

INFORMATION TECHNOLOGY

NETWORK MANAGEMENT

Network Management Degree - A25590NM

- Day and Evening

The Network Management curriculum prepares individuals for employment supporting local- and wide-area networks. Students may learn how to use technologies to provide for data, voice, image, and video communications in business, industry, and education.

Course work includes design, installation, configuration, and management of local- and wide-area network hardware and software. Emphasis is placed on developing proficiency in the use of network management software and the use of hardware such as switches and routers.

Graduates may find employment in entry-level jobs as local area network managers, network operators, network analysts, and network technicians. Graduates may also be qualified to take certification examinations for various network products, depending on their local program.

Program Sequence

FALL SEMESTER

CTI 110	Web, Programming and Database Foundations.....	3
CTI 120	Network and Security Foundations.....	3
NOS 110	Operating System Concepts.....	3
— —	Math Elective.....	3

SPRING SEMESTER

CSC 121	Python Programming.....	3
CTS 115	Info Sys Business Concepts.....	3
NET 125	Introduction to Networks.....	3
NET 126	Routing Basics.....	3
ENG 111	Writing and Inquiry.....	3

SUMMER SEMESTER

NET 225	Routing and Switching I.....	3
NET 270	Building Scalable Networks.....	3

FALL SEMESTER

NET 115	Telecom for IT Professionals.....	3
NOS 130	Windows Single User.....	3
NOS 230	Windows Admin I.....	3
— —	Humanities and Fine Arts Elective.....	3
— —	Social and Behavioral Sciences Elective.....	3

SPRING SEMESTER

CTS 120	Hardware/Software Support.....	3
NET 175	Wireless Technology.....	3
NOS 120	Linux/UNIX Single User.....	3
— —	Major Elective I.....	2
— —	English Elective.....	3

SUMMER SEMESTER

NET 289	Networking Project.....	3
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Graduation Requirements..... 65 Credit Hours

General Electives

English Electives

(Choose 3 credit hrs)

ENG 112	Writing/Research in the Disc.....	3
ENG 114	Professional Research and Reporting3	

Mathematics Electives

(Choose 3 Credit Hrs)

MAT 121	Algebra/Trigonometry I.....	3
MAT 143	Quantitative Literacy.....	3

MAT 152	Statistical Methods I.....	4
MAT 171	Precalculus Algebra.....	4

Humanities/Fine Arts Elective

(Choose 3 Credit Hrs)

HUM 110	Technology and Society.....	3
HUM 115	Critical Thinking.....	3
PHI 240	Introduction to Ethics.....	3

Social/Behavioral Science Elective

(Choose 3 Credit Hrs)

ECO 251	Prin. Of Microeconomics.....	3
ECO 151	Survey of Economics.....	3
POL 120	American Government.....	3
PSY 118	Interpersonal Psychology.....	3
PSY 150	General Psychology.....	3
SOC 210	Introduction to Sociology.....	3

Required Major Electives

(Choose a min of 2 Credit Hrs)

NET 135	Data Center Networking.....	3
NET 240	Network Design.....	3
NET 272	Multi-Layer Networks.....	3
NET 273	Internetworking Support.....	3
WBL	Work-Based Learning.....	2

* Work based learning is an elective. WBL courses completed for one program may not count toward the completion of another program. For verification, please contact your academic advisor or your departmental WBL faculty coordinator. Students must have approval from the Program Director and pre-register with the Work-Based Learning Office. The work may be done over any semester, but the total elective credits must add up to 3.

CISCO Network Associate Certificate – C25590CA

This certificate is designed to prepare students for the CISCO Certified Network Associate (CCNA) examination. Topics include network topologies and design, router configuration and protocols, switching theory, virtual LANS and threaded case studies.

Upon completion of the four-course sequence, students may have the expertise they need to pass the test required to achieve CCNA status. Completion of NET 110 or CTI-120 or its equivalent is required to begin this program.

CTI 120	Network and Security.....	3
NET 125	Networking Basics.....	3
NET 126	Routing Basics.....	3
NET 225	Routing and Switching I.....	3

Graduation Requirements..... 12 Credit Hours

CISCO Network Professional Certificate - C25590CP

The CISCO Certified Network Professional (CCNP) certificate provides the student with advanced skills in LAN/WAN networking technologies with an emphasis on CISCO methodology. These courses will provide an in-depth study of theory, as well as practical hands-on lab activities to prepare the student for the CCNP certification objectives. Topics include routing protocols, switching technology, remote access setup and maintenance, building multi-layer networks, and networking troubleshooting.

NET 270	Building Scalable Networks.....	3
NET 272	Multi-Layer Networks.....	3

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NET 273	Internetworking Support.....	3
___ ___	Major Elective (min 3 Credit Hrs).....	3

Graduation Requirements 12 Credit Hours

Major Electives

(Choose a Min of 3 Credit Hrs)

NET 115	Telecom for IT Professionals	3
NET 135	Data Center Networking.....	3
NET 175	Wireless Technology.....	3
NET 240	Network Design.....	3
WBL ___	Work Based Learning (All Numbers Accepted)	3

* Work based education is an elective. Students must have approval from the Program Director and preregister with the Work-Based Learning Office. The work may be done over any number of semesters, but the total elective credits must add up to 8 for electives 1, 2 and 3.

Wireless Network Certificate (C25590WN)

This certificate is designed to give students a solid foundation in cellular and wireless network technologies. These courses will provide an in-depth study of theory, as well as practical hands-on lab activities to prepare the student for the CCNA, CWSA and CWNA certification objectives. The CWNA and CWSA certifications will be administered as the final exam for each course.

NET 115	Telecom for IT Professionals	3
NET 125	Networking Basics	3
NET 126	Routing Basics.....	3
NET 225	Routing and Switching	3
NET 175	Wireless Technology.....	3

Graduation Requirements15 Credit Hours