



Apprenticeships in INFORMATION TECHNOLOGY

The City Colleges of Chicago Apprenticeship Program in Information Technology was created with the future in mind. We strive to help students learn computer networking and programming skills that will help businesses meet the needs of the global, increasingly connected environment in which we live. Our IT apprenticeship program integrates with IT positions at your organization.

The following certificates and degrees, when combined with an apprenticeship from a technology partner, give students a well-rounded education that best prepares them to enter your organization.

Employer Position:

Computer Network Support Specialist

Job description: Analyze, test, troubleshoot, and evaluate existing network systems such as local area networks (LANs), wide area networks (WANs), and Internet systems or segments of network systems.

Responsibilities & Requirements

- Documenting network support activities
- Backing up network data
- Configuring security settings and access permissions
- Analyzing and reporting computer network security breaches

Knowledge & Skills Required

- Operating systems (Windows/Linux)
- Network security
- Network devices, configuration, and maintenance
- Troubleshooting
- Communication

Related Technical Instruction at City Colleges:

Networking Systems & Technology

Degrees offered: Associate in Applied Science (AAS), Advanced Certificate (AC), Basic Certificate (BC)

The Networking Systems and Technology program teaches students to administer and maintain network equipment (such as routers, switches, or servers), software, and services common in modern network infrastructure. With a curriculum that covers both hardware and software components, students will be well prepared for jobs in the IT market.

The AAS program, which is the most comprehensive option, can help students better understand and apply computer networking principles and skills. Students also can earn industry certifications along the way, including: A+, Security+, CCNA, Network+, CCENT, CCNA Security.

Critical Coursework

- Computer Science
- Operating Systems
- Information Security
- Inter-networking
- Servers

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Employer Position:

Computer User Support Specialist

Job description: Provide technical assistance to computer users, answer questions, resolve computer problems for clients, and help concerning the use of: computer hardware, software, printing, installation, word processing, email, and operating systems.

Responsibilities & Requirements

- Maintain systems and equipment functionality
- Desktop support
- Phone and printer configuration
- End user support
- Installation, configuration, troubleshooting, and maintenance of computer hardware and software

Knowledge & Skills Required

- Technical support
- Problem solving
- Communication
- Troubleshooting
- Customer service

Related Technical Instruction at City Colleges:

Computer Science

Degree offered: Associate in Science (AS)

The Computer Science program provides a comprehensive overview of computer programming, programming design, programming languages, and troubleshooting. Combined with the hands-on experience obtained in an apprenticeship program, a computer science degree from City Colleges of Chicago prepares students for entry-level and mid-career IT jobs.

Critical Coursework

- Computer Science
- Operating Systems
- Programming
- Problem Solving

Employer Position:

Web Developer

Job description: Design, create, and modify web sites. Analyze user needs to implement web site content, graphics, performance, and capacity.

Responsibilities & Requirements

- Write supporting code for web applications
- Design, build, or maintain web sites
- Choose appropriate programming languages and applications
- Manage databases

Knowledge & Skills Required

- Programming
- Critical thinking
- Operations analysis
- Web platform development software
- Database management software

Related Technical Instruction at City Colleges:

Web Development

Degrees offered: Associate in Applied Science (AAS), Advanced Certificate (AC), Basic Certificate (BC)

The Web Development Program teaches students programming principles, languages, and web technologies to effectively create and deploy dynamic websites. Students will also learn to integrate web and database servers to increase the productivity and interactivity of a website. The program prepares students for entry-level positions in website design, development, and administration.

Critical Coursework

- Web Development
- Java
- Mobile Application Development
- Web Database Integration