

2018-2019 TTC Catalog

Network Systems Management

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Associate in Applied Science in Network Systems Management

69 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, Cybersecurity, 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

or

ECO 211 Microeconomics 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

CPT 210 Computer Resource Management 3

IST 161 Introduction to Network Administration 3

IST 165 Implementing and Administering Windows Directory Services 3
IST 190 Linux Essentials 3
IST 201 Cisco Internetworking Concepts 3
IST 202 Cisco Router Configuration 3
IST 220 Data Communications 3
IST 260 Network Design 3
IST 293 IT and Data Assurance I 3
MGT 270 Managerial Communication 3

Total: 36

Electives

Select six courses from the following

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 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
IST 162 Introduction to Workstation Networking Administration 3
IST 206 Cisco Remote Access 3
IST 207 Cisco Multilayer Switching 3
IST 208 Cisco Internetwork Troubleshooting 3
IST 209 Fundamentals of Wireless LANs 3
MKT 135 Customer Service Techniques 3

Total: 18

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.