Networking and Support Systems

The Networking and Support Systems Department at Cincinnati State prepares students to successfully install, maintain, and support networking systems for industries, businesses, and other organizations. Numerous entities—from large corporations to individual households—rely on computer networks to enhance production and complete daily tasks. The associate's degree programs in Networking and Support Systems provide areas of specialization for students interested in a computer networking career.

- **Business Network Administration (NETB)** is a business degree program that prepares graduates for careers in the software, administration, and security areas of networking with a concentration on the business side of the networking industry. Students complete business courses in marketing, management, accounting, and law. Networking courses focus on design, administration, security, and network maintenance.
- **Computer Network Engineering Technology (NETC)** prepares graduates to work in the hardware industry of the networking field. It is an engineering-based program, emphasizing installation, setup, maintenance, and troubleshooting of network hardware. Students complete courses in physics, engineering-based electronics, and networking hardware.
- **PC Support and Administration Technology (PCSA)** has less emphasis on electronics. Students in this program should have an interest in the basics of electronics and desire extensive training in the installation and maintenance of personal computers. Graduates attain positions as PC technicians, help desk managers, and PC user trainers.

Business Network Administration (NETB)

Students in the Business Network Administration program learn to plan, implement, analyze, and administer local, campus-wide, metropolitan, and wide area networks. Students develop expertise in all facets of networking including network operating systems, security systems, network hardware, server administration, virtualization, and messaging tools. Graduates of the NETB program are proficient with server setup and configuration, server administration, network security measures, messaging, network wiring, and network help desk operations.

Career opportunities for program graduates vary due to the diverse occupations available in the business industry.

Job titles for NETB graduates may include: Network Administrator, Network Specialist, Network Technician, and Network Security Administrator.

Computer Network Engineering Technology (NETC)

The Computer Network Engineering Technology program emphasizes the design, installation, and support of an organization's local area network (LAN), wide area network (WAN), network segment, internet, or intranet system. Graduates of the program provide day-to-day, on-site administrative support for a variety of work environments, including professional offices, small businesses, schools, government agencies, and large corporations.

The Computer Network Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, phone: (410) 347-7700

PC Support and Administration Technology (PCSA)

PC Support and Administration program graduates are troubleshooters responsible for interpreting problems and providing technical support assistance, support, and advice to customers and users. Students learn to install, set up, and maintain hardware and software for microcomputers. Courses include computer operating systems, data communications, networking, and support center management.

Career opportunities for program graduates are diverse, for several reasons. The sheer number of computers and users in business and industry creates ever-changing work environments and challenges. Also, gaining assistance in using software effectively is generally a high priority for businesses and users. Finally, the graduate's knowledge and skills are applicable to a class of computers, rather than to a particular company, so graduates have significant job mobility as well as opportunities for entrepreneurial work.

Job titles for PCSA graduates may include: senior PC support technician, PC system coordinator, or helpdesk manager.

Business Network Administration (NETB)

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 12 credit hours taken at Cincinnati State.

Semester 1		Credits
MGT 101	Principles of Management	3
ENG 101	English Composition	3
IT 105	Information Technology Concepts	3
IT 115	Operating Systems Administration	3
MAT 121	Technical Algebra and Geometry with Statistics	3
CIT 190	Career Preparation: Engineering and Information Technologies	1

Semester 2

ECO 105	Principles of Microeconomics	3
NETB 115	Networking Essentials	3
NETB 125	Open Source Operating Systems and Applications	3
NETB 155	Server Administration	4
ENG 1XX English Composition Elective		3

Semester 3

NETB 291	Full-Time Cooperative Education 1: Business Network Administration	2

Semester 4

ACC 101	Financial Accounting	3
COMM 110	Public Speaking	3
NETB 135	IT Support Desk Concepts	4
NETB 215	Electronic Messaging Administration	4
NETB 225	Information Security	4

Semester 5

LAW 101	Business Law	3
MKT 101	Principles of Marketing	3
NETB 235	Desktop and Server Virtualization	3
NETB 290	Business Network Administration Capstone	4
XXX XXX Humanities/ Social Sciences Elective		3

Semester 6

NETB 292	Full-Time Cooperative Education 2: Business Network Administration	2
Total Credits:		70

Electives

English Composition Elective

ENG 102	Composition and Argument	3
ENG 103	Composition and Literature	3
ENG 104	Composition and Technical Communication	3
ENG 105	Composition and Business Communication	3

Humanities/Social Sciences Elective

Any CULT, ECO, FRN, GEO, HST, LBR, POL, LBR, PSY, SOC, SPN

Computer Network Engineering Technology (NETC)

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 12 credit hours taken at Cincinnati State.

Semester 1		**Credits**
ENG 101	English Composition	3
NETB 115	Networking Essentials	3
NETC 121	Network Communications 1	3
MAT 125	Algebra and Trigonometry	4
EET 131	Circuit Analysis 1	4
CIT 190	Career Preparation: Engineering and Information Technologies	1
Semester 2		
COMM 110	Public Speaking	3
EET 121	Digital Systems 1	3
MAT 126	Functions and Calculus	4
EET 132	Circuit Analysis 2	4
NETB 155	Server Administration	4
Semester 3		

NETC 291	Full-Time Cooperative Education 1: Computer Network Engineering Technology	2
Semester 4		
NETC 122	Network Communications 2	3
EET 122	Digital Systems 2	4
PHY 151	Physics 1: Algebra and Trigonometry-Based	4
NETC 230	Network Security Design	3
EET 251	Electronics 1	4
Semester 5		
ENG 102	Composition and Argument	3
ECO 105	Principles of Microeconomics	3
PSY 110	Introduction to Psychology	3
NETC 240	Emerging Topics in Computer Network Engineering Technology	3
NETC 290	Computer Network Engineering Technology Capstone Project	3
Semester 6		
NETC 292	Full-Time Cooperative Education 2: Computer Network Engineering Technology	2
Total Credits:		73

PC Support and Administration Technology (PCSA)

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 12 credit hours taken at Cincinnati State.

Semester 1		**Credits**
ENG 101	English Composition	3
IT 105	Information Technology Concepts	3
IT 115	Operating Systems Administration	3
MAT 121	Technical Algebra and Geometry with Statistics	3
CIT 190	Career Preparation: Engineering and Information Technologies	1
Semester 2		
EET 101	Electronic Fundamentals 1	4
ENG 10X English Composition Elective		3
PCSA 111	Computer Repair 1	3
NETC 121	Network Communications 1	3
NETB 125	Open Source Operating Systems and Applications	3
Semester 3		
PCSA 291	Full-Time Cooperative Education 1: PC Support and Administration	2
Semester 4		
EET 102	Electronic Fundamentals 2	4
COMM 110	Public Speaking	3
PCSA 112	Computer Repair 2	3
NETB 135	IT Support Desk Concepts	4
IT XXX Programming Elective		3
Semester 5		
PSY 110	Introduction to Psychology	3
NETB 155	Server Administration	4
PCSA 213	Computer Repair 3	3
PCSA 290	PC Support and Administration Capstone	3
XXX XXX Humanities Elective		3
Semester 6		
PCSA 292	Full-Time Cooperative Education 2: PC Support and Administration	2
Total Credits:		66

Electives

English Composition Elective

ENG 102	Composition and Argument	3
ENG 103	Composition and Literature	3
ENG 104	Composition and Technical Communication	3
ENG 105	Composition and Business Communication	3
Programming Elective		
IT 101	.NET Programming 1	3
IT 110	HTML with CSS and JavaScript	4
IT 111	Database Design and SQL 1	4
Humanities Elective		
COMM 130	Introduction to Film Studies	3
Any ART, CULT, FRN, LIT, MUS, PHI, REL, SPN, THE		