

# Red River Self-Paced Courses Catalog



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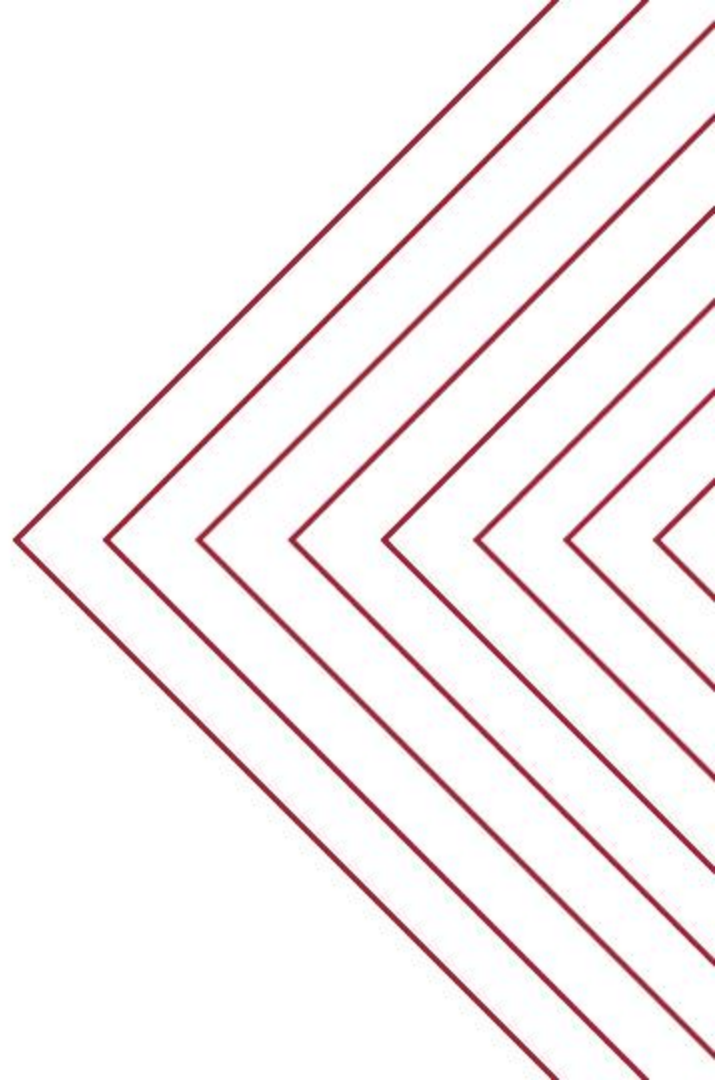
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# CISCO SKILLS FOR ALL

Self-Paced Courses



# CYBERSECURITY PATHWAY

### Course Overview

This Cybersecurity pathway prepares you for an entry-level cybersecurity position, such as a Cybersecurity Technician, Junior Cybersecurity Analyst, or Tier 1 Help Desk Support role.

### Benefits

You will learn vital skills like threat intelligence, network security, and risk management to protect yourself and organizations from cyber attacks. If you enjoy solving puzzles, are passionate about technology, and like working in teams, the field of cybersecurity may be a great fit for you!

### Explore Opportunities in Technology

- ✓ Build your cybersecurity foundation
- ✓ Take the next step in exploring the many career possibilities in cybersecurity
- ✓ Gain skills for managing threats, such as how to assess a network for vulnerabilities, manage risks, and respond to security incidents

### Register Here:

[Cybersecurity Pathway](#)

**Target Audience:** Secondary and 2-year college vocational students; Reskilling Intent to find a job in cybersecurity.

**Estimated Time to Completion:** 180 hours

**Course Delivery:** Self-paced

### Career Path Outline:

- ✓ [Introduction to Cybersecurity](#)
- ✓ [Video – A Future-Proof Career](#)
- ✓ [Video – The Cybersecurity Threat Landscape](#)
- ✓ [Video – Anatomy of an Attacker](#)
- ✓ [Networking Basics](#)
- ✓ [Networking Devices and Initial Configuration](#)
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**Course Recognitions:** Digital Badge

**Certification Alignment:** IT Specialist – Cybersecurity certification offered through Certiport

# INTRODUCTION TO CYBERSECURITY

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## Course Overview

This course explores cyber trends, threats, and staying safe in cyberspace, and protecting personal and company data.

## Benefits

Today's interconnected world makes everyone more susceptible to cyber-attacks. Learn how to protect your personal data and privacy online and in social media, and why more and more IT jobs require cybersecurity awareness and understanding.

## Explore Opportunities in Technology

- ✓ Builds cybersecurity understanding for a secure and safe digital life
- ✓ Explores many career possibilities cybersecurity skills offers

**Register Here:** [Introduction to Cybersecurity](#)

## Course Details

**Target Audience:** Secondary and 2-Year college students, general audience

**Estimated Time to Completion:** 6 hours- but finish it in your time.

**Prerequisites:** None

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 5 modules and 7 practice labs
- ✓ Interactive activities & quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital Badge

**Certification Alignment:** [Cybersecurity Pathway](#): IT Specialist Cybersecurity certification from Certiport

**Recommended Next Course:** [Networking Essentials](#) or [Cybersecurity Essentials](#)

# ENDPOINT SECURITY

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## Course Overview

This course covers how to assess the network, operating systems, and endpoints for vulnerabilities, and how to secure the network. It also covers skills to maintain the integrity, confidentiality, and availability in the network and data.

## Benefits

The demand for security professionals continues to grow. Learn the foundational knowledge you will use in the workplace as a Cybersecurity Technician.

## Prepare for Careers

- ✓ Build your cybersecurity foundation
- ✓ Take the next step in exploring the many career possibilities in cybersecurity
- ✓ Gain skills to create a layered defense-in-depth cybersecurity strategy

**Register Here:** [Endpoint Security](#)

## Course Details

**Target Audience:** Secondary and 2-year college vocational students; Reskilling Intent to find a job in cybersecurity.

**Estimated Time to Completion:** 40 hours

**Prerequisites:** Introduction to Cybersecurity, Networking Essentials

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 10 modules
- ✓ 31 Labs and Cisco Packet Tracer activities
- ✓ 40+ interactive activities & quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital Badge

**Certification Alignment:** [Cybersecurity Pathway](#): IT Specialist Cybersecurity certification from Certiport

**Recommended Next Course:** [Network Defense](#)

# NETWORK DEFENSE

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## Course Overview

This course covers different methods to monitor your network and how to evaluate security alerts. Delve into the tools and techniques used to protect your network, including access control, firewalls, cloud security, and cryptography.

## Benefits

The demand for security professionals continues to grow. Gain the intermediate knowledge used in the workplace as a Cybersecurity Technician.

## Prepare for Careers

- ✓ Build your cybersecurity foundation
- ✓ Explores the many career possibilities in cybersecurity
- ✓ Develops skills to create a layered defense-in-depth cybersecurity strategy

**Register Here:** [Network Defense](#)

## Course Details

**Target Audience:** Secondary and 2-year college vocational students; Reskilling Intent to find a job in cybersecurity.

**Estimated Time to Completion:** 40 hours

**Prerequisites:** Introduction to Cybersecurity, Networking Essentials, and Endpoint Security

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 11 modules
- ✓ 29 Labs and Cisco Packet Tracer activities
- ✓ 58 + interactive activities & quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital Badge

**Certification Alignment:** [Cybersecurity Pathway](#): IT Specialist Cybersecurity certification from Certiport

**Recommended Next Course:**  
[Cyber Threat Management](#)

# CYBER THREAT MANAGEMENT

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## Course Overview

This course explores governance in cybersecurity and threat management. Learn to develop policies and ensure your organization complies with ethics standards and legal and regulatory frameworks.

## Benefits

The demand for security professionals continues to grow. Develop advanced knowledge you will use in the workplace as a Cybersecurity Technician.

## Explore Opportunities in Technology

- ✓ Build your cybersecurity foundation
- ✓ Explores the many career possibilities in cybersecurity
- ✓ Develops skills for managing threats, such as how to assess a network for vulnerabilities, manage risks, and respond to security incidents

Register Here: [Cyber Threat Management](#)

## Course Details

**Target Audience:** Secondary and 2-year college vocational students; Reskilling to find a job in cybersecurity.

**Estimated Time to Completion:** 20 hours

**Prerequisites:** Introduction to Cybersecurity, Networking Essentials, Endpoint Security, and Network Defense

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 6 modules
- ✓ 16 Labs and Cisco Packet Tracer activities
- ✓ 28 + interactive activities & quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital Badge

**Certification Alignment:** [Cybersecurity Pathway](#): IT Specialist Cybersecurity certification from Certiport



# CYBERSECURITY ESSENTIALS

## Course Overview

This course covers essential knowledge for all cybersecurity domains including information security, systems security, network security, ethics and laws, and defense and mitigation techniques used in protecting businesses.

## Benefits

The demand for security professionals continues to grow. Develop a foundational understanding of cybercrime, security principles, technologies, and procedures used to defend networks.

## Explore Opportunities in Technology

- ✓ Build your cybersecurity foundation
- ✓ Offer the next step in exploring the many career possibilities in cybersecurity
- ✓ Help learners determine if they want to pursue job roles in networking or cybersecurity

## Register Here:

[Cybersecurity Essentials](#)

## Course Details

**Target Audience:** Secondary and 2-Year college vocational students

**Estimated Time to Completion:** 30 hours - but finish it in your time.

**Prerequisites:** Introduction to Cybersecurity; Foundational networking knowledge (equivalent of Networking Essentials)

**Course Delivery:**  
Self-paced

## Learning Component Highlights:

- ✓ 8 modules and 14 practice labs
- ✓ 12 Cisco Packet Tracer activities
- ✓ Interactive activities & quizzes
- ✓ 1 final exam

## Course Recognitions:

Certificate of Completion, Digital Badge

**Recommended Next Course:** CyberOps Associate, [Cloud Security](#), Network Security, or IoT Security

# GETTING STARTED WITH CISCO PACKET TRACER

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## Course Overview

This short on-ramp course introduces Cisco Packet Tracer, an innovative network simulation and visualization tool. Teaches how to download Cisco Packet Tracer, navigate the simulation environment, and practice building a network using everyday examples.

### Benefits

Provides valuable tips, best practices, and builds confidence using this powerful tool offered in many courses.

### Explore Opportunities in Technology

- ✓ Install the powerful simulation and visualization tool.
- ✓ Practices networking, cybersecurity, and IoT skills by using Cisco Packet Tracer.

### Register Here:

[Getting Started with Packet Tracer](#)

## Course Details

**Target Audience:** Designed for learners who are new to Packet Tracer

**Estimated Time to Completion:** 2 hours - but finish it in your time.

**Prerequisites:** None

**Course Delivery:** Self-paced

### Learning Component Highlights:

- ✓ 2 modules
- ✓ 1 Packet Tracer Tutored Activity (PTTA)
- ✓ 1 Cisco Packet Tracer Activity
- ✓ 1 assessment

**Course Recognitions:** SFA Achievement

### Recommended Next Courses:

- ✓ [Exploring Networking with Packet Tracer](#)
- ✓ [Exploring IOT with Packet Tracer](#)

# EXPLORING NETWORKING WITH CISCO PACKET TRACER

## Course Overview

In this course, learners create and explore a small office network using Cisco Packet Tracer. Teach how to connect and configure devices in a network, including wireless devices, and how to manage and monitor a network.

## Benefits

Offers valuable tips and practices networking skills using Cisco Packet Tracer.

## Explore Opportunities in Technology

- ✓ Teach how to connect and configure devices in a small office network using Packet Tracer
- ✓ Show how packets travel across a network using Simulation Mode
- ✓ Explore how a network controller can be used to manage and configure a network

**Register Here:** [Exploring Networking with Packet Tracer](#)

## Course Details

**Target Audience:** Designed for learners who are new to Packet Tracer

**Estimated Time to Completion:** 3 hours - but finish it in your time.

**Prerequisites:** Getting Started with Packet Tracer

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 2 modules
- ✓ 1 Packet Tracer Tutored Activity (PTTA)
- ✓ 7 Cisco Packet Tracer Activities
- ✓ 1 assessment

**Course Recognitions:** SFA Achievement

**Recommended Next Courses:**  
[Exploring IOT with Packet Tracer](#)

# EXPLORING INTERNET OF THINGS WITH CISCO PACKET TRACER

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## Course Overview

This course teaches how to set up a smart home network using Cisco Packet Tracer, how to add IoT devices to a home network, and then connect, configure, and monitor them. Learners become more familiar with IoT devices and how they can be programmed. Learners will even create their own IoT device and use it in a simulated smart home network.

## Benefits

Practice IoT (Internet of Things) skills using Cisco Packet Tracer.

## Explore Opportunities in Technology

- ✓ Connect and monitor devices in a smart home network.
- ✓ Modify and monitor environment elements that may affect IoT devices.
- ✓ Create and modify an IoT Thing in Cisco Packet Tracer.

**Register Here:** [Exploring Internet Of Things with Packet Tracer](#)

## Course Details

**Target Audience:** Designed for learners who are new to Packet Tracer

**Estimated Time to Completion:** 3 hours - but finish it in your time.

**Prerequisites:** Getting Started with Packet Tracer

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 2 modules
- ✓ 6 Cisco Packet Tracer Activities
- ✓ 1 assessment

**Course Recognitions:** SFA Achievement

## Recommended Next Courses:

[Exploring Networking with Packet Tracer](#)



# NETWORKING BASICS

## Course Overview

This course covers the foundation of networking and network devices, media, and protocols. The learner will observe data flowing through a network and basic device configuration to connect to networks.

## Benefits

Teaching your students basic networking concepts is essential for developing IT skills and prepares them for a wide variety of IT career paths.

## Explore Opportunities in Technology

- ✓ Configure a wireless router and wireless host to connect to the internet
- ✓ Teach how protocols, devices, and media enable communication on Ethernet networks
- ✓ Demonstrate how IP addresses enable network communication
- ✓ Create a simple LAN
- ✓ Use application layer services to accomplish real-world tasks

Register Here: [Networking Basics](#)

## Course Details

**Target Audience:** High school, secondary and 2-Year college vocational students, college and university students studying IT and non-IT fields, career changers

**Estimated Time to Completion:** 25 hours- but finish it in your time.

**Prerequisites:** None

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 17 modules and 13 practice labs
- ✓ interactive activities, videos, & quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital Badge

## Recommended Next Course:

[Networking Devices and Initial Configuration](#)

# NETWORKING DEVICES AND INITIAL CONFIGURATION



## Course Details

**Target Audience:** High school, secondary and 2-Year college vocational students, college and university students studying IT and non-IT fields, career changers

**Estimated Time to Completion:** 25 hours- but finish it in your time.

**Prerequisites:** None

**Course Delivery:** Self-paced

**Learning Component Highlights:**

- ✓ 12 modules and 17 practice labs
- ✓ interactive activities, videos, & quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital Badge

**Recommended Next Course:**

[Network Addressing and Basic Troubleshooting](#)

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### Course Overview

This course teaches intermediate knowledge and skills for networking by covering basic concepts and skills needed to build a home office network and a small office network.

### Benefits

By teaching the characteristics and benefits of Cloud and Virtualization technologies, your students develop skills to calculate an IP addressing scheme and configure Cisco devices to create a small network.

### Explore Opportunities in Technology

- ✓ Teach the characteristics of Virtualization and Cloud services.
- ✓ Explain how Ethernet operates in a switched network.
- ✓ Show how routers use network layer protocols and services.
- ✓ Demonstrate how the TCP protocol guarantees data delivery
- ✓ Configure a simple computer network using Cisco devices

**Register Here:** [Networking Devices and Initial Configuration](#)

# NETWORK ADDRESSING AND BASIC TROUBLESHOOTING



## Course Details

### Course Overview

This course examines the Physical layer in depth, topologies at the Data Link layer, and basic routing at the Network layer. It dives deep into static and dynamic IPv4 and IPv6 addressing and address resolution.

### Benefits

Teach your students the components and functionality of Cisco switches and routers, troubleshooting methodologies for some of the most common networking issues, and an overview of providing customer support that prepares them for a wide variety of IT careers paths.

### Explore Opportunities in Technology

- ✓ Explain the features and functions of the physical, data link, and network layers.
- ✓ Develop a networking scheme for a small network based on stated requirements.
- ✓ Explain the operation of Cisco switches and routers.
- ✓ Teach basic troubleshooting for network connectivity issues.

**Register Here:** [Network Addressing and Basic Troubleshooting](#)

**Target Audience:** High school, secondary and 2-Year college vocational students, college and university students studying IT and non-IT fields, career changers

**Estimated Time to Completion:** 18 hours- but finish it in your time.

**Prerequisites:** [Networking Devices and Initial Configuration](#) or equivalent knowledge

**Course Delivery:** Self-paced

### Learning Component Highlights:

- ✓ 8 modules and 8 practice labs
- ✓ interactive activities, videos, & quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital Badge

**Recommended Next Course:** CCNA: Switching, Routing and Wireless Essentials

# NETWORKING ESSENTIALS

## Course Overview

Networking Essentials teaches networking based on environments students may encounter in daily life, including small office and home office networking. This course provides an engaging, self-paced learning experience using Packet Tracer simulation, interactive activities, and learning with your own devices at home.

## Benefits

Develop a foundational understanding of the high-level network architecture and how a network operates.

## Prepare for Careers

✓For developers, cybersecurity, business analysts, or other professionals: gain essential networking knowledge

✓For students: a launching point for many career pathways, from cybersecurity to software to business and more

Register Here: [Networking Essentials](#)

## Course Details

**Target Audience:** High school, secondary and 2-Year college vocational students, college and university students studying IT and non-IT fields, career changers

**Estimated Time to Completion:** 70 hours- but finish it in your time.

**Prerequisites:** None

**Course Delivery:** Instructor-led or Self-paced

## Learning Component Highlights:

- ✓20 modules and 19 practice labs
- ✓24 Cisco Packet Tracer activities
- ✓130+ interactive activities, videos, & quizzes
- ✓5 module exams
- ✓1 final exam and 1 skills assessment (Instructor-led only)

**Course Recognitions:** Digital Badge

**Certification Alignment:** [Cybersecurity Pathway](#): IT Specialist Cybersecurity certification from Certiport

**Recommended Next Course:** [Endpoint Security](#)



# PYTHON ESSENTIALS 1

## Course Overview

Designed as easy to understand and beginner-friendly course focusing on various data collections, manipulation tools, logic and bit operations and creating basic REST APIs.

## Benefits

Learn to design, write, debug, and run programs encoded in the Python language. No prior programming knowledge is required. The course begins with the very basics guiding you step by step until you become adept at solving more complex problems.

## Explore Opportunities in Technology

- ✓ Explore the world of computer programming and the careers it offers
- ✓ Develop coding skills using Python
- ✓ Teach about data types, variables, I/O operations, control flow and functions

**Register Here:** [Python Essentials 1](#)

## Course Details

**Target Audience:** Secondary and 2-Year college students, general audience

**Estimated Time to Completion:** 30 hours

**Prerequisites:** None

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 4 modules and 30 practice labs
- ✓ interactive activities & quizzes
- ✓ 1 final project
- ✓ 1 final exam

**Course Recognitions:** Digital Badge

**Certification Aligned:** [PCEP: Certified Entry-Level Python Programmer](#)

**Recommended Next Course:** [Python Essentials 2](#)



# PYTHON ESSENTIALS 2

## Course Details

### Course Overview

This course is designed for learners who are already familiar with the essentials of Python, universal computer programming concepts like data types, containers, functions, conditions and loops, and the basics of procedural, structural, and functional programming.

### Benefits

Used by startups and tech giants like Google, Facebook, Netflix, and more, Python with userfriendly, easy-to-read code offers endless possibilities for creating small and large-scale software projects.

### Prepare for Careers

- ✓ Explore the world of programming
- ✓ Design, develop, and improve multi-module computer applications coded in Python
- ✓ Analyze and model real-life problems in Object-Oriented Programming categories
- ✓ Create and develop a programming portfolio

**Register Here:** [Python Essentials 2](#)

**Target Audience:** Secondary and 2-Year college students, general audience

**Estimated Time to Completion:** 40 hours

**Prerequisites:** Python Essentials 1, PCEP certification, or equivalent

**Course Delivery:** Self-paced

### Learning Component Highlights:

- ✓ 4 modules and 21 practice labs
- ✓ interactive activities & quizzes
- ✓ 1 final exam
- ✓ PCAP certification voucher discount

**Course Recognitions:** Digital Badge

**Certification Aligned:** [PCAP - Certified Associate in Python Programming](#)

**Recommended Next Course:** DevNet Associate

# INTRODUCTION TO IOT AND DIGITAL TRANSFORMATION

## Course Overview

The course provides learners with an engaging, exploratory view of the Internet of Things and highlights how Digital Transformation impacts organizations, businesses, governments, industries, and our daily lives.

## Benefits

Learners discover how IoT, along with emerging technologies such as data analytics, artificial intelligence and cybersecurity, are digitally transforming industries and expanding career opportunities. Learners understand the importance of Intent-Based Networking using a software-driven approach and machine learning to be able to connect and secure tens of billions of new devices with ease.

## Explore Opportunities in Technology

- ✓ Develops digital basics
- ✓ Explores career opportunities in the new emerging technologies landscape

**Register Here:** [Introduction IOT and Digital Transformation](#)

## Course Details

**Target Audience:** Secondary and 2-Year college students, general audience

**Estimated Time to Completion:** 6 hours - but finish it in your time.

**Prerequisites:** None

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 6 modules
- ✓ 16 practice lab activities
- ✓ 7 Cisco Packet Tracer Activities
- ✓ 12 videos
- ✓ Knowledge checks and module quizzes
- ✓ Final exam

**Course Recognitions:** Digital Badge

**Recommended Next Course:** A great start for any learning path, and a way to introduce digital transformation before or during any Career course.

# INTRODUCTION TO DATA SCIENCE



## Course Overview

This introductory course takes learners inside the world of data science. They will learn the basics in the fields of data science, data analytics and data engineering to better understand how machine learning is shaping the future of business, healthcare, education and more.

## Benefits

Data science professionals who can provide actionable insights for data-driven decisions are in high demand.

## Explore Opportunities in Technology

- ✓ Develops awareness of opportunities that data analytics enable.
- ✓ Explores career opportunities in the Data Science, Analytics, Engineering and Artificial Intelligence and Machine Learning landscapes.

**Register Here:** [Introduction to Data Science](#)

## Course Details

**Target Audience:** High-school, Secondary and 2-Year college students, General audience

**Estimated Time to Completion:** 6 hours - but finish it in your time.

**Prerequisites:** None

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 4 modules
- ✓ 5 practice lab activities
- ✓ 1 interactive pivot table widget
- ✓ 14 videos
- ✓ knowledge checks and module quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital Badge

**Recommended Next Course:** Data Analytics Essentials

# DATA ANALYTICS ESSENTIALS



## Course Overview

Learners will understand how to use the fundamental tools of a data analyst, and how to transform, organize and visualize data with spreadsheet tools such as Excel. They will learn how to query data from a relational database using SQL and how to improve their data presentations using powerful business intelligence tools like Tableau. By the end of the course, they will have an analytics portfolio complete with an analysis of popular datasets, showcasing their skills in Excel, SQL and Tableau.

## Benefits

Organizations all over the world recognize the value of analytics. This course teaches the tools of the trade.

## Prepares for Careers

- ✓ SQL and Excel, used in every organization.
- ✓ Dashboarding, data visualizations and storytelling with data are highly sought after.

Register Here: [Data Analytics Essentials](#)

## Course Details

**Target Audience:** High-school, Secondary and 2-Year college students, General audience

**Estimated Time to Completion:** 30 hours - but finish it in your time.

**Prerequisites:** None

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 9 modules
- ✓ 26 practice lab activities
- ✓ 42 videos
- ✓ 90 practice opportunities
- ✓ 9 module exams
- ✓ 1 final exam

**Course Recognitions:** Digital Badge

**Recommended Next Course:** Python Essentials 1

# OPERATING SYSTEM BASICS



## Course Overview

This course teaches the fundamentals of operating systems by covering the basic concepts and skills needed to explain the purpose and characteristics of operating systems, implement basic operating system security, and explain how to configure mobile device network connectivity.

## Benefits

This course provides the learner with an engaging, foundational view of operating systems and mobile device connectivity, including Windows, Linux, Android, and iOS.

### Explore Opportunities in Technology

- ✓ Use Windows administrative tools.
- ✓ Implement basic Linux security.
- ✓ Explain how to configure network connectivity and email on mobile devices.
- ✓ Explain the purpose and characteristics of mobile operating systems.

Register Here: [Operating System Basics](#)

## Course Details

**Target Audience:** Secondary, vocational, career technical school and immediate post-secondary students, general audience

**Estimated Time to Completion:** 16 hours - but finish it in your time.

**Prerequisites:** None

**Course Delivery:** Self-paced

### Learning Component Highlights:

- ✓ 8 modules
- ✓ 18 practice lab activities
- ✓ checkpoints and quizzes
- ✓ final exam

**Course Recognitions:** Digital Badge

**Recommended Next Course:** Networking Basics, Introduction to Networks

# COMPUTER HARDWARE BASICS



## Course Overview

This course teaches the fundamentals of computers and mobile devices by covering the basic concepts and skills needed to install components to build, repair, or upgrade personal computers.

## Benefits

This course provides the learner with an engaging, foundational view of computers and mobile devices, including desktop and laptop computers, and other mobile devices such as tablets and mobile phones.

## Explore Opportunities in Technology

- ✓ Install component to build, repair, or upgrade personal computers.
- ✓ Explain the features and functions of laptops.
- ✓ Explain the features and functions of mobile devices.

Register Here: [Computer Hardware Basics](#)

## Course Details

**Target Audience:** Secondary, vocational, career technical school and immediate post-secondary students, general audience

**Estimated Time to Completion:** 6 hours - but finish it in your time.

**Prerequisites:** None

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 3 modules
- ✓ practice items, labs, and quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital Badge

**Recommended Next Course:** Operating System Basics, Networking Basics

# CISCO NETWORKING ACADEMY

Self-Paced Courses





# GET CONNECTED



## Course Overview

Get Connected students are introduced to the Internet and experiment with various social networking sites. Talking characters and devices make this course a user-friendly environment for an audience new to Information Technology.

## Benefits

The digital world is upon us both personally and professionally. Gain essential skills like basic computer skills, such as how to use a computer, connect devices, and access search, email, and social media.

## Explore Opportunities in Technology

- ✓ Develop your digital basics
- ✓ Start exploring the many career possibilities these skills can open up for you

Register Here: [Get Connected](#)

## Course Details

**Target Audience:** Secondary and general audience new to IT

**Estimated Time to Completion:** 30 hours- but finish it in your time.

**Prerequisites:** None

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 5 modules and 13 practice labs
- ✓ Illustrations and narrations guide students through topics
- ✓ interactive activities, videos, & quizzes

**Course Recognitions:** Certificate of Completion

**Recommended Next Course:** IT Essentials

# INTRODUCTION TO CYBERSECURITY

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## Course Overview

This course explores cyber trends, threats, and staying safe in cyberspace, and protecting personal and company data.

## Benefits

Today's interconnected world makes everyone more susceptible to cyber-attacks. Learn how to protect your personal data and privacy online and in social media, and why more and more IT jobs require cybersecurity awareness and understanding.

## Explore Opportunities in Technology

- ✓ Builds cybersecurity understanding for a secure and safe digital life
- ✓ Explores many career possibilities cybersecurity skills offers

**Register Here:** [Introduction to Cybersecurity](#)

## Course Details

**Target Audience:** Secondary and 2-Year college students, general audience

**Estimated Time to Completion:** 6 hours- but finish it in your time.

**Prerequisites:** None

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 5 modules and 7 practice labs
- ✓ Interactive activities & quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital Badge

**Certification Alignment:** [Cybersecurity Pathway](#): IT Specialist Cybersecurity certification from Certiport

**Recommended Next Course:** [Networking Essentials](#) or [Cybersecurity Essentials](#)

# NETWORKING ESSENTIALS

## Course Overview

Networking Essentials teaches networking based on environments students may encounter in daily life, including small office and home office networking. This course provides an engaging, self-paced learning experience using Packet Tracer simulation, interactive activities, and learning with your own devices at home.

## Benefits

Develop a foundational understanding of the high-level network architecture and how a network operates.

## Prepare for Careers

✓For developers, cybersecurity, business analysts, or other professionals: gain essential networking knowledge

✓For students: a launching point for many career pathways, from cybersecurity to software to business and more

Register Here: [Networking Essentials](#)

## Course Details

**Target Audience:** High school, secondary and 2-Year college vocational students, college and university students studying IT and non-IT fields, career changers

**Estimated Time to Completion:** 70 hours- but finish it in your time.

**Prerequisites:** None

**Course Delivery:** Instructor-led or Self-paced

## Learning Component Highlights:

- ✓20 modules and 19 practice labs
- ✓24 Cisco Packet Tracer activities
- ✓130+ interactive activities, videos, & quizzes
- ✓5 module exams
- ✓1 final exam and 1 skills assessment (Instructor-led only)

**Course Recognitions:** Digital Badge

**Certification Alignment:** [Cybersecurity Pathway](#): IT Specialist Cybersecurity certification from Certiport

**Recommended Next Course:** [Endpoint Security](#)

# NDG LINUX UNHATCHED

## Course Overview

This course covers introductory back-end operating system knowledge by teaching basic installation and configuration of Linux and introducing the Linux command line.

## Benefits

Learners ease into acquiring Linux knowledge without having to commit to more than 8 total hours of self-paced learning, guided step-by-step with a series of hands-on virtual machine activities.

## Explore Opportunities in Technology

- ✓Wade into the shallow end of Linux and see whether it's for you or not
- ✓Develop your digital basics
- ✓Start exploring the many career possibilities these skills can open up for you

Register Here: [NDG Linux Unhatched](#)

## Course Details

**Target Audience:** Secondary and general audience new to IT

**Estimated Time to Completion:** 6-8 hours

**Prerequisites:** None

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓1 module
- ✓20 pages
- ✓Built-in Linux machine with activities
- ✓1 exam

**Course Recognitions:** Certificate of Completion

**Recommended Next Course:** [NDG Linux Essentials](#)

# NDG LINUX ESSENTIALS

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## Course Overview

This course teaches fundamentals of the Linux operating system, command line, and open-source programming concepts.

## Benefits

Nearly every IT job requires some Linux knowledge. Gain hands-on practice with Linux commands through the Linux virtual machine embedded in the course.

## Prepare for Careers

- ✓ Develop fundamental operating system skills for entry-level IT jobs
- ✓ Prepare for LPI certificate exam
- ✓ Fulfill prerequisites to pursue more specialized IT and networking skills

**Register Here:** [NDG Linux Essentials](#)

## Course Details

**Target Audience:** Secondary and 2-year college students

**Estimated Time to Completion:** 70 hours

**Prerequisites:** None

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 16 chapters and 13 practice labs
- ✓ Built-in virtual machine to experiment with Linux commands
- ✓ Learner-directed activities
- ✓ Chapter, midterm, and final exams

**Course Recognitions:** Certificate of Completion

**Recommended Next Course:** [NDG Linux I](#)

# NDG LINUX I AND II



## Course Overview

A 2-course series for aspiring Linux system administrators. Covers performing maintenance tasks on the command line, installing and configuring a computer running Linux, and configuring basic networking, using virtual machines running Linux.

## Benefits

More rigorous and comprehensive than NDG Linux Essentials, this course develops your Linux mastery. Gain hands-on practice with Linux commands through the Linux virtual machine embedded in the course.

## Prepare for Careers

- ✓ Develop skills for careers in cloud computing, cybersecurity, information systems, networking, programming, software development, big data, and more
- ✓ Prepare for LPIC-1 certificate exam

**Register Here:** [NDG Linux I](#)

**Register Here:** [NDG Linux II](#)

## Course Details

**Target Audience:** 2-year and 4-year college students

**Estimated Time to Completion:** 140 hours

**Recommended Preparation:** [NDG Linux Essentials](#)

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ Built-in virtual machine to experiment with Linux commands
- ✓ Practice labs and activities
- ✓ Chapter, midterm, and final exams

**Course Recognitions:** Certificate of Completion

**Recommended Next Course:** DevNet Associate

# JAVASCRIPT ESSENTIALS 1 (JSE)

## Course Overview

Learn how interactive web and mobile apps are created with JavaScript programming – and how to design, write, debug, and run your own programs! No prior programming knowledge is required.

## Benefits

Programming skills open you up to careers in almost any industry. These skills are required if you want to continue to more advanced and higher paying web, mobile app, or game development roles.

## Prepare for Careers

- ✓ Develop fundamental programming skills
- ✓ Prepare for JSE certification exam
- ✓ Build your foundation to pursue more specialized networking and software development skills

**Register Here:** [Javascript Essentials 1](#)

## Course Details

**Target Audience:** Secondary and 2-Year college vocational students, college and university students

**Estimated Time to Completion:** 40 hours

**Prerequisites:** None

**Course Delivery:** Self-paced

## Learning Component Highlights:

- ✓ 6 modules
- ✓ Interactive activities
- ✓ Module Exams and Quizzes
- ✓ Labs
- ✓ Final exam

**Course Recognitions:** Certificate of Completion

**Recommended Next Course:** DevNet Associate

# CPA: PROGRAMMING ESSENTIALS IN C++

## Course Overview

This beginner course introduces the basics of programming in the C++ language and the fundamental notions and techniques used in object-oriented programming.

## Benefits

Build transferable skills. When you learn C++, you develop overarching fundamentals for all programming languages. Practice your skills through hands-on labs and write your own programs!

## Prepare for Careers

- ✓ Develop skills for entry-level programming roles
- ✓ Prepare for CPA certification exam
- ✓ Build your foundation to pursue more advanced programming skills

**Register Here:** [CPA: Programming Essentials in C++](#)

## Course Details

**Target Audience:** Secondary and 2-Year college vocational students, college and university students

**Estimated Time to Completion:** 70 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led or Self-paced

## Learning Component Highlights:

- ✓ 8 modules of interactive instructional content
- ✓ 100+ practice labs
- ✓ Module Exams
- ✓ 1 final exam

**Course Recognitions:** Certificate of Completion

**Recommended Next Course:** Internet of Things (IoT) Fundamentals, NDG Linux Essentials, DevNet Associate



# CLOUD SECURITY

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## Course Overview

This course introduces the fundamentals of cloud computing and skills needed to secure an organization in the cloud.

## Benefits

Learn the methods and tools to design, build, and maintain a secure cloud business environment.

## Prepare for Careers

- ✓ Develop skills for entry-level cloud security positions
- ✓ Prepare for Certificate of Cloud Security Knowledge (CCSK) exam
- ✓ Pursue a career in cloud security, an in-demand, exciting new area that spans all industries

**Register Here:** [Cloud Security](#)

## Course Details

### Target Audience:

This course introduces the fundamentals of cloud computing and skills needed to secure an organization in the cloud.

**Estimated Time to Completion:** 35 hours

**Prerequisites:** [Introduction to Cybersecurity](#),  
[Cybersecurity Essentials](#)

**Course Delivery:** Virtual Self-paced (with instructor mentorship)

### Learning Component Highlights:

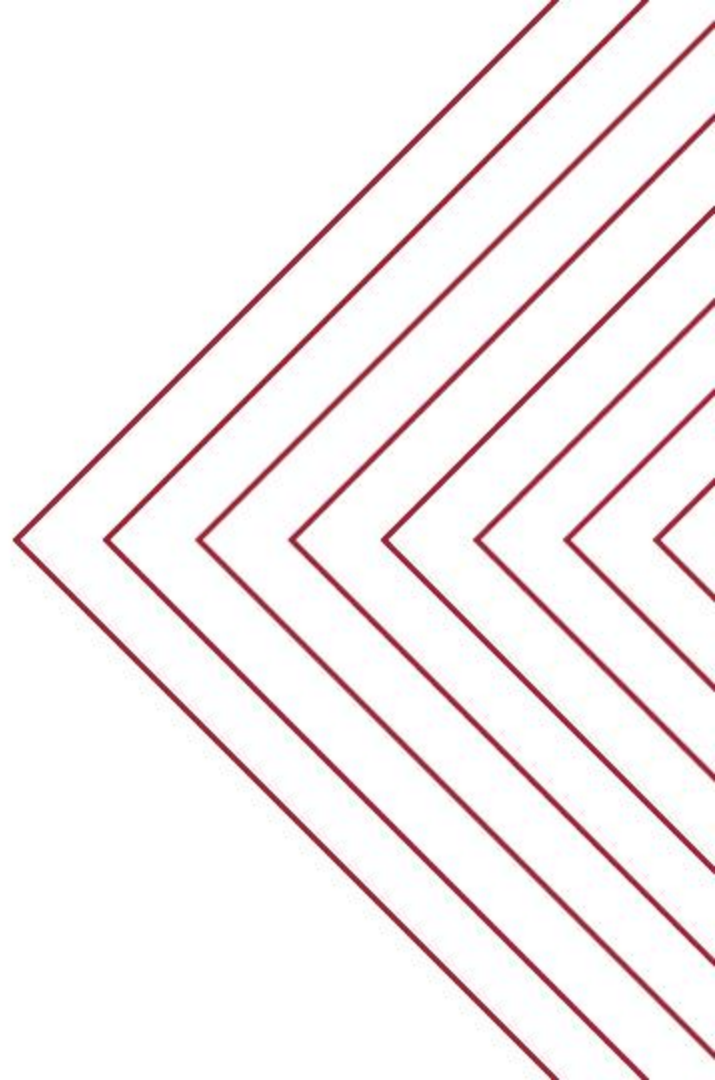
- ✓ 6 modules
- ✓ 20+ videos
- ✓ 10 Interactive activities
- ✓ 37 quizzes
- ✓ 1 final exam

**Course Recognitions:** Certificate of Completion

**Recommended Next Course:** CyberOps Associate, Network Security, IoT Security

# VMWARE IT ACADEMY

Self-Paced Micro-Courses



# GETTING STARTED IN IT

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## Course Overview

This course has a variety of different topics that introduces the learner to several basic IT concepts.

## Course Objectives

- Explore key concepts of computers and the different types of computers
- Explore what virtualization is and how virtualization works
- Describe the role of operating systems in computers and the different types of operating systems
- Learn the basics of computer networks and computer basics in business
- Understand the key concepts of HTML & the basics on the world-wide-web
- Explore Cybersecurity and intrinsic security and malware
- Explore the basic concepts of containerization and how container engines work

## Course Details

**Target Audience:** General audience

**Estimated Time to Completion:** 160 hours

**Prerequisites:** None

**Course Delivery:** Self-paced

**Learning Component Highlights:**

✓ 11 modules

**Course Recognitions:**

Certificate of Completion, Digital Badge

**Register Here:** [VMWare Getting Started in IT](#)

# CLOUD AND VIRTUALIZATION CONCEPTS

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## Course Overview

Through VMware IT Academy, Cloud and Virtualization Concepts provides the learner with the knowledge needed to start a career in the digital world. Upon completion of this micro-course, the learner will be aware of the basics of virtualization and the data center. The learner will be able to set up and manage a virtual machine.

## Course Objectives

- Explore creating a virtual machine and the benefits
- Move from a physical environment to a virtual one
- Describe types of virtualization used for data centers
- Describe virtualization, virtual machines, hypervisors, and VMware vSphere® components
- Describe the concepts of server, network, storage, and desktop virtualization
- Understand how individuals and businesses benefit from virtualization
- Understand cloud concepts such as types of cloud computing and popular cloud deployment models
- Access embedded videos and labs to help you along the way

## Course Details

**Target Audience:** General audience

**Estimated Time to Completion:** 9 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led or Self-paced

### Learning Component Highlights:

- ✓ 1 module
- ✓ 4 labs

### Course Recognitions:

Certificate of Completion, Digital Badge

**Register Here:** [Cloud and Virtualization Concepts](#)

# NETWORK VIRTUALIZATION CONCEPTS

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## Course Overview

Through VMware IT Academy, Network Virtualization Concepts provides an overview of the key concepts related to network virtualization and the software-defined data center. This micro-course will provide the learner with a basic understanding of network virtualization, the software-defined data center, and basics of NSX architecture. After this micro-course, the learner will understand how to bridge physical with virtual networks, identify vSphere® virtual networking components, and identify key components in the NSX architecture.

## Course Objectives

- Learn basic network virtualization concepts
- Articulate NSX capabilities and benefits
- Describe the major VMware NSX® components in the data, management, and control planes and their interactions
- Apply relevant NSX features to use cases
- Explain NSX network virtualization components and services
- Explain how network virtualization is utilized in an SDDC environment

## Course Details

**Target Audience:** General audience

**Estimated Time to Completion:** 9 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led or Self-paced

**Learning Component Highlights:**

✓ 1 module

**Course Recognitions:**

Certificate of Completion, Digital Badge

**Register Here:** [Nwtwork Virtualization Concepts](#)

# SOFTWARE DEFINED STORAGE CONCEPTS

## Course Overview

Through VMware IT Academy, Software-Defined Storage Concepts provides an overview of the key concepts related to storage in the data center and attributes of software-defined storage. It also introduces the hyperconverged infrastructure and storage vSAN™. Upon completion of this micro-course, the learner will have the basic understanding of storage virtualization, the software-defined data center, and basics of vSAN architecture. Additionally, the learner will be able to identify types of software-defined storage, the layers of a software-defined storage model, and components of a hyperconverged storage vSAN.

## Course Objectives

- Learn key concepts related to storage in the data center
- Understand software-defined storage concepts
- Describe the architecture, technical characteristics, and benefits of vSAN
- Compare the functionalities and performance of vSAN with other traditional storage options
- Gain basic information about the Hyper-Converged Infrastructure

## Course Details

**Target Audience:** General audience

**Estimated Time to Completion:** 8 - 12 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led or Self-paced

**Learning Component Highlights:**

✓ 1 module

**Course Recognitions:**

Certificate of Completion, Digital Badge

**Register Here:** [Software Defined Storage Concepts](#)