In 2014, St. Louis businesses submitted 369 job opportunities for graduates from the Information Technology Division to Ranken’s job placement service.
The Information Technology (IT) division at Ranken Technical College offers students an unparalleled education and intensive hands-on experience to prepare them for successful, fast-track careers.

Ranken’s IT programs offer flexibility in designing a career that’s right for you. All IT students begin in a common first semester that focuses on desktop operating systems and teaches students how to use the computer and networks as resources. Students spend time learning the unique features and benefits of each career field available to them and may choose between four track options offering specialized training. Courses offered are industry-driven, using Cisco Network Academy, NetApp Partner Academy, Microsoft IT Academy and CompTIA Academy course curriculum.

**INTERNET AND WEB-BASED TECHNOLOGY**
Focusing on Internet and Web-based programming with experience in Web design, students will utilize industry-standard applications such as Microsoft’s Visual Studio and Adobe DreamWeaver® and learn hand-coded HTML, CSS, JavaScript, T-SQL and the Microsoft® .NET framework. Students will use a variety of programming languages to design, develop and maintain software applications to help businesses solve real-world problems and discover new opportunities via data-driven Web-based applications.

Upon completion of this program, students will be able to:
- Develop and design websites that use the latest versions of HTML, CSS, JavaScript and modern JavaScript libraries
- Utilize object-oriented programming principles and fundamentals to develop, troubleshoot and implement applications in both Java and C# programming languages
- Develop web-based applications using traditional .NET Framework, MVC.NET, and .NET web services
- Create data driven applications that utilize a SQL Server database

**NETWORK ARCHITECTURE AND DESIGN TECHNOLOGY**
In this hardware-centered program, students will work with Cisco® equipment, program and configure routers and switches, study wireless local area network (LAN) configurations and security and firewall issues, voice over IP (VOIP) technology and virtual LANs (VLANs). Students will be prepared for the Cisco Certified Network Associate (CCNA™) certification test. Upon completion of this program, students will be able to:
- Design, configure and troubleshoot networks using Cisco routing and switching protocols
- Install, configure and troubleshoot desktop operating systems, PCs and peripherals

**NETWORK AND DATABASE ADMINISTRATION TECHNOLOGY**
Software-centered, this track focuses on Microsoft Server for network services, network infrastructure and Active Directory, Microsoft Structured Query Language (SQL) for database configuration and services and network virtualization using ESXi, VCenter Server and VMware. Students will be prepared to achieve the Microsoft Certified Technology Specialist (MCTS) certification and VMware Certified Professional (VCP) certification.

Upon completion of this program, students will be able to:
- Install, configure, maintain and troubleshoot Microsoft enterprise-level servers and databases
- Install, configure and troubleshoot desktop operating systems, PCs and peripherals
- Support data centers by implementing high availability and disaster recovery technologies
- Maintain group policies by configuring, monitoring and troubleshooting Active Directory configurations
- Implement and manage enterprise-level virtual environments

**NETWORK SYSTEMS MANAGEMENT TECHNOLOGY**
Featuring elements of network and database administration and network architecture technology, this track will focus on configuring Cisco routers. Students will also study Microsoft Server, including Active Directory services and network infrastructure. Students will be prepared for the Cisco Certified Network Associate (CCNA) certification test. Upon completion of this program students will be able to:
- Implement static and dynamic routing protocols using Cisco routers
• Implement switching technologies such as VLANs, Spanning Tree Protocol (STP), Inter-VLAN routing and VLAN Trunking Protocol (VTP)
• Install/configure Small Office/Home Office wireless network using Linksys wireless routers and clients
• Implement inter-VLAN routing using Cisco switches and routers
• Install/configure wide-area network (WAN) technologies such as Frame Relay and PPP
• Configure basic networking security strategies to protect corporate networks
• Implement IPv6 addresses on new/existing networks
• Install and configure enterprise-level servers
• Implement high availability and disaster recovery
• Support data centers
• Create and maintain group policy
• Configure, monitor and troubleshoot Active Directory configurations

ASSOCIATE OF TECHNOLOGY OR ASSOCIATE OF SCIENCE
The various track options offer students the opportunity to design and build networks and websites. Students receive intense hands-on lab time, spending three hours in the lab working with equipment and technology to one hour in classroom theory. Class sizes are small, usually with no more than two students to every piece of equipment. Lab exercises focus on troubleshooting and working through real-world situations and problems, so students can be confident they are prepared to work in the fast-paced IT field. Leading industry Cisco and Microsoft testing and certifications are also integrated into the course curriculum. Perhaps one of the biggest advantages of Ranken’s IT program is that students learn to think and solve problems. We teach students how to be continual learners—a “must-have” in today’s rapidly changing IT field. Based on our strong industry relationships and advisory board input, our programs are flexible enough to quickly incorporate cutting edge technology. Graduates of Ranken’s IT programs work at companies such as Anheuser-Busch, Emerson, Enterprise, BJC Healthcare, Charter Communications, AT&T, IBM and the Lindbergh School District.
DAY PROGRAM COURSES

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td>CNT1100</td>
<td>Operating Systems</td>
<td>15</td>
<td>MTH1100 or MTH1110 (Co. Req.)</td>
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<tr>
<td>Second Semester (Internet and Web-based Technology)</td>
<td>IWT1229</td>
<td>Web Development and Design Foundation</td>
<td>14</td>
<td>CNT1100</td>
</tr>
<tr>
<td>Second Semester (All other tracks)</td>
<td>CNT1210</td>
<td>Microcomputer Hardware and Peripherals</td>
<td>7</td>
<td>CNT1100</td>
</tr>
<tr>
<td>Third and Fourth Semester (Network and Web-based Technology)</td>
<td>IWT1227</td>
<td>Java Programming</td>
<td>7</td>
<td>IWT1229</td>
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<tr>
<td></td>
<td>IWT2130</td>
<td>Web Databases</td>
<td>7</td>
<td>IWT1229</td>
</tr>
<tr>
<td></td>
<td>IWT2200</td>
<td>.NET Framework</td>
<td>15</td>
<td>IWT1229</td>
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<tr>
<td>Third and Fourth Semester (Network)</td>
<td>CNT2027</td>
<td>Advanced Networking and Internetworking Infrastructure Technologies Theory</td>
<td>5</td>
<td>CNT1210,CNT1221</td>
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<tr>
<td></td>
<td>CNT2028</td>
<td>Advanced Networking and Internetworking Infrastructure Lab</td>
<td>8</td>
<td>CNT1210,CNT1221</td>
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<tr>
<td></td>
<td>INF2200</td>
<td>Cyber Security and Voice over IP</td>
<td>13</td>
<td>CNT1210, CNT1221</td>
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<tr>
<td>Third and Fourth Semester (Network and Database Administration)</td>
<td>INF2010</td>
<td>Network Virtualization</td>
<td>7</td>
<td>CNT1210,CNT1221</td>
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<tr>
<td></td>
<td>INF2026</td>
<td>Microsoft Network Administration II</td>
<td>7</td>
<td>CNT1210,CNT1221</td>
</tr>
<tr>
<td></td>
<td>INF2027</td>
<td>Microsoft Network Administration III</td>
<td>7</td>
<td>CNT1210, CNT1221</td>
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<tr>
<td>Third and Fourth Semester (Network and Systems Management and Technology)</td>
<td>CNT2027</td>
<td>Advanced Networking and Internetworking Infrastructure Technologies Theory</td>
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<td>CNT1210,CNT1221</td>
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<tr>
<td></td>
<td>CNT2028</td>
<td>Advanced Networking and Internetworking Infrastructure Lab</td>
<td>8</td>
<td>CNT1210,CNT1221</td>
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<td>INF2025</td>
<td>Microsoft Network Administration I</td>
<td>7</td>
<td>CNT1210,CNT1221</td>
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<tr>
<td></td>
<td>INF2026</td>
<td>Microsoft Network Administration II</td>
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<tr>
<td>Total Technical Credit Hours Required</td>
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<td></td>
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</table>

**Important Note:** Wentzville students may complete the first and second semester in any order and the third and fourth semester in any order, however, both the first and second semester must be complete before advancing to the third or fourth.

GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>English/Social Sciences</td>
<td>ENG1101</td>
<td>College Composition I</td>
<td>3</td>
<td>Placement Exam or ENG1099</td>
</tr>
<tr>
<td></td>
<td>ENG2102</td>
<td>College Composition II</td>
<td>3</td>
<td>ENG1101</td>
</tr>
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<td></td>
<td>COM1105</td>
<td>Oral Communications</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SOC1206</td>
<td>Principles of Sociology or</td>
<td>3</td>
<td>ENG1099 (Co. Req.)</td>
</tr>
<tr>
<td></td>
<td>PSY1206</td>
<td>Introduction to Psychology</td>
<td>3</td>
<td>ENG1099 (Co. Req.)</td>
</tr>
<tr>
<td>Mathematics/Science</td>
<td>MTH1110</td>
<td>Elementary Algebra and MTH1111 Intermediate Algebra or</td>
<td>6</td>
<td>Placement Exam or MTH1099</td>
</tr>
<tr>
<td></td>
<td>MTH1100</td>
<td>Elementary/Intermediate Algebra</td>
<td>3</td>
<td>Placement Exam</td>
</tr>
<tr>
<td>Business/Information Technology</td>
<td>BUS1000</td>
<td>Career Success Skills</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MNG1224</td>
<td>Automotive Service Management</td>
<td>3</td>
<td>ENG1099 (Co. Req.)</td>
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<tr>
<td>Associate of Science</td>
<td>MTH2112</td>
<td>College Algebra</td>
<td>3</td>
<td>MTH1100 or MTH1111</td>
</tr>
<tr>
<td>Additional Required Courses</td>
<td>MTH2220</td>
<td>Trigonometry</td>
<td>3</td>
<td>MTH2112</td>
</tr>
<tr>
<td></td>
<td>PHY2230</td>
<td>College Physics</td>
<td>3</td>
<td>MTH2220</td>
</tr>
<tr>
<td></td>
<td>MTH2240</td>
<td>Survey of Calculus</td>
<td>3</td>
<td>MTH2112</td>
</tr>
</tbody>
</table>

**Important Note:** Only courses in which a grade of “C” or higher is earned may be applied toward this Ranken degree.

**COURSE DESCRIPTIONS**

**CNT1100 Operating Systems**
Provides a comprehensive overview of Command Line, Microsoft Windows operating systems. Students will learn to install, configure and deploy desktop operating systems in various environments including VMWare workstations. Students will work with partitioning, formatting, directory structures, file management, memory resident programs, device drivers, batch files, configuration files and remote recovery consoles. Students will learn to use a command line interface for troubleshooting and system recovery. Students spend time installing and upgrading each operating system while gaining an in-depth understanding of Microsoft Windows optimization, customization, client-side network setup, peer-to-peer networking, printing, resource sharing, policies, profiles, administration, security and remote administration. Students will be prepared as a Microsoft Certified Technology Specialist (MCTS). Fifteen credit hours.

**CNT1210 Microcomputer Hardware and Peripherals**
Offers an in-depth study of personal computers. Students spend time studying microcomputer subsystems including processors, memories and modern bus types. Students also study, install and configure the most common business-oriented peripheral devices. Students learn to build, configure and troubleshoot PCs and will be prepared for the CompTIA A+ certification exam. Seven credit hours.
**INF2025 Microsoft Network Administration I**

Offers a comprehensive overview of the Microsoft Network Operating Systems. Focus is placed on using the Windows Server operating system to provide networking services, such as user creation, file sharing, printer sharing, Domain Naming Services and remote access. Students also learn how to use the Microsoft Active Directory Services to provide networking services for larger-scale networks. **Seven credit hours.**

**INF2026 Microsoft Network Administration II**

Provides hands-on implementation of concepts studied in INF2025. Students design the layout to set up Active Directory Services for small and large networks, implement network plans by installing the Windows Network Operating System and configure servers to provide the proper networking services. **Seven credit hours.**

**INF2027 Microsoft Network Administration III**

This course focuses on advanced configuration of services necessary to deploy, manage and maintain a Windows Server 2012 infrastructure, such as advanced networking services, Active Directory Domain Services (AD DS), Active Directory Rights Management Services (AD RMS), Active Directory Federation Services (AD FS), Network Load Balancing, Failover Clustering, business continuity and disaster recovery services. Students will gain experience with access and information provisioning and protection technologies such as Dynamic Access Control (DAC), user-centric capabilities for anytime/anywhere services and software to strengthen both control and compliance in organizations that deploy the entire Microsoft System Center and Web Application Proxy integration with AD FS and Workplace Join. **Seven credit hours.**

**IWT1229 Web Development and Design Foundation**

This course includes the technologies needed to develop modern and highly effective websites. Students will obtain a comprehensive coverage of the latest HTML version, Cascading Style Sheets, Web Scripting technologies and Web design best practices while also learning about WordPress, accessibility, Web ethics, e-commerce, website promotion strategies, and mobile website development. With web-design-focused activities, hands-on exercises and real world projects, this course provides the skill sets that beginning web developers will need. **Fourteen credit hours.**

**IWT1227 Java Programming**

The students are introduced to object-oriented programming using the Java SDK and Eclipse software packages. The fundamentals of control structures, classes and the Old Development Paradigm are thoroughly covered before moving onto graphics and more powerful applications of the Java language. Students will be prepared for the Oracle Certified Java Associate certification. **Seven credit hours.**
EVENING PROGRAM CERTIFICATE IN COMPUTER NETWORKING TECHNOLOGY

Composed of a combination of computer desktop operating systems, Local Area Networking (LAN), Wide Area Networking (WAN) and microcomputer hardware, Ranken’s four-semester evening program leads to a Certificate in Computer Networking Technology.

The first two semesters of the program focus on preparing students to become A+ Certified technicians. The curriculum covers installation, configuration and troubleshooting of desktop computer systems.

During the second year, students are introduced to network devices and how they fit into the network. Using Cisco routers, students learn how to implement routing among the LAN protocol suites and across WANs. With the skills gained in this program, students are prepared to design, build and maintain small and medium-sized networks.

At the completion of the second year, students are eligible to earn Cisco® Certified Network Associate (CCNA™) certification. For students interested in furthering their education, these courses can be credited toward the Bachelor of Science in Applied Management (BSAM) degree.

ASSOCIATE OF APPLIED SCIENCE

Ranken is offering an Associate of Applied Science degree as a part of the evening program curriculum. You can earn your associate degree with a combination of Ranken’s standard evening school courses as well as our new online courses. You can also transfer credit from other accredited technical training programs, or have your technical work experience evaluated for possible transfer credit. (30 technical credit hours required for graduation.)

For all General Education course requirements, please turn to page 105. For more information about the BSAM degree, please turn to page 99.

<table>
<thead>
<tr>
<th>EVENING PROGRAM COURSES</th>
<th>HOURS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td>CNT0110 Command Line and Windows® Lab</td>
<td>6</td>
</tr>
<tr>
<td>Second Semester</td>
<td>CNT0120 Microcomputer Hardware and Peripherals</td>
<td>6</td>
</tr>
<tr>
<td>Third Semester</td>
<td>CNT0130 Data Communication and Basic Router Configuration</td>
<td>6 CNT0110, CNT0120</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td>CNT0230 Implementing Cisco® Networking Equipment and Wide Area Network (WAN) Router Configuration</td>
<td>6 CNT0130</td>
</tr>
<tr>
<td>Fifth Semester*</td>
<td>CNT306C Healthcare Information Networking</td>
<td>6 CNT0130</td>
</tr>
</tbody>
</table>

Total Technical Credit Hours for Certificate Completion 24

*I Semester is optional

IWT2130 Web Databases
Students will learn how to create database-driven websites, implementing the latest technologies to integrate databases with Web applications. Students will also learn the basic database concepts with special emphasis on hands-on learning skills necessary to implement XML databases on the Web.
At the completion of this course, students will be able to add a webpage database to an HTML page, manipulate data using SQL operations, publish both static and dynamic data on the Web, manipulate data on the Web using ADO RecordSets, convert text files to XML databases and query XML data using XQuery. Seven credit hours.

IWT2200 .NET Framework
The .NET Framework is an integral Windows component for building and running the next generation of software applications and Web services. This course focuses on using the ASP and C# programming languages within that framework. Emphasis will be given to the .NET architecture/design, data access, deployment and distribution. Fifteen credit hours.
COURSE DESCRIPTIONS

CNT0110 Command Line and Windows® Lab
Provides a comprehensive overview of Microsoft Windows operating systems. Students will work with partitioning, formatting, directory structures, file management, device drivers, batch files, configuration files and remote recovery consoles. Students will learn to use a command line interface for troubleshooting and system recovery. Students will spend time installing each operating system while gaining an in-depth understanding of Microsoft Windows optimizations, customization, client-side network configuration, peer-to-peer networking, printing, resource sharing, policies, profiles, administration, security and remote administration. Six credit hours.

CNT0120 Microcomputer Hardware and Peripherals
Offers an in-depth study of personal computers. Students spend time studying microcomputer subsystems, including: processors, memory and modern bus types. Students also study, install and configure the most common business oriented peripheral devices. Students learn to build, configure and troubleshoot personal computers. Students will be prepared for the CompTIA A+ certification exam. Six credit hours.

CNT0130 Data Communication and Basic Router Configuration
The semester begins with an introduction to the Internetworking model and the Transmission Control Protocol (TCP)/Internet Protocol (IP) protocol suite. Course will focus on networking fundamentals including the Open Systems Interconnection model and industry standards, networking layouts, IP addressing and basic network design. The second half of the semester students will examine basic beginning router configurations to learn how a Cisco router works and study how to configure and troubleshoot a Cisco router that is on a TCP/IP network. Students will also receive an introduction to local area network (LAN) switching. Six credit hours.

CNT0230 Implementing Cisco® Networking Equipment and Wide Area Network (WAN) Router Configuration
The course begins by building on skills learned in previous semesters and focuses on designing a local area network (LAN). Students learn advanced router configurations, local LAN switching, network management and advanced network design. Later in the semester, students are introduced to WAN concepts and cover advanced design considerations and protocol implementations, including how WANs are implemented on a Cisco Router. Six credit hours.

CNT306C Healthcare Information Networking
This course is designed to supplement Networking Academy core classes and help students prepare for 21st century careers in a healthcare environment. The Health Information Networking (HIN) course introduces students to IT fundamentals for healthcare organizations. Student will be introduced to basic information healthcare environment principles of security and privacy, fundamentals of electronic health record (EHR) systems and basic information on medical practice workflows and adjusting workflows for EHR implementation. Students in the HIN course will also learn how to design, secure and troubleshoot a network for a medical group. Six credit hours.

ADVANCED CISCO CERTIFIED NETWORK PROFESSIONAL (CCNP) CERTIFICATION TRAINING

Advanced training for Cisco Certified Network Professional (CCNP) certification is now available at Ranken Technical College. Our convenient evening classes are designed to help you work toward the next level in your certification goals. Ranken is not only a certified Cisco Networking Academy, but also the 2008 awardee of the prestigious Cisco “4R” award in the category of academic rigor.

The CCNP curriculum builds upon Cisco Certified Networking Associate (CCNA) courses, adding more complex network configurations, diagnosis and troubleshooting strategies.

These courses are designed for individuals wishing to become network engineers, network administrators and network technicians. Geared towards the working adult, classes are conveniently offered in the evening, meeting just twice a week, from 6 p.m. to 10 p.m.

Students may enroll in the CCNP program once they have successfully completed CCNA training within the Cisco Networking Academy or if they have a current CCNA certification.

<table>
<thead>
<tr>
<th>EVENING PROGRAM COURSES</th>
<th>HOURS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNT300C Implementing Cisco IP Routing</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CNT310C Implementing Cisco IP Switched Networks</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CNT320C Troubleshooting and Maintaining Cisco IP Networks</td>
<td>6</td>
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<td><strong>Total Technical Credit Hours Required for Certificate Completion</strong></td>
<td><strong>18</strong></td>
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</table>
**COURSE DESCRIPTIONS**

**CNT300C Implementing Cisco IP Routing**
In this course, students will learn how to configure Enhanced Interior Gateway Routing Protocol (EIGRP) across High Level Data Link Control (HDLC), Frame Relay, Multiprotocol Label Switching (MPLS), Virtual Private Network (VPN) and MPLS virtual circuits. Students will also configure Open Shortest Path First (OSPF) over HDLC, Frame Relay, PPT and over different Wide Area Network (WAN) links. Time will be spent implementing alternate routing path control, implementing Internet Protocol Version 6 (IPv6), analyzing branch office network designs and planning installations; and analyzing designs to support mobile workers and planning network modifications. *Six credit hours.*

**CNT310C Implementing Cisco IP Switched Networks**
This course covers the skills necessary to plan, configure and verify the implementation of complex enterprise switching solutions using Cisco’s Campus Enterprise Architecture including, Secure integration of Virtual Local Area Networks (VLAN), Wireless Local Area Networks (WLAN), voice and video into campus networks. *Six credit hours.*

**CNT320C Troubleshooting and Maintaining Cisco IP Networks**
In this course, students will learn to plan and perform regular maintenance on complex enterprise routed and switched networks and use technology-based practices and a systematic Information Technology Infrastructure Library (ITIL)-compliant approach to perform network troubleshooting. *Six credit hours.*

**EVENING PROGRAM CERTIFICATE IN MICROSOFT WINDOWS SERVER**

Students enrolled in the Microsoft Windows Server evening certificate program will take the CompTIA A+ exams after completing the Command Line and Windows® Lab and Microcomputer Hardware/Peripherals courses. Students will also take the Microsoft Windows Server 2008 Active Directory, Configuring (70-640) and the Microsoft Windows Server 2008 Network Infrastructure, Configuring (70-642) exam. After passing each Microsoft exam, the students will receive the Microsoft Certified Technology Specialist (MCTS) certification. Knowledge and skills gained upon completion of this certification is as follows:

- Ability to build, troubleshoot and configure desktop computers, Windows operating systems and peripherals
- Operation and management of a Windows server infrastructure within an enterprise organization
- Ability to manage the infrastructure of Web and IT application servers
- Use scripts and batch files to accomplish tasks on a regular basis
- Conduct most server management tasks remotely by using Remote Desktop Server or administration tools installed on their local workstation
- Design the layout to set up Active Directory Services for small and large networks
- Implement network plans by installing the Windows server operating system
- Configure servers to provide the proper networking services

**ASSOCIATE OF APPLIED SCIENCE**
Ranken is offering an Associate of Applied Science degree as a part of the evening program curriculum. You can earn your associate degree with a combination of Ranken’s standard evening school courses as well as our new online courses. You can also transfer credit from other accredited technical training programs, or have your technical work experience evaluated for possible transfer credit. (30 technical credit hours required for graduation.)

For all General Education course requirements, please turn to page 105. For more information about the BSAM degree, please turn to page 99.

**EVENING PROGRAM COURSES**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Description</th>
<th>Hours</th>
<th>Prerequisites</th>
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<tr>
<td>First Semester</td>
<td>CNT0110</td>
<td>Command Line and Windows® Lab</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Second Semester</td>
<td>CNT0120</td>
<td>Microcomputer Hardware and Peripherals</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Third Semester</td>
<td>CNT0225</td>
<td>Microsoft Network Administrator I</td>
<td>6</td>
<td>CNT0110, CNT0120</td>
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<tr>
<td>Fourth Semester</td>
<td>CNT0226</td>
<td>Microsoft Network Administrator II</td>
<td>6</td>
<td>CNT0110, CNT0120</td>
</tr>
</tbody>
</table>

Total Technical Credit Hours Required for Certificate Completion: 24
COURSES DESCRIPTIONS

**CNT0110 Command Line and Windows® Lab**
Provides a comprehensive overview of Microsoft Windows operating systems. Students will work with partitioning, formatting, directory structures, file management, device drivers, batch files, configuration files and remote recovery consoles. Students will learn to use a command line interface for troubleshooting and system recovery. Students will spend time installing each operating system while gaining an in-depth understanding of Microsoft Windows optimizations, customization, client side network configuration, peer-to-peer networking, printing, resource sharing, policies, profiles, administration, security and remote administration. Six credit hours.

**CNT0120 Microcomputer Hardware Peripherals**
Offers an in-depth study of personal computers. Students spend time studying microcomputer subsystems, including: processors, memory and modern bus types. Students also study, install and configure the most common business oriented peripheral devices. Students learn to build, configure and troubleshoot PCs. Students will be prepared for the CompTIA A+ certification exam. Six credit hours.

**CNT0225 Microsoft Network Administrator I**
A server administrator is responsible for the operations and day-to-day management of a Windows Server infrastructure within an enterprise organization. Windows server administrators manage the infrastructure, Web and IT application servers. The Windows server administrators use scripts and batch files written by others or those that they occasionally write themselves to accomplish tasks on a regular basis. They conduct most server management tasks remotely by using Remote Desktop Server or administration tools installed on their local workstation. A server administrator’s primary tasks include:
- Managing the server operating system, file and directory services
- Software distribution and updates
- Profiling and monitoring assigned servers
- Troubleshooting

Server administrators also support engineering projects.
Server administrators are responsible for server builds and configuration. Their job role involves 60 percent operations, 20 percent engineering and 20 percent support tasks. Six credit hours.

**CNT0226 Microsoft Network Administrator II**
Provides hands-on implementation of concepts studied in Microsoft Windows Server environment. Students design the layout to set up Active Directory Services for small and large networks, implement network plans by installing the Windows Network Operating System and configure servers to provide the proper networking services. Six credit hours.

EVENING PROGRAM CERTIFICATE IN MICROSOFT ADMINISTRATION

The Microsoft Administration Certificate program will give students the opportunity to obtain Microsoft Certified Technology Specialist (MCTS) certification. Knowledge and skills gained upon completion of this certification are as follows:
- Ability to build, troubleshoot and configure desktop computers, Windows operating systems and peripherals
- Operation and management of a Windows server infrastructure within an enterprise organization
- Ability to manage the infrastructure, Web and IT application servers
- Use scripts and batch files to accomplish tasks on a regular basis
- Conduct most server management tasks remotely by using Remote Desktop Server or administration tools installed on their local workstation
- Design the layout to set up Active Directory Services for small and large networks
- Implement network plans by installing the Windows server operating system
- Configure servers to provide the proper networking services

ASSOCIATE OF APPLIED SCIENCE

Ranken is offering an Associate of Applied Science degree as a part of the evening program curriculum. You can earn your associate degree with a combination of Ranken’s standard evening school courses as well as our new online courses. You can also transfer credit from other accredited technical training programs, or have your technical work experience evaluated for possible transfer credit. (30 technical credit hours required for graduation.)
### COURSE DESCRIPTIONS

#### CNT0225 Microsoft Network Administrator I
A server administrator is responsible for the operations and day-to-day management of a Windows Server infrastructure within an enterprise organization. Windows server administrators manage the infrastructure, Web and IT application servers, as well as use scripts and batch files written by others or those that they occasionally write themselves to accomplish tasks on a regular basis. They conduct most server management tasks remotely by using Remote Desktop Server or administration tools installed on their local workstation. A server administrator’s primary tasks include:

- Managing the server operating system, file and directory services
- Software distribution and updates
- Profiling and monitoring assigned servers
- Troubleshooting

Server administrators also support engineering projects. Server administrators are responsible for server builds and configuration. Their job role involves 60 percent operations, 20 percent engineering and 20 percent support tasks. 
Six credit hours.

#### CNT0226 Microsoft Network Administrator II
Provides hands-on implementation of concepts studied in Microsoft Windows Server environment. Students design the layout to set up Active Directory services for small and large networks, implement network plans by installing the Windows Network Operating System and configure servers to provide the proper networking services. Six credit hours.

#### CNT0227 Administering and Deploying System Center Configuration Manager
This course allows students to use Configuration Manager’s user-centric capabilities to provide anytime/anywhere services and software, and to strengthen both control and compliance in organizations that deploy the entire Microsoft System Center 2012 Enterprise Suite and leverage its powerful integration capabilities have an extraordinarily strong platform for managing everything from clients to servers, mobile infrastructure to data centers. Six credit hours.