

# Cisco Certified Network Professional

## Certificate in Applied Science

### Credit Requirements: 12 Semester Credit Hours

This program is delivered by TTC in its role as a Cisco Networking Academy. It provides students with advanced knowledge of networks. Students learn to install, configure, and operate LAN, WAN, and dial-access services for organizations with networks from 100 to more than 500 nodes including but not limited to these protocols and services: IP, IGRP, IPX, Async Routing, AppleTalk, Extended Access Lists, IP RIP, Route Redistribution, RIP, Route Summarization, OSPF, VLSM, BGP, Serial, Frame Relay, ISDN, ISL, X.25, DDR, PSTN, PPP, VLANs, Ethernet, Access Lists, 802.10, FDDI, and Transparent and Translational Bridging. Classes prepare students for the four exams required to obtain the Cisco Certified Network Professional credential.

Admission into this program requires proof of high school graduation (or GED) and qualifying scores on SAT, ACT or the TTC placement test. The prerequisite for this program is IST 204 or possession of a valid Cisco Certified Network Associate (CCNA) credential.

### Recommended Sequence of Courses

#### First Semester

IST 205	Cisco Advanced Routing	3
IST 206	Cisco Remote Access	3
		<b>Total 6</b>

#### Second Semester

IST 207	Cisco Multilayer Switching	3
IST 208	Cisco Internetwork Troubleshooting	3
		<b>Total 6</b>

# Computer Game Design

## Certificate in Applied Science

### Credit Requirements: 24 Semester Credit Hours

The Computer Game Design Certificate provides students with the skills to understand and apply computer game design and development concepts. Students are prepared for entry-level employment in game design and related fields. Topics covered include game programming fundamentals, game math and physics, 2-D and 3-D graphics and animation.

Admission into this program requires proof of high school graduation (or GED) and qualifying scores on SAT, ACT or the TTC placement test.

### Recommended Sequence of Courses

#### First Semester

CPT 102	Basic Computer Concepts	3
CPT 232	C++ Programming I	3
ARV 217	Computer Imagery	3
		<b>Total 9</b>

#### Second Semester

CPT 233	C++ Programming II	3
ARV 222	Computer Animation	3
ARV 247	3-D Animation III	3
		<b>Total 9</b>

#### Third Semester

CPT 288	Computer Game Development	3
ARV 225	Advanced Computer Animation	3
		<b>Total 6</b>

# Computer Network Technician

## Certificate in Applied Science

### Credit Requirements: 27 Semester Credit Hours

This program prepares you for network technician jobs. It is designed for students who are employed in businesses that use or plan to use a computer network and need on-site primary support. Admission into this program requires proof of high school graduation (or GED) and qualifying scores on SAT, ACT or the TTC placement test.

### Recommended Sequence of Courses

#### First Semester

CPT 102	Basic Computer Concepts	3
IST 166	Network Fundamentals	3
IST 220	Data Communications	3
		<b>Total 9</b>

#### Second Semester

IST 161	Introduction to Network Administration	3
IST 190	Linux Essentials	3
IST 253	LAN Service and Support	3
		<b>Total 9</b>