



BIRMINGHAM CITY  
University

# Self-enrol courses

Cisco Networking Academy

Open to all students, self-paced

Offerings updated: **31/10/2022**

Courses expire: **31/08/2023**

# SFA Getting Started with Cisco Packet Tracer

## Course Overview

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

## Benefits

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

## Prepare for Careers

- ✓ Install the powerful simulation and visualization tool.
- ✓ Get familiar with Cisco Packet Tracer by practicing networking, cybersecurity, and IoT skills.

## Course Details

### Target Audience:

General audience

### Estimated Time to Completion:

2 hours

### Learning Component Highlights:

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

### Course Recognitions:

SFA Achievement

[Course self-enrol link](#)

Login with Cisco NetAcad credentials



# SFA Exploring Networking with Cisco Packet Tracer

## Course Overview

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

## Benefits

Get valuable tips and practice networking skills using Cisco Packet Tracer.

## Prepare for Careers

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

## Course Details

### Target Audience:

General audience

### Estimated Time to Completion:

3 hours

### Learning Component Highlights:

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

### Course Recognitions:

SFA Achievement

[Course self-enrol link](#)

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# SFA Exploring IoT with Cisco Packet Tracer

## Tracer

### Course Overview

In this course, you will set up a smart home network using Cisco Packet Tracer. Learn how to add IoT devices to a home network and then connect, configure, and monitor them. You will also become more familiar with IoT devices and how they can be programmed. You will even create your own IoT device and use it in your simulated smart home network.

### Benefits

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

### Prepare for Careers

- ✓ 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.

### Course Details

#### Target Audience:

General audience

#### Estimated Time to Completion:

3 hours

#### Learning Component Highlights:

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

#### Course Recognitions:

SFA Achievement

[Course self-enrol link](#)

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# SFA Introduction to Packet Tracer Exam

This exam covers the core concepts and skills presented in the three Cisco Packet Tracer courses:



Course

### Getting Started with Cisco Packet Tracer

Your on-ramp to Cisco Packet Tracer. Get familiar with the simulation environment and download the latest version.

🕒 2 Hours    🔒 Free    🟢 Beginner



Course

### Exploring Networking with Cisco Packet Tracer

Practice using Cisco Packet Tracer to set up, manage, and monitor a branch office network.

🕒 3 Hours    🔒 Free    🟢 Beginner



Course

### Exploring Internet of Things with Cisco Packet Tracer

Learn to add and configure IoT devices in Cisco Packet Tracer to set up a smart home network.

🕒 3 Hours    🔒 Free    🟢 Beginner

[Exam self-enrol link](#) Login with Cisco NetAcad credentials

### Target Audience:

General audience

### Estimated Time to Completion:

30 minutes

### Learning Component Highlights:

✓ 1 assessment

### Course Recognitions:

Digital Badge



# SFA Introduction to IoT and Digital Transformation 2.1



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## 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.

## Prepare for Careers

- ✓ Develop your digital basics
- ✓ Explore career opportunities in this new emerging technologies landscape.

## Course Details

### Target Audience:

Secondary and 2-Year college students, general audience

### Estimated Time to Completion:

6 hours

### Learning Component Highlights:

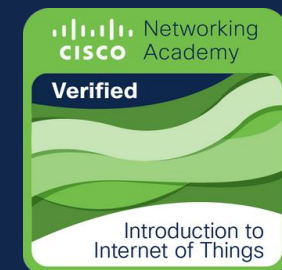
- ✓ 6 modules
- ✓ 16 practice lab activities
- ✓ 7 Cisco Packet Tracer activities
- ✓ 12 videos
- ✓ Knowledge checks and module quizzes
- ✓ Final exam

### Course Recognitions:

Digital Badge

[Course self-enrol link](#)

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Networking  
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# SFA Introduction to Cybersecurity

## 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.

## Prepare for Careers

- ✓ Explore the world of cybersecurity and how it relates to YOU
- ✓ Develop your cybersecurity basics for a secure and safe digital life
- ✓ Start exploring the many career possibilities these skills can open up for you

## Course Details

### Target Audience:

Secondary and 2-Year college students, general audience

### Estimated Time to Completion:

6 hours

### Learning Component Highlights:

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

### Course Recognitions:

Digital Badge

[Course self-enrol link](#)

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Certification Aligned  
[IT Specialist Cybersecurity](#)

# Additional Videos



Video

## A Future-Proof Career

Swati Handa, Cisco Senior Product Leader, discusses how cybersecurity is a future-proof career.

 30 Minutes  Free  Beginner

[Video link](#)

Login with Cisco NetAcad credentials



Video

## The Cybersecurity Threat Landscape

Cisco Senior Threat Researcher, Earl Carter, shares how attackers keep upping their game and how Cisco responds. Offers a good description of types of jobs in the field of...

 21 Minutes  Free  Beginner

[Video link](#)

Login with Cisco NetAcad credentials



Video

## The Anatomy of an Attacker

Get a sampling of what cybersecurity professionals do. Cisco Security Architect, Matt Carling, offers defender's point of view and why a "Defense in Depth" layer approach...

 24 Minutes  Free  Beginner

[Video link](#)

Login with Cisco NetAcad credentials



# SFA 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.

## Prepare for Careers

- ✓ 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

## Course Details

### Target Audience:

Secondary or vocational school and college/university students, general audience

### Estimated Time to Completion:

25 hours

### Learning Component Highlights:

- ✓ 17 modules and 13 practice labs
- ✓ Interactive activities and quizzes
- ✓ 1 final test

### Course Recognitions:

Digital Badge

[Course self-enrol link](#)

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# SFA Networking Devices and Initial Configuration

## 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 Cisco 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.

## Prepare for Careers

- ✓ 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

## Course Details

### Target Audience:

Secondary or vocational school and college/university students, general audience

### Estimated Time to Completion:

25 hours

### Learning Component Highlights:

- ✓ 12 modules and 17 practice labs
- ✓ Interactive activities and quizzes
- ✓ 1 final test

### Course Recognitions:

Digital Badge

[Course self-enrol link](#)

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# SFA Endpoint Security

## 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. Gain the intermediate knowledge used 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 secure a network all the way to the edge, including hardware, software, and media

## Course Details

### Target Audience:

Secondary and 2-year college vocational students; Reskilling  
Intent to find a job in cyber

### Estimated Time to Completion:

40 hours

### Learning Component Highlights:

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

### Course Recognitions:

Digital Badge

[Course self-enrol link](#)

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# SFA Network Defense

## 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
- ✓ Take the next step in exploring the many career possibilities in cybersecurity
- ✓ Gain skills to create a layered defence-in-depth cybersecurity strategy

## Course Details

### Target Audience:

Secondary and 2-year college vocational students; Reskilling Intent to find a job in cyber

### Estimated Time to Completion:

40 hours

### Learning Component Highlights:

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

### Course Recognitions:

Digital Badge

[Course self-enrol link](#)

Login with Cisco NetAcad credentials



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# SFA Cyber Threat Management

## 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.

## Prepare for Careers

- ✓ 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

## Course Details

### Target Audience:

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

### Estimated Time to Completion:

20 hours

### Learning Component Highlights:

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

### Course Recognitions:

Digital Badge

[Course self-enrol link](#)







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# SFA Cybersecurity Pathway Exam

This exam covers the core concepts and skills presented in these five courses:

 <p>Course <b>Introduction to Cybersecurity</b></p> <p>Explore the exciting field of cybersecurity and why cybersecurity is a future-proof career.</p> <p>6 Hours Free Beginner</p>	 <p>Course <b>Networking Basics</b></p> <p>Languages: English, Español +1</p> <p>Start learning the basics of computer networking and discover how networks operate.</p> <p>25 Hours Free Beginner</p>	 <p>Course <b>Networking Devices and Initial Configuration</b></p> <p>Languages: English, Español +1</p> <p>Continue learning networking essentials and build your foundational skills.</p> <p>25 Hours Free Beginner</p>
 <p>Course <b>Endpoint Security</b></p> <p>Learn to secure your network all the way to the edge.</p> <p>40 Hours Free Intermediate</p>	 <p>Course <b>Network Defense</b></p> <p>Learn how to monitor and protect your network and evaluate security alerts.</p> <p>40 Hours Free Intermediate</p>	 <p>Course <b>Cyber Threat Management</b></p> <p>Learn about cybersecurity governance and build your skills to manage threats.</p> <p>20 Hours Free Intermediate</p>

[Cybersecurity Pathway exam link](#)  
Login with Cisco NetAcad credentials

## Target Audience:

General audience

## Estimated Time to Completion:

90 minutes

## Learning Component Highlights:

✓ 1 assessment

## Course Recognitions:

Digital Badge



Certification Aligned  
[IT Specialist Cybersecurity](#)

# SFA Python Essentials 1

## Course Overview

This course teaches in-demand skills including how to design, develop, and improve computer programs using Python.

## Benefits

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

## Prepare for Careers

- ✓ 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

## Course Details

### Target Audience:

Secondary and 2-Year college students, general audience

### Estimated Time to Completion:

30 hours

### Learning Component Highlights:

- ✓ 4 modules and 30 practice labs
- ✓ Interactive activities & quizzes
- ✓ 1 final project
- ✓ 1 final test

### Course Recognitions:

Digital Badge

In partnership with 



[Course self-enrol link](#)

Login with Cisco NetAcad credentials



Certification Aligned

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

# SFA Python Essentials 2

## 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 start-ups and tech giants like Google, Facebook, Netflix, and more, Python with user-friendly, 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
- ✓ Analyse and model real-life problems in Object-Oriented Programming categories
- ✓ Create and develop a programming portfolio

## Course Details

### Target Audience:

Secondary and 2-Year college students, general audience

### Estimated Time to Completion:

40 hours

### Learning Component Highlights:

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

### Course Recognitions:

Digital Badge

In partnership with



[Course self-enrol link](#)

Login with Cisco NetAcad credentials



Certification Aligned

[PCAP: Certified Associate in Python Programming](#)



# SFA Cybersecurity Essentials

## Course Overview

This course covers essential knowledge for all cybersecurity domains including information security, systems security, network security, ethics and laws, and defence 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.

## Prepare for Careers

- ✓ Build your cybersecurity foundation
- ✓ Take the next step in exploring the many career possibilities in cybersecurity
- ✓ See if you want to pursue job roles in networking or cybersecurity

## Course Details

### Target Audience:

Secondary and 2-Year college students

### Estimated Time to Completion:

30 hours

### Learning Component Highlights:

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

### Course Recognitions:

Digital Badge

[Course self-enrol link](#)

Login with Cisco NetAcad credentials



# SFA 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

## 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

### 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

### Course Recognitions:

Digital Badge

[Course self-enrol link](#)

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Certification Aligned  
IT Specialist Cybersecurity

# SFA Network Addressing and Basic Troubleshooting

## 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.

## Prepare for Careers

- ✓ 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.

## Course Details

### Target Audience:

Secondary school and college/university students, general audience

### Estimated Time to Completion:

18 hours

### Prerequisites:

Networking Devices and Initial Configuration or equivalent knowledge

### Learning Component Highlights:

- ✓ 8 modules and 8 practice labs
- ✓ Interactive activities and quizzes
- ✓ 1 final test

### Course Recognitions:

Digital Badge

[Course self-enrol link](#)

Login with Cisco NetAcad credentials





# SFA 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.

## Prepare for Careers

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

## Course Details

### Target Audience:

High-school, Secondary and 2-Year college students, General audience

### Estimated Time to Completion:

6 hours

### Learning Component Highlights:

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

### Course Recognitions:

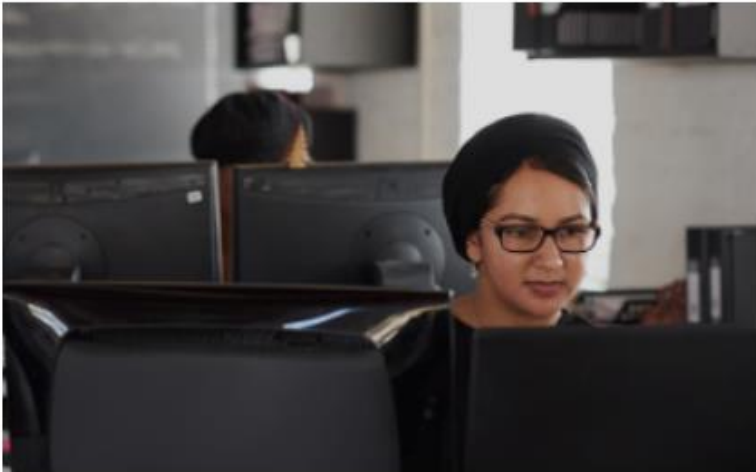
Digital Badge

[Course self-enrol link](#)

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# Additional Resources



Video

## **A Day in the Life of a Cybersecurity Professional**

Hear from cybersecurity professionals on what a usual day in the cybersecurity career might look like.

 105 Minutes  Free  Beginner

[Video link](#)

Login with Cisco NetAcad credentials



Video

## **Connecting to Jobs**

Make sure you are ready to be found by employers. Learn the fundamentals beyond having a resume.

 14 Minutes  Free  Beginner

[Video link](#)

Login with Cisco NetAcad credentials



Resources

## **The bridge between talent and employment**

From job preparation to matching, explore the many resources available as part of your participation with Cisco Networking Academy.

 Free

[Video link](#)

Login with Cisco NetAcad credentials

Candidates who participated in Talent Bridge activities and utilized resources are:

# Talent Bridge Program Highlights

**33,000** students reported Talent Bridge resources helped them find a job (in the past 6 years)

(Source: Strategy & Insights Team - Talent Bridge Student Employment Survey, 2021)



More likely to find a new job and have a faster time to employment than non-participating students



More likely to have a job than students who did not participate in Talent Bridge activities



3 x more likely to have a job with Cisco or it's Partners/Distributors compared to non-participants



# Career Preparation Workshop

## self-enroll course

Offers advice on navigating the hiring process and maximizing tools available. Helps users with their goal to transition into professional careers

Utilizes webinars and articles on [NetAcad.com/careers](https://www.netacad.com/careers) and external resources to guide participants as they prepare to join the workforce.



8-10 hours to complete the course

Labs and activities for self-paced learning

