Fourth Semester

REQ HUM	Select one course from Humanities listing on page B-3	3
ELE NSM	Select one course from Network Systems Management Electives on page B-24	3
ELE NSM	Select one course from Network Systems Management Electives on page B-24	3
ELE NSM	Select one course from Network Systems Management Electives on page B-24	3
	Total 12	

Fifth Semester

ECO 210	Macroeconomics	3
or		
ECO 211	Microeconomics	3
IST 260	Network Design	3
MGT 270	Managerial Communication	3
ELE NSM	Select one course from Network Systems Management Electives on page B-25	3
	Total 12	

Cisco Network Administration Career Path Electives

IST 203	Advanced Cisco Router Configuration	3
IST 204	Cisco Troubleshooting	3
IST 205	Cisco Advanced Routing	3

CompTIA Systems Specialist Career Path Electives

IST 166	Network Fundamentals	3

Linux System Administration Career Path Electives

IST 191	Linux System Administration	3
IST 192	Linux Network Applications	3
IST 193	Linux Security Administration	3

Microsoft Network Solutions Associate Career Path Electives

IST 164	Implementing Windows Network Infrastructure Services	3
IST 263	Designing Windows Network Security	3

Microsoft Network Solutions Expert Career Path Electives

IST 163	Introduction to Server Networking Configuration Administration	3
IST 265	Designing a Windows Directory Services Infrastructure	3

Cybersecurity and Forensics Career Path Electives

CPT 282	Information Systems Security	3
CRJ 233	Cyber Crimes and the Law	3
IST 268	Computer Forensics	3
IST 269	Digital Forensics	3
IST 291	Fundamentals of Network Security I	3
IST 292	Fundamentals of Network Security II	3
IST 294	IT and Data Assurance II	3

Virtualization and Cloud Computing Career Path Electives

IST 196	Cloud Storage Fundamentals	3
IST 198	Cloud Essentials	3
IST 253	LAN Service and Support	3
IST 250	Network Management	3
IST 298	Advanced Cloud Computing	3

Work Experience and Internship Career Path Electives

CWE 113	Cooperative Work Experience	3
CWE 123	Cooperative Work Experience	3
IST 286	Technical Support Internship I	3
IST 287	Technical Support Internship II	3

Other Electives

CPT 220	e-Commerce	3
CPT 172	Microcomputer Database	3
CPT 242	Database	3
IST 162	Introduction to Workstation Networking Administration	3
IST 206	Cisco Remote Access	3
IST 207	Cisco Multilayer Switching	3
IST 208	Cisco Internetworking Troubleshooting	3
IST 209	Fundamentals of Wireless LANs	3
MKT 135	Customer Service Techniques	3

Bookkeeping

Certificate in Applied Science
Credit Requirements: 27 Semester Credit Hours

This program prepares you for entry-level accounting positions with basic skills in accounting, individual tax and payroll. Training in computerized accounting and electronic spreadsheets utilizing accounting applications is included in the program.

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

ACC 111	Accounting Concepts	3
ACC 150	Payroll Accounting	3
CPT 101	Introduction to Computers	3
ENG 101	English Composition I	3
	Total	**12**

Second Semester

ACC 102	Accounting Principles II	3
ACC 112	Organizational Accounting	3
ACC 124	Individual Tax Procedures	3
ACC 240	Computerized Accounting	3
ACC 245	Accounting Applications	3
	Total	**15**

Business Information Systems

Certificate in Applied Science
Credit Requirements: 24 Semester Credit Hours

This certificate program provides a broad overview of software, database management and application packages. Emphasis is placed on information systems used in the business environment. Students gain general competency in using microcomputers for management and decision making.

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 – Fall

CPT 102	Basic Computer Concepts	3
CPT 172	Microcomputer Database	3
CPT 179	Microcomputer Word Processing	3
	Total	**9**

Second Semester – Spring

CPT 174	Microcomputer Spreadsheets	3
BUS 210	Introduction to e-Commerce in Business	3
MGT 230	Managing Information Resources	3
	Total	**9**

Third Semester – Summer

CPT 270	Advanced Microcomputer Applications	3
MGT 240	Management Decision Making	3
	Total	**6**

Cisco Certified Network Associate

Certificate in Applied Science
Credit Requirements: 15 Semester Credit Hours

This program is delivered by TTC in its role as a Cisco Networking Academy and prepares students for entry-level jobs in companies with TCP/IP networks. Students learn the fundamentals of networking and internetworking, basic router and switch configuration, and troubleshooting in a diverse learning environment that includes instructor-led, web-based and hands-on lab settings.

Admission into this program requires proof of high school graduation (or GED) and qualifying scores on SAT, ACT or the TTC placement test. The program qualifies students to pursue a number of industry-standard certifications, including the Cisco Certified Entry Network Technician (CCENT) and Cisco Certified Network Associate (CCNA).

Recommended Sequence of Courses
First Semester

IST 201	Cisco Internetworking Concepts	3
IST 202	Cisco Router Configuration	3
IST 220	Data Communications	3
	Total	**9**

Second Semester

IST 203	Advanced Cisco Router Configuration	3
IST 204	Cisco Troubleshooting	3
	Total	**6**

CompTIA Systems Specialist

Certificate in Applied Science
Credit Requirements: 24 Semester Credit Hours

This program teaches students to properly install, configure, upgrade, troubleshoot and repair microcomputer hardware. Students also learn basic installation and troubleshooting knowledge of DOS/Windows. Basic knowledge of networking technology and practices is covered. This program helps prepare students for the Comp TIA Security+, A+, Network+ and Linux+ certification exams. Admission into this program requires proof of high school graduation (or GED) and qualifying scores on SAT, ACT or the TTC placement test.