

# INFORMATION COMMUNICATION TECHNOLOGY

This program prepares students for entry-level employment and/or further study in the Information Technology/Computer Maintenance fields. Students completing courses in this area will have a foundation for the field of Information Technology through the study and analysis of computer operations and will acquire skills and abilities in installing, configuring, upgrading, troubleshooting, and repairing microcomputer systems.





# WHAT YOU WILL LEARN

- Preventative Maintenance Basic Networking and Security •
- System Administration Information Windows Server Infrastructure •
- Navigate Microsoft Windows Server Technologies Information Technology Storage
  - Virtualization of Applications Network and Server Performance •

#### WHERE DO YOU SEE YOURSELF?

- Computer Technician Helpdesk Specialist Quality Assurance Specialist
  - Corporate Trainer Technical Writer •

## **PAY RANGE**

Average salary for entry-level is between \$17-25 per hour. Computer Technicians with 3-5 years of experience can make between \$26-35 per hour.



Learn More at COS.EDU/ICT

PROGRAM CONTACT:

Ramyar Alavi-Moghaddam ramyarm@cos.edu (559) 730-3925

# **DEGREES & CERTIFICATES OFFERED**

Associate of Science in Information Communication Technology - 60 units Certificate of Achievement in CISCO CCNA Academy - 16 units Certificate of Achievement in Computer & Network Support - 16 units

# **CLASSES YOU MIGHT TAKE**

### ICT 201 PC Repair and Maintenance

This course prepares the student for CompTIA A+ certification, which includes the latest foundation-level knowledge and skills needed by today's computer support professionals. It is the starting point for a career in the Information Technology industry. This international, vendor-neutral certification is accredited by the International Organization for Standards (ISO) and the American National Standards Institute (ANSI). CompTIA A+ certification proves competence in a technician's ability to perform essential IT tasks such as installation, configuration, diagnosing, preventative maintenance, basic networking and security. It also confirms a technician's understanding of customer service and communication skills needed to work with clients

## ICT 221 Cisco Academy I

This is the first of four classes in the Information and Communication Technology CISCO Academy Certificate Program. Instruction includes: safety, networking, protocols, standards, LANs, WANs, OSI models, cabling, cabling tools, routers, Ethernet, IP addressing, and network standards.

## ICT 210 Introduction to Microsoft Windows Server

This course provides the student with networking, security, and system administration information needed to implement a Windows Server infrastructure. It covers the basics of installation and configuration, storage, network infrastructure, network components, network protocols, server roles, Active Directory Domain Services (AD DS), Group Policy, IT security, server security, network security, security software, monitoring server performance, and maintaining a Windows Server. This course includes the foundational level knowledge to prepare students to start a career or cross train in Microsoft Windows Server technologies.

## **ICT 230 Network Security Fundamentals**

This course offers a comprehensive guide for anyone wishing to take the CompTIA Security+ SY0-401 Certification Exam. It provides an introduction to the fundamentals of network security, including compliance and operational security; threats and vulnerabilities; application, data, and host security; access control and identity management; and cryptography. The course covers new topics in network security as well, including psychological approaches to social engineering attacks, Web application attacks, penetration testing, data loss prevention, cloud computing security, and application programming development security.