

# IT Support Professional:

## Program Overview

This program includes innovative curriculum from Google and the Computer Technology Industry Association (CompTIA) designed to prepare you for an entry-level role in IT support. A job in IT can mean in-person or remote help desk work, either in a small business or at a global company, like Google. Whether you've been tinkering with IT or are completely new to the field, you've come to the right place. Through a dynamic mix of live and video lectures, quizzes, and hands-on labs, this certificate program will introduce you to trouble-shooting and customer service, networking, operating systems, system administration, and security.

## About Google

Google LLC is an American multinational technology company that specializes in Internet-related services and products, which include online advertising technologies, search engine, cloud computing, software, and hardware. Out of tremendous need for IT support professionals, they created their own training program. After an internal testing period, the program is now available to the general public. MCC has been selected to launch the program in our region.



## About CompTIA

The Computer Technology Industry Association (CompTIA) is the voice of the world's (IT) Information Technology industry. As a non-profit trade association, they enable IT professionals and IT channel organizations to be more successful with industry-leading certifications and business credentials, education, resources and the ability to connect with like-minded leading IT industry experts.



## Contact Information:

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## Campus Locations:

### Brighton Campus:

Monroe Community College  
1000 E. Henrietta Road  
Rochester, NY 14623

### Downtown Campus

MCC Downtown Campus  
321 State Street  
Rochester, NY 14608

## Materials:

All materials are supplied

## Cost:

\$4,500 (Fee is due prior to the start of the first class)

## Register at:

[www.workforceforward.com/ITcerts](http://www.workforceforward.com/ITcerts)

CONTINUING PROFESSIONAL  
DEVELOPMENT



IN PARTNERSHIP WITH GOOGLE & COMPTIA'S  
AUTHORIZED ACADEMY PROGRAM



## IT Support Professional




Economic & Workforce  
Development Center

MONROE COMMUNITY COLLEGE

# Classes within the Program:

## Google IT Support Professional

 Through years of struggling to hire IT support professionals, Google decided to train new employees with a program they developed. After an internal testing period, the program is now available to the general public. MCC has been selected to launch the program in our region. Topics to be covered include:

### TECHNICAL SUPPORT FUNDAMENTALS

- The binary system
- Assemble a computer from scratch
- Choose and install an operating system
- Applications and how they work under the hood
- Common problem-solving methodologies and soft skills in an IT setting.

### THE BITS AND BYTES OF COMPUTER NETWORKING

- Five-layer model
- Standard protocols involved with TCP/IP
- Network troubleshooting tools
- DNS and DHCP

### OPERATING SYSTEMS (OS)

- Windows and Linux
- Set up users, groups, and permissions
- System processes work and how to manage
- System logs and remote connection tools
- Utilize OS to troubleshoot

### SYSTEM ADMINISTRATION AND IT INFRASTRUCTURE

- Best practices for choosing hardware, vendors, and services
- The most common infrastructure services
- Manage computers and users with directory services, Active Directory, and OpenLDAP
- Backup
- Utilize systems administration plan/improve

### IT SECURITY: DEFENSE AGAINST THE DIGITAL DARK ARTS

- Evaluate potential risks, ways to reduce risk.
- How best to secure a network
- Help others to understand security concepts

## CompTIA A+ certification



CompTIA A+ certification is the industry standard for computer support technicians. The international, vendor-neutral certification proves competence in areas such as installation, preventative

maintenance, networking, security and trouble-shooting. Topics to be covered include:

- Tools, Cases and Basic Components
- ESD
- Hardware and Personal Safety
- MSDS Documentation
- Environmental Factors
- Maintenance Procedures
- Motherboard Form Factors and Components
- Chipsets and the Bus
- BIOS and the CMOS
- The Boot Process
- CPUs / Power / RAM
- Input, Output and Multimedia Devices
- Device Cables and Connectors
- Physical Interface Connections
- Wireless Device Connections
- Expansion Cards
- Display Types / Cables and Connectors
- Designing Custom Computer Systems
- Laptops
- Storage Devices
- Printers
- Network Tools, Types & Devices
- TCP/IP / • Network Protocols and Ports
- Wireless Technologies and Standards
- Professionalism in the Workplace
- Prohibited Content / Activity
- Operating Systems Installation & Upgrades
- Partitioning and Formatting Disks
- Transferring Files
- Windows Features and Control Panel Utilities
- Administrative Tools

## CompTIA Network+ Certification



Network+ is an ISO-17024 compliant, vendor-neutral technology certification that verifies the certified individual has the skills and knowledge needed to take on a pivotal role in building, managing,

and protecting the data network. Topics to be covered include:

- Network Models, OSI and TCP/IP
- Physical Network Topologies
- LAN & WAN Technologies
- Cabling and Connectors
- Ethernet Standards
- Network Devices
- TCP/IP Concepts – IPv4, IPv6, Subnetting
- DHCP
- TCP/IP Ports, Protocols and Services
- Name Resolution
- Routing & Switching
- Remote Access
- Remote Connection Technologies
- Wireless Networking
- Network Performance and Optimization
- Network Security – Authentication, Firewalls, Network Scanners
- IPsec, VPNs, Encryption
- Network Management and Documentation
- Virtualization
- Network Troubleshooting
- SOHO Networking Concepts

