

# COMPUTER INFORMATION SYSTEMS AND TECHNOLOGY (CIST)

## CIST 100 Information Technology (IT) Technical Support Fundamentals 54 Hours

This course is the first of a series that aims to prepare students for a role as an entry-level IT Support Specialist. Students will be introduced to the world of Information Technology. Topics include: computer hardware, Internet and security, managing computer software, networking and security, understanding/installing operating systems, troubleshooting, and customer service.

## CIST 105 The Bits and Bytes of Computer Networking 54 Hours

**Prerequisite(s):** CIST 100 Information Technology (IT) Technical Support Fundamentals

This course is part of a series that aims to prepare students for a role as an entry-level IT Support Specialist. In this course, students will learn a full overview of Computer Networking. Topics include: the fundamentals of modern networking technologies and protocols, and overview of the cloud, practical applications, and network troubleshooting.

## CIST 110 Operating Systems and Becoming a Power User 54 Hours

**Prerequisite(s):** CIST 105 The Bits and Bytes of Computer Networking

This course is part of a series that aims to prepare students for a role as an entry-level IT Support Specialist. In this course, students will learn about the main components of an operating system (Windows, Linux, OS, etc.) and how to perform critical tasks like managing software and users and configuring hardware.

## CIST 115 System Administration and IT Infrastructure Services 72 Hours

**Prerequisite(s):** CIST 110 Operating Systems and Becoming a Power User

This course is part of a series that aims to prepare students for a role as an entry-level IT Support Specialist. Students will learn infrastructure services that keep organizations up and running, typical cloud infrastructure setups, how to use industry tools to manage computers, user information, and user productivity.

## CIST 120 IT Security: Defense Against the Digital Dark Ages 72 Hours

**Prerequisite(s):** CIST 115 System Administration and IT Infrastructure Service

This course is part of a series that aims to prepare students for a role as an entry-level IT Support Specialist. Students will learn about IT security concepts, tools, and best practices.

## CIST 150 Develop in Swift Explorations: Values 15 Hours

The first course in a series to learn how to develop in Swift. Students will learn about the fundamental units of programming, explore how to associate names with values using variables and constants, and how values can be used in simulations. The course culminates in an app project.

## CIST 153 Develop in Swift Explorations: Algorithms 15 Hours

**Prerequisite(s):** CIST 150 Develop in Swift Explorations: Values

This is the second course in a series to learn how to develop in Swift. Students explore how functions can encapsulate repetitive tasks and how to use if/else statements to make decisions in their code. Students also learn how Swift uses types to distinguish different kinds of data.

## CIST 156 Develop in Swift Explorations: Organizing Data 15 Hours

**Prerequisite(s):** CIST 153 Develop in Swift Explorations: Algorithms

This is the third course in a series to learn how to develop in Swift. Students explore how to create custom types using structs, group large quantities of items into arrays, and process them using loops. Students also learn how to use enums to represent a set of related values.

## CIST 159 Develop in Swift Explorations: Building Apps 15 Hours

**Prerequisite(s):** CIST 156 Develop in Swift Explorations: Organizing Data

The fourth course in a series to learn how to develop in Swift. Students will use techniques to add user interface elements to a screen, connect those elements to code, and respond to the events generated by user interaction.