STEM

NETWORKING ADMINISTRATION

Delivery: Daytime and Evening Classes

Start: Fall Semester only, Daytime, Full-time (recommended)

Start: Fall or Spring Semester, Evenings, Part-time

AWARDS

| Networking Administration A.A.S. Degree 69 c | r. |
|--|-----|
| Networking Administration Diploma60 c | r. |
| PC Technician Certificate | cr. |

MAJOR DESCRIPTION

This program provides students with the knowledge and experience to install and maintain computers, servers, networks and other networking equipment to function in a variety of network environments. Combining a theory-based foundation with hands-on work, students build and manage networks, install software, configure a variety of networking devices, including switches and routers, and troubleshoot problems related to both hardware and software.

WORK ENVIRONMENT

Graduates secure employment in entry-level positions such as network installation, network management, network maintenance, computer technician and help desk.

POTENTIAL JOB TITLES

- Network Administrator
- Network Manager
- Network Security Administrator
- Network Services Supervisor
- Network Specialist
- Network Systems Coordinator

SALARY DATA

See latest data at <u>onetonline.org</u>.

Average Wage: \$45.80/hourTop Earners: \$62.08/hour

ADDITIONAL INFORMATION

Scan the QR code for more program information and specific program costs; some courses may have additional lab or instructional fees.



NETWORKING ADMINISTRATION

A.A.S. DEGREE

This is a suggested sample course sequence.

Please contact your program advisor regarding your academic plans.

| First Year - | Fall Semester 15 cr | | | |
|------------------------------------|--|--|--|--|
| ENGL1150 | Composition I | | | |
| ISTC1015 | Supporting Business Applications | | | |
| ISTC1030 | Operating Systems I | | | |
| ISTC1045 | Network Systems I: Introduction to Networking 3 | | | |
| COMS1020 | Interpersonal Communication | | | |
| First Year - Spring Semester 18 cr | | | | |
| ISTC1010 | Microcomputer Maintenance | | | |
| ISTC1033 | Operating Systems II | | | |
| ISTC1050 | Database Systems | | | |
| ISTC1061 | Intro to IT Security | | | |
| ISTC1100 | Business Communications | | | |
| | General Elective (any MnTC area) | | | |
| Second Yea | r - Fall Semester 18 cr | | | |
| ISTC2006 | Network Systems II: Routing and Switching Essentials | | | |
| ISTC2011 | Network Systems III: Scaling Networks | | | |
| ISTC2035 | Operating System III | | | |
| ISTC2066 | Firewalls | | | |
| ISTC2071 | Computer Forensics † | | | |
| | General Elective (any MnTC area) | | | |
| Second Yea | r - Spring Semester 18 cr | | | |
| ISTC2037 | Operating Systems IV | | | |
| ISTC2040 | Database Management | | | |
| ISTC2080 | Cybersecurity † | | | |
| ISTC2100 | Project Management (<i>or</i> ISTC2970 Internship)3 | | | |
| ISTC2150 | Virtualization, Storage, and Cloud Technologies 3 | | | |
| MATS1251 | <i>or</i> MATS1240 <i>or</i> MATS1300 <i>or</i> PHIL1250*3 | | | |

TOTAL PROGRAM REQUIREMENTS 69

[†] Course only offered once a year. Please see faculty advisor for schedule.

^{*} PHIL1250 is 3 credits. MATS1251, 1240 & 1300 are 4 credits. Students who complete MATS1251, 1240, or 1300 will get 1 credit towards their General Elective total

[Revised: 03/16/23]

NETWORKING ADMINISTRATION

DIPLOMA

This is a suggested sample course sequence.

Please contact your program advisor regarding your academic plans.

| First Year - | Fall Semester 15 | cr | | | |
|-------------------------------------|---|-----|--|--|--|
| ENGL1150 | Composition I | . 3 | | | |
| ISTC1015 | Supporting Business Applications | . 3 | | | |
| ISTC1030 | Operating Systems I | . 3 | | | |
| ISTC1045 | Network Systems I: Introduction to Networking | . 3 | | | |
| COMS1020 | Interpersonal Communication | . 3 | | | |
| First Year - | Spring Semester 15 | cr | | | |
| ISTC1010 | Microcomputer Maintenance | . 3 | | | |
| ISTC1033 | Operating Systems II | . 3 | | | |
| ISTC1050 | Database Systems | . 3 | | | |
| ISTC1061 | Intro to IT Security | . 3 | | | |
| ISTC1100 | Business Communications | . 3 | | | |
| Second Yea | Second Year - Fall Semester 15 cr | | | | |
| ISTC2006 | Network Systems II: Routing and | - | | | |
| 13102000 | Switching Essentials | . 3 | | | |
| ISTC2011 | Network Systems III: Scaling Networks | . 3 | | | |
| ISTC2035 | Operating System III | . 3 | | | |
| ISTC2066 | Firewalls | . 3 | | | |
| ISTC2071 | Computer Forensics † | . 3 | | | |
| Second Year - Spring Semester 15 cr | | | | | |
| ISTC2037 | Operating Systems IV | . 3 | | | |
| ISTC2040 | Database Management | . 3 | | | |
| ISTC2080 | Cybersecurity † | . 3 | | | |
| ISTC2150 | Virtualization, Storage, and Cloud Technologies | . 3 | | | |
| | General Elective (any MnTC area) | . 3 | | | |
| | | | | | |

TOTAL PROGRAM REQUIREMENTS 60

PC TECHNICIAN

CERTIFICATE

This is a suggested sample course sequence.

Please contact your program advisor regarding your academic plans.

| First Year - | Fall Semester | 12 cr |
|--------------|---|-------|
| ISTC1015 | Supporting Business Applications | 3 |
| ISTC1030 | Operating Systems I | 3 |
| ISTC1045 | Network Systems I: Introduction to Networking | g3 |
| COMS1020 | Interpersonal Communication | 3 |
| | | |
| First Year - | Spring Semester | 18 cr |
| ISTC1010 | Microcomputer Maintenance | 3 |
| ISTC1033 | Operating Systems II | 3 |
| ISTC1050 | Database Systems | 3 |
| ISTC1061 | Intro to IT Security | 3 |
| ISTC1100 | Business Communications | 3 |
| | Technical Elective (any ISTC) | 3 |
| | | |

TOTAL PROGRAM REQUIREMENTS 30



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[†] Course only offered once a year. Please see faculty advisor for schedule.