course #</th>
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<th>Function</th>
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<tbody>
<tr>
<td>COMP 1360</td>
<td>Introduction to Data Communications and Networking</td>
<td>4</td>
<td>Technical Course</td>
</tr>
<tr>
<td>ENGL Choice</td>
<td>ENGL100 or ENGL240</td>
<td>4</td>
<td>Liberal Arts &amp; Sciences</td>
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<tr>
<td>COMP1125</td>
<td>Spreadsheet/Database Integration</td>
<td>4</td>
<td>Technical Course</td>
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<tr>
<td>COMP1130</td>
<td>Programming Fundamentals</td>
<td>4</td>
<td>Technical Course</td>
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**Semester 3**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Function</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Additional LAS Course not from MnTC Goal Areas 1 or 4</td>
<td>4</td>
<td>Liberal Arts &amp; Sciences</td>
</tr>
<tr>
<td>COMP Choice</td>
<td>Select a course from the following: COMP2460, COMP2462, COMP2453, COMP2145, COMP2300</td>
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<td>Select a course from the following: COMP2460, COMP2462, COMP2453, COMP2145, COMP2300</td>
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**Semester 4**

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<th>Function</th>
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</thead>
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<tr>
<td>COMP2498</td>
<td>Capstone - Networking Services</td>
<td>2</td>
<td>Technical Course</td>
</tr>
<tr>
<td>COMP Choice</td>
<td>Select a course from the following: COMP2466, COMP2475, COMP2456, COMP2452, COMP2500, COMP2150, COMP2312</td>
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<td>COMP Choice</td>
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<td>MATH Choice</td>
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### Spring Starts

#### Credits

<table>
<thead>
<tr>
<th>Category</th>
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<tbody>
<tr>
<td>Technical Course</td>
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<tr>
<td>Liberal Arts &amp; Sciences</td>
<td>15</td>
</tr>
<tr>
<td>Elective</td>
<td>16</td>
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<tr>
<td><strong>Total Credits</strong></td>
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#### Semester 1

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<tbody>
<tr>
<td>COMP 1200</td>
<td>Hardware and Software Essentials</td>
<td>4</td>
<td>Technical Course</td>
</tr>
<tr>
<td>COMP 1140</td>
<td>Web For Business</td>
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<tr>
<td>COMP 1120</td>
<td>Foundations of Computing</td>
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#### Semester 2

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<th>Credits</th>
<th>Function</th>
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<td>Introduction to Data Communications and Networking</td>
<td>4</td>
<td>Technical Course</td>
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<td>ENGL Choice</td>
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<td>Spreadsheet/Database Integration</td>
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<td>Technical Course</td>
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<tr>
<td>COMP 1130</td>
<td>Programming Fundamentals</td>
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<td>Technical Course</td>
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<td>Select a course from the following: COMP2466, COMP2475, COMP2456, COMP2452, COMP2500, COMP2150, COMP2312</td>
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<th>Function</th>
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<td>COMP Choice</td>
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<td>4</td>
<td>Elective</td>
</tr>
<tr>
<td>COMP Choice</td>
<td>Select a course from the following: COMP2460, COMP2462, COMP2453, COMP2145, COMP2300</td>
<td>4</td>
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</tr>
<tr>
<td>MATH Choice</td>
<td>MATH115 or MATH120</td>
<td>4</td>
<td>Liberal Arts &amp; Sciences</td>
</tr>
<tr>
<td>COMP2498</td>
<td>Capstone - Networking Services</td>
<td>2</td>
<td>Technical Course</td>
</tr>
</tbody>
</table>

### Program Course List

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Credits</th>
<th>Pre/Corequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 1140</td>
<td>Web For Business</td>
<td>3</td>
<td>None</td>
</tr>
<tr>
<td>COMP 1200</td>
<td>Hardware and Software Essentials</td>
<td>4</td>
<td>(Skill) - Basic Windows navigation; Click, Double-click, etc. (Skill) - Internet usage such as email, internet searching, etc. (Skill) - Window Explorer, such as file organization, searches, etc.</td>
</tr>
<tr>
<td>COMP 1360</td>
<td>Introduction to Data Communications and Networking</td>
<td>4</td>
<td>None.</td>
</tr>
<tr>
<td>COMP 2300</td>
<td>Java</td>
<td>4</td>
<td>Successful completion of COMP1130 Programming Fundamentals (with a C grade or higher), or a working knowledge of another programming language. Note: Prerequisites ensure that you are at the correct learning level for the course. Please feel free to contact the instructor to help you determine your expertise level if you have not completed the prerequisite courses.</td>
</tr>
<tr>
<td>COMP 2312</td>
<td>Software Development</td>
<td>4</td>
<td>Successful completion of COMP1130 Programming Fundamentals with a C grade or higher, or a working knowledge of at least one programming language.</td>
</tr>
<tr>
<td>COMP 2452</td>
<td>Information Storage and Management</td>
<td>4</td>
<td>COMP 1200 Hardware and Software Essentials</td>
</tr>
<tr>
<td>COMP 2453</td>
<td>Virtualization Technologies</td>
<td>4</td>
<td>COMP 1200 Hardware and Software Essentials</td>
</tr>
<tr>
<td>COMP 2456</td>
<td>Cloud Technologies and Services</td>
<td>4</td>
<td>COMP 1200 Hardware and Software Essentials</td>
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<td>COMP 2460</td>
<td>Linux Administration</td>
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<td>COMP 1200</td>
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<td>Credits</td>
<td>Prerequisites</td>
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<tr>
<td>COMP 2462</td>
<td>Microsoft Administration</td>
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<td>COMP 1360</td>
</tr>
<tr>
<td>COMP 2466</td>
<td>Routing &amp; Switching</td>
<td>4</td>
<td>COMP 1360</td>
</tr>
<tr>
<td>COMP 2475</td>
<td>Security Basics</td>
<td>4</td>
<td>COMP 1360</td>
</tr>
<tr>
<td>COMP 2498</td>
<td>Capstone - Networking Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 240</td>
<td>Technical Communication</td>
<td>4</td>
<td>ENGL 100 or a score of 104 or higher on the sentence skills portion of the Accuplacer test.</td>
</tr>
<tr>
<td>MATH 115</td>
<td>Concepts in Mathematics</td>
<td>4</td>
<td>MATH 0085 with a grade of C or higher, or a score of 76 or higher on the Elementary Algebra portion of the Accuplacer test.</td>
</tr>
<tr>
<td>MATH 120</td>
<td>College Algebra</td>
<td>4</td>
<td>Completion of MATH 0085 with a grade of C or higher, or an Accuplacer test score of 56 in Elementary Algebra and a score of 50 in College Level Mathematics. MNTC 4: Mathematical/Logical Reasoning</td>
</tr>
</tbody>
</table>