# Welcome to Working Connections 2018







## Google



## Background Google IT Support Professional Certificate

- Created by Google and launched January, 2018
- Initially offered in English only
- Developed with industry participation
- Aimed at the Tech support generalist Computer User Support Specialists (SOC:15-1151)
- Created to help increase the pipeline of workers to fill the many open positions in IT
- Created with the goal of increasing access to IT careers
- Has been offered through non-profits (Goodwill and YearUp) to date and now being launched through community colleges in 7 states



### **Strong Company Interest**

- Bank of America
- Walmart
- Sprint
- GE
- PNC
- Infosys
- UPMC
- TEKsystems
- Hulu
- Sams Club
- Jet.com
- Ricoh

- Hayneedle
- Bonobos
- Modcloth
- Moosejaw
- Shoes.com
- Store No. 8
- Allswell
- Vudu
- Cognizant
- MCPc
- And growing



#### Google IT Support Professional Certificate Overview

- Offered online through Coursera
- 5 courses required for the certificate (6 available)
  - Technical Support Fundamentals
  - The Bits and Bytes of Computer Networking
  - Operating Systems and You
  - Systems Administration and IT Infrastructure Services
  - IT Security Defense Against the Digital Dark Arts



#### Google IT Support Professional Certificate Overview

- Courses are \$49 each through Coursera
- About 6 weeks each, part-time, 8-10 hours per week (their estimate)
- Those finishing the certificate can choose to have their information shared with all the companies signed on with Google to support the certificate



### **Technical Support Fundamentals**

**Quote from Google Website:** In this course, you'll be introduced to the world of Information Technology, or IT. This course is the first of a series that aims to prepare you for a role as an entry-level IT Support Specialist. ... This course covers a wide variety of topics in IT that are designed to give you an overview of what's to come in this IT Support Professional Certificate. By the end of this course, you'll be able to:

- understand how the binary system works.
- assemble a computer from scratch.
- choose and install an operating system on a computer.
- understand what the Internet is, how it works, and the impact it has in the modern world.
- learn how applications are created and how they work under the hood of our computer.
- utilize common problem-solving methodologies and soft skills in an Information Technology setting.



### The Bits and Bytes of Computer Networking

Quote from the Google Website: This course is designed to provide a full overview of computer networking. In this course, we'll cover everything from the fundamentals of modern networking technologies and protocols to practical applications and network troubleshooting. By the end of this course, you'll be able to:

- describe computer networks in terms of a five-layer model.
- understand all of the standard protocols involved with TCP/IP communications.
- grasp powerful network troubleshooting tools and techniques.
- learn network services like DNS and DHCP that help make computer networks run.



### Operating Systems and You: Becoming a Power User

**Quote from Google's Website:** In this course, you'll learn how to use the major operating systems, Windows and Linux, which are a core component of IT. Through a combination of video lectures, demonstrations, and hands-on practice, you'll learn about the main components of an operating system and how to perform critical tasks like managing software and users, and configuring hardware.

By the end of this course you'll be able to:

- navigate the Windows and Linux filesystems using a graphical user interface and command line interpreter.
- set up users, groups, and permissions for account access.
- install, configure, and remove software on the Windows and Linux operating systems.
- configure disk partitions and filesystems.
- understand how system processes work and how to manage them.
- work with system logs and remote connection tools. utilize operating system knowledge to troubleshoot common issues in an IT Support Specialist role.



### Systems Administration and IT Infrastructure

**Quote from the Google Website:** This course will transition you from working on a single computer to a whole fleet. Systems administration is the field of IT that's responsible for maintaining reliable computers systems in a multi-user environment. By the end of this course you'll be able to:

- utilize best practices for choosing hardware, vendors, and services for your organization.
- understand how the most common infrastructure services that keep an organization running work and how to manage infrastructure servers.
- manage an organization's computers and users using the directory services, Active Directory, and OpenLDAP.
- choose and manage the tools that your organization will use.
- backup your organization's data and be able to recover your IT infrastructure in the case of a disaster.
- utilize systems administration knowledge to plan improve processes for IT environments.



### IT Security: defense against the digital dark arts

Quote from the Google Website: This course covers a wide variety of IT security concepts, tools, and best practices. It introduces threats and attacks and the many ways they can show up. ... The course is rounded out by putting all these elements together into a multi-layered, in-depth security architecture, followed by recommendations on how to integrate a culture of security into your organization or team.

At the end of this course, you'll understand how various encryption algorithms and techniques work and their benefits and limitations; various authentication systems and types; the difference between authentication and authorization.

At the end of this course, you'll be able to: evaluate potential risks and recommend ways to reduce risk; make recommendations on how best to secure a network; help others to understand security concepts and protect themselves.



#### **Demonstrations**

- Courses include
  - Videos with transcript
    - Some are content-related
    - Some are testimonials from a variety of IT professionals
  - Reading extra information, often from contemporary websites
  - Exercises/self-tests
  - Hands-on and opportunities building physical labs for peer review
  - Quiz at the end (can take multiple times, but have to master at 80%)



#### **Questions?**

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