

# 2020-2021 TTC Catalog

## Network Systems Management

### Associate in Applied Science in Network Systems Management

#### 60 Credit Hours

The Network Systems Management program prepares students for entry-level or higher positions as help desk and PC support, network administrators, network managers, network designers, network engineers, system administrators, routing and switching specialists, Linux/UNIX system administrators or network security specialists. Students have the option of acquiring a set of basic skills in a number of information technology disciplines or focusing in one discipline (for example, Cisco, Cloud, Linux or Microsoft System Administration) to acquire the higher-level skill sets of a specialist in one or more of these concentrations. With six department electives, students can design the degree program which best fits their job requirements or their own goals and ambitions. Most courses help students prepare for an individual IT vendor or vendor-neutral certification exam. TTC is a Cisco Networking Academy for the Cisco Certified Network Associate academic program. The Network Systems Management department is an academy partner with Cisco, Microsoft, VMware, CompTIA, NetApp and The Linux Professional Institute (LPI).

#### General Education Core Requirements

ECO 210 Macroeconomics 3  
ENG 101 English Composition I 3  
IDS 109 First Year Experience Seminar 3  
MAT 110 College Algebra 3  
or  
MAT 120 Probability and Statistics 3  
or  
MAT 155 Contemporary Mathematics 3  
REQ HUM                      Select from                      3  
[Humanities](#)

Total: 15

#### Major Requirements

CPT 114 Computers and Programming 3  
CPT 209 Computer Systems Management 3  
IST 165 Implementing and Administering Windows Directory Services 3  
IST 166 Network Fundamentals 3  
IST 190 Linux Essentials 3  
IST 198 Cloud Essentials 3  
IST 201 Cisco Internetworking Concepts 3  
IST 202 Cisco Router Configuration 3

IST 253 LAN Service and Support 3  
IST 260 Network Design 3  
IST 293 IT and Data Assurance I 3  
MGT 270 Managerial Communication 3

Total: 36

### **Electives**

Select three courses from the following

#### **Cisco Network Administration Career Path Electives**

IST 203 Advanced Cisco Router Configuration 3  
IST 204 Cisco Troubleshooting 3  
IST 206 Cisco Remote Access 3

#### **CompTIA Systems Specialist Career Path Electives**

IST 161 Introduction to Network Administration 3

#### **Linux System Administration Career Path Electives**

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

#### **Microsoft Network Solutions Associate Career Path Electives**

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

#### **Virtualization and Cloud Computing Career Path Electives**

CPT 180 Shell Scripting 3  
IST 250 Network Management 3  
IST 253 LAN Service and Support 3  
IST 298 Advanced Cloud Computing 3

#### **Work Experience and Internship Career Path Electives**

CWE Cooperative Work Experience \* \*  
IST 286 Technical Support Internship I 3  
IST 287 Technical Support Internship II 3

\*Up to six credit hours

#### **Other Electives**

CPT 172 Microcomputer Database 3  
CPT 242 Database 3  
CPT 282 Information Systems Security 3  
IST 206 Cisco Remote Access 3  
MKT 130 Customer Service Principles 3

REQ OTH                      Select from [Other](#)    3

Total: 12

**Admission Requirements**

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