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 offered within the Networking and Support Systems department provide areas of specialization for students interested in a computer networking career.

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 operating systems, network hardware, server administration, and virtualization. Graduates earn an Associate of Applied Science degree and are proficient with server setup and configuration, network security measures, messaging, network wiring, and network help desk operations. In addition, the program prepares students to qualify for several technical certifications. Graduates are prepared for diverse career opportunities in a variety of businesses and organizations. Job titles for graduates 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 earn an Associate of Applied Science degree and are prepared to 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, 415 N. Charles St., Baltimore, MD 21202-4012, phone (410) 347-7700.

Computer Network Engineering Technology - Cyber-Security Major (NETCCS)

The Computer Network Engineering Technology - Cyber-Security Major combines technical knowledge and skills with understanding of security planning, risk mitigation, and related documentation requirements. Graduates earn an Associate of Applied Science degree and are prepared to assist organizations that must comply with federal or state government regulations related to information security, or must meet payment card industry requirements to safeguard customer information or other sensitive data.

Computer Support and Administration Technology (CSA)

Computer Support and Administration program graduates are troubleshooters responsible for interpreting problems and providing technical support assistance and advice to customers. 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. Graduates earn an Associate of Applied Science degree.

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 Computer Support and Administration graduates include senior PC support technician, PC system coordinator, or helpdesk manager.

For more information, please contact the Center for Innovative Technologies at (513) 569-1743.

Business Network Administration (NETB)

Semester 1		Lec	Lab	Credits
FYE 1XX First Year Experience Elective (**B**)		1	0	1
ENG 101	English Composition 1 (**G**)	3	0	3
IT 105	Information Technology Concepts (**B**)	2	3	3
NETB 120	Computer Virtualization (**T**)	2	3	3
IT 115	Operating Systems Administration 1 (**B**)	2	3	3
CIT 190	Career Preparation: Engineering and Information Technologies (**B**)	1	0	1

Semester 2

ENG 1XX English Composition Elective (**G**)		3	0	3
IT 116	Operating Systems Administration 2 (**B**)	2	3	3
NETB 115	Networking Essentials (**T**)	2	3	3
NETB 155	Server Administration 1 (**T**)	3	2	4
MAT 121	Technical Algebra and Geometry with Statistics (**G**)	2	2	3
Semester 3				
NETB 291	Full-Time Cooperative Education 1: Business Network Administration (**T**)	1	40	2
Semester 4				
NETB 135	Information Technology Support Desk Concepts (**T**)	3	2	4
NETB 256	Server Adminstration 2 (**T**)	3	2	4
NETB 265	Server Configuration (**T**)	3	2	4
XXX XXX Social/Behavioral Science Elective (**G**)		3	0	3
Semester 5				
NETB 125	Open Source Operating Systems and Applications (**T**)	2	3	3
COMM 110	Public Speaking (**B**)	3	0	3
NETB 290	Business Network Administration Capstone (**T**)	2	5	4
XXX XXX Arts/Humanities Elective (**G**)		3	0	3
XXX XXX Business Elective (**B**)		3	0	3
Semester 6				
NETB 292	Full-Time Cooperative Education 2: Business Network Administration (**T**)	1	40	2
Total Credits:		50	113	65

Electives

First Year Experience Elective

FYE 100	College Survival Skills	1
FYE 105	College Success Strategies	2
FYE 110	Community College Experience	3

English Composition Elective

ENG 102	English Composition 2: Contemporary Issues	3
ENG 103	English Composition 2: Writing about Literature	3
ENG 104	English Composition 2: Technical Communication	3
ENG 105	English Composition 2: Business Communication	3

Social/Behavioral Science Elective

Any ECO, GEO, HST, LBR, POL, PSY, SOC	3

Arts/Humanities Elective

Any ART, CULT, FRN, SPN, LIT, MUS, PHI, REL, THE, or COMM 130	3

Business Elective

ACC 101	Financial Accounting	3
LAW 101	Business Law	3

MGT 101	Principles of Management			3

Computer Network Engineering Technology (NETC)

Semester 1		Lec	Lab	Credits
NETC 121	Network Communications 1 (**B**)	2	2	3
FYE 1XX First Year Experience Elective (**B**)		1	0	1
MAT 125	Algebra and Trigonometry (**B**)	3	2	4
ENG 101	English Composition 1 (**G**)	3	0	3
EET 131	Circuit Analysis 1 (**T**)	3	2	4
CIT 190	Career Preparation: Engineering and Information Technologies (**T**)	1	0	1
Semester 2				
MAT 126	Functions and Calculus (**G**)	3	2	4
EET 121	Digital Systems 1 (**T**)	2	2	3
EET 132	Circuit Analysis 2 (**T**)	3	2	4
NETB 155	Server Administration 1 (**B**)	3	2	4
Semester 3				
XXX XXX Cooperative Education or Transfer Elective 1 (**T**) [*]		1	40	2
Semester 4				
PHY 151	Physics 1: Algebra and Trigonometry-Based (**B**)	3	3	4
NETC 122	Network Communications 2 (**T**)	2	2	3
NETC 230	Network Security Design (**T**)	2	2	3
EET 122	Digital Systems 2 (**T**)	3	2	4
Semester 5				
NETC 240	Emerging Topics in Computer Network Engineering Technology (**T**)	2	3	3
NETC 290	Computer Network Engineering Technology Capstone Project (**T**)	2	2	3
ENG 10X English Composition Elective (**G**)		3	0	3
XXX XXX Arts/Humanities or Social/Behavioral Science Elective (**G**)		3	0	3
Semester 6				
XXX XXX Cooperative Education or Transfer Elective 2 (**T**) [*]		1	40	2
Total Credits:		46	108	61

Electives

First Year Experience Elective

FYE 100	College Survival Skills	1
FYE 105	College Success Strategies	2
FYE 110	Community College Experience	3

English Composition Elective

ENG 102	English Composition 2: Contemporary Issues	3
ENG 103	English Composition 2: Writing about Literature	3
ENG 104	English Composition 2: Technical Communication	3
ENG 105	English Composition 2: Business Communication	3

Arts/Humanities or Social/Behavioral Science Elective

PHI 110	Ethics	3
PSY 110	Introduction to Psychology	3
SOC 105	Introduction to Sociology	3

Cooperative Education or Transfer Electives [*]

NETC 291	Full-Time Cooperative Education 1: Computer Network Engineering Technology	2
NETC 292	Full-Time Cooperative Education 2: Computer Network Engineering Technology	2
EET 251	Electronics	4
EMET 240	Programmable Logic Controllers, Motors, Motor Controls, and Kinematics	3
EMET 250	Servomechanisms	3
IT 101	.NET Programming 1	3
IT 110	HTML with CSS and JavaScript	4
IT 111	Database Design and SQL 1	4
IT 115	Operating Systems Administration 1	3
IT 161	Java Programming 1	4

[*]   Program Chair approval is required for students planning to take a Transfer Elective course rather than participate in cooperative education.

Computer Network Engineering Technology - Cyber-Security Major (NETCCS)

Semester 1		Lec	Lab	Credits
NETC 121	Network Communications 1 (**B**)	2	2	3
MAT 131	Statistics 1 (**G**)	2	2	3
ENG 101	English Composition 1 (**G**)	3	0	3
MGT 130	Project Management (**B**)	3	0	3
FYE 1XX First Year Experience Elective (**B**)		1	0	1
CIT 190	Career Preparation: Engineering and Information Technologies (**T**)	1	0	1
Semester 2				
NETC 122	Network Communications 2 (**T**)	2	2	3
NETC 170	Governance and Management of IT (**B**)	3	3	4
NETB 155	Server Administration 1 (**B**)	3	2	4
XXX XXX Arts/Humanities or Social/Behavioral Science Elective (**G**)		3	0	3
Semester 3				
Cooperative Education or Transfer Elective 1 (**T**) [*]		1	40	2
Semester 4				
NETC 180	Information Risk Management (**T**)	3	3	4
NETC 230	Network Security Design (**T**)	2	2	3
COMM 110	Public Speaking (**B**)	3	0	3
ENG 10X English Composition Elective (**G**)		3	0	3

PHY XXX Physics Elective (**G**)		2	2	3
Semester 5				
NETC 240	Emerging Topics in Computer Network Engineering Technology (**T**)	2	3	3
NETC 280	IT Documentation (**T**)	3	3	4
NETC 290	Computer Network Engineering Technology Capstone Project (**T**)	2	2	3
IT 215	Scripting (**T**)	2	2	3
Semester 6				
Cooperative Education or Transfer Elective 2 (**T**) *		1	40	2
Total Credits:		47	108	61

Electives

First Year Experience Elective

FYE 100	College Survival Skills	1
FYE 105	College Success Strategies	2
FYE 110	Community College Experience	3

Arts/Humanities or Social/Behavioral Science Elective

PHI 110	Ethics	3
ECO 105	Principles of Microeconomics	3
PSY 110	Introduction to Psychology	3
SOC 105	Introduction to Sociology	3

English Composition Elective

ENG 102	English Composition 2: Contemporary Issues	3
ENG 103	English Composition 2: Writing about Literature	3
ENG 104	English Composition 2: Technical Communication	3
ENG 105	English Composition 2: Business Communication	3

Physics Elective

PHY 150	Introduction to Physics	3
PHY 151	Physics 1: Algebra and Trigonometry-Based	4
PHY 201	Physics 1: Calculus-Based	5

Cooperative Education or Transfer Electives *

NETC 291	Full-Time Cooperative Education 1: Computer Network Engineering Technology	2
NETC 292	Full-Time Cooperative Education 2: Computer Network Engineering Technology	2
IT 101	.NET Programming 1	3
IT 110	HTML with CSS and JavaScript	4
IT 111	Database Design and SQL 1	4
IT 115	Operating Systems Administration 1	3
IT 161	Java Programming 1	4

* Program Chair approval is required for students planning to take a Transfer Elective course rather than participate in cooperative education.

Computer Support and Administration Technology (CSA)

Semester 1		**Lec**	**Lab**	**Credits**
CIT 190	Career Preparation: Engineering and Information Technologies (**B**)	1	0	1
ENG 101	English Composition 1 (**G**)	3	0	3

Course	Title			
IT 105	Information Technology Concepts (**B**)	2	3	3
IT 115	Operating Systems Administration 1 (**B**)	2	3	3
MAT 121	Technical Algebra and Geometry with Statistics (**G**)	2	2	3
FYE 1XX First Year Experience Elective (**B**)		1	0	1
Semester 2				
CSA 111	Computer Repair 1 (**T**)	2	3	3
EET 101	Electronic Fundamentals 1 (**B**)	2	3	3
NETB 125	Open Source Operating Systems and Applications (**B**)	2	3	3
ENG 10X English Composition Elective (**G**)		3	0	3
NETX XXX Networking Elective (**T**)		2	3	3
Semester 3				
CSA 291	Full-Time Cooperative Education 1: Computer Support and Administration (**T**)	1	40	2
Semester 4				
CSA 112	Computer Repair 2 (**T**)	2	3	3
COMM 110	Public Speaking (**B**)	3	0	3
NETB 135	Information Technology Support Desk Concepts (**T**)	3	2	4
PSY 110	Introduction to Psychology (**G**)	3	0	3
IT XXX Programming Elective (**T**)		2	3	3
Semester 5				
CSA 213	Computer Repair 3	2	2	3
CSA 290	Computer Support and Administration Capstone (**T**)	2	2	3
NETB 155	Server Administration 1 (**T**)	3	2	4
XXX XXX Arts/Humanities Elective (**G**)		3	0	3
Semester 6				
CSA 292	Full-Time Cooperative Education 2: Computer Support and Administration (**T**)	1	40	2
Total Credits:		47	114	62

Electives

First Year Experience Elective

FYE 100	College Survival Skills	1
FYE 105	College Success Strategies	2
FYE 110	Community College Experience	3
English Composition Elective		
ENG 102	English Composition 2: Contemporary Issues	3
ENG 103	English Composition 2: Writing about Literature	3

ENG 104	English Composition 2: Technical Communication	3
ENG 105	English Composition 2: Business Communication	3
Networking Elective		
NETB 115	Networking Essentials	3
NETC 121	Network Communications 1	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
Arts/Humanities Elective		
Any ART, CULT, FRN, LIT, MUS, PHI, REL, SPN, THE, or COMM 130		3

Faculty

NETB & CSA Program Chair/Advisor

Professor Jeffrey Vetter, BS, BA
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NETC & NETCCS Program Chair/Advisor

Professor Paul Weingartner, PE, BS
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Co-op Coordinator (All programs)

Professor Noelle Grome, ME, MA
noelle.grome@cincinnatistatee.du

NETB Courses

NETB 115 Networking Essentials
3 Credits. 2 Lecture Hours. 3 Lab Hours.
A course on managing operating systems in a network environment. Topics include: topologies and technologies; protocols; network problem solving; and network administration, support, and security.
Prerequisites: IT 105 and IT 115

NETB 120 Computer Virtualization
3 Credits. 2 Lecture Hours. 3 Lab Hours.
A course on operating systems in a virtual environment. Topics include: fundamentals of virtualization, advantages of using virtual software, and installing virtual systems.
Prerequisites: AFL 085 and AFM 092, or appropriate placement test scores

NETB 125 Open Source Operating Systems and Applications
3 Credits. 2 Lecture Hours. 3 Lab Hours.
A course on the open source movement and essential operating systems and applications. Topics include: history of open source, the Linux operating system, file systems, and troubleshooting.
Prerequisites: IT 105 and IT 115

NETB 135 Information Technology Support Desk Concepts
4 Credits. 3 Lecture Hours. 2 Lab Hours.
A course on fundamental operations and procedures of an information technology support desk. Topics include: product evaluation, roles and responsibilities, support management, needs assessment, and troubleshooting.
Prerequisites: IT 105 and IT 115

NETB 155 Server Administration 1
4 Credits. 3 Lecture Hours. 2 Lab Hours.
A course on user administration for Microsoft Windows server technology. Topics include: installing servers, configuring server roles, deploying core network services, administering Active Directory, managing remote servers, and creating and managing group policy. This course prepares students for a Microsoft Certification exam.
Prerequisites: NETC 121, or IT 105 and IT 115

NETB 191 Part-Time Cooperative Education 1: Business Network Administration
1 Credit. 1 Lecture Hour. 20 Lab Hours.
Students seeking an associate's degree participate in their first part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: CIT 190

NETB 192 Part-Time Cooperative Education 2: Business Network Administration
1 Credit. 1 Lecture Hour. 20 Lab Hours.
Students seeking an associate's degree participate in their second part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETB 191

NETB 193 Part-Time Cooperative Education 3: Business Network Administration
1 Credit. 1 Lecture Hour. 20 Lab Hours.
Students seeking an associate's degree participate in their third part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETB 192

NETB 194 Part-Time Cooperative Education 4: Business Network Administration
1 Credit. 1 Lecture Hour. 20 Lab Hours.
Students seeking an associate's degree participate in their fourth part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETB 193

NETB 195 Part-Time Cooperative Education 5: Business Network Administration
1 Credit. 1 Lecture Hour. 20 Lab Hours.
Students seeking an associate's degree participate in their fifth part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETB 194

NETB 196 Part-Time Cooperative Education 6: Business Network Administration
1 Credit. 1 Lecture Hour. 20 Lab Hours.
Students seeking an associate's degree participate in their sixth part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETB 195

NETB 198 First Year Special Topics in Business Network Administration
1-9 Credits. 0 Lecture Hour. 0 Lab Hour.
A course on selected topics related to Business Network Administration, which gives students opportunities to study information not currently covered in other courses. Grades issued are A, B, C, D, or F.
Prerequisites: Instructor Approval
Instructor Consent Required

NETB 199 First Year Independent Project in Business Network Administration
1-9 Credits. 0 Lecture Hour. 0 Lab Hour.
A project related to Business Network Administration that is completed by one or more students to meet specific educational goals. Projects must have prior approval and supervision by Business Network Administration faculty. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: Instructor Approval
Instructor Consent Required

NETB 215 Electronic Messaging Administration
4 Credits. 3 Lecture Hours. 2 Lab Hours.
A course on messaging using a networked system. Topics include: installing and setting up an exchange server, managing recipients and addresses, managing data storage, backup and recovery, and troubleshooting.
Prerequisites: NETB 115 and NETB 155

NETB 225 Information Security
4 Credits. 3 Lecture Hours. 2 Lab Hours.
A course on information security and ethical concerns related to information technology. Topics include: security implementation, software protection, physical security, privacy, cryptography, policies, and ethics of IT organizations.
Prerequisites: NETB 115 and NETB 155

NETB 256 Server Adminstration 2
4 Credits. 3 Lecture Hours. 2 Lab Hours.
A continuation of NETB 155. Topics include: deploying, managing, and maintaining servers; configuring file and print services; configuring Network Policy Server infrastructure; configuring and managing Active Directory; and managing group policy. This course prepares students for a Microsoft Certification exam.
Prerequisites: NETB 155

NETB 265 Server Configuration
4 Credits. 3 Lecture Hours. 2 Lab Hours.
A course on configuration for Microsoft Windows server technology. Topics include: configuring file and storage solutions, network services, Active Directory infrastructure, and access solutions; and business continuity and disaster recovery. This course prepares students for a Microsoft Certification exam.
Prerequisites: NETB 155

NETB 290 Business Network Administration Capstone
4 Credits. 1 Lecture Hour. 6 Lab Hours.
Students demonstrate knowledge and skills while completing a project related to the Business Network Administration program. Topics include: analyzing and designing appropriate network architecture, developing business network solutions, and installing and implementing networks.
Prerequisites: NETB 256 and NETB 265

NETB 291 Full-Time Cooperative Education 1: Business Network Administration
2 Credits. 1 Lecture Hour. 40 Lab Hours.
Students seeking an associate's degree participate in their first full-time field learning experience related to their degree. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: CIT 190

NETB 292 Full-Time Cooperative Education 2: Business Network Administration
2 Credits. 1 Lecture Hour. 40 Lab Hours.
Students seeking an associate's degree participate in their second full-time field learning experience related to their degree. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETB 291

NETB 293 Full-Time Cooperative Education 3: Business Network Administration
2 Credits. 1 Lecture Hour. 40 Lab Hours.
Students seeking an associate's degree participate in their third full-time field learning experience related to their degree. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETB 292

NETB 294 Internship 1: Business Network Administration
2 Credits. 1 Lecture Hour. 40 Lab Hours.
Students seeking an associate's degree participate in their first unpaid field learning experience related to their degree. Students must follow applicable policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: CIT 190

NETB 295 Internship 2: Business Network Administration
2 Credits. 1 Lecture Hour. 40 Lab Hours.
Students seeking an associate's degree participate in their second unpaid field learning experience related to their degree. Students must follow applicable policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETB 294

NETB 298 Second Year Special Topics in Business Network Administration
1-9 Credits. 0 Lecture Hour. 0 Lab Hour.
A course on selected topics related to Business Network Administration, which gives students opportunities to study information not currently covered in other courses. Grades issued are A, B, C, D, or F.
Prerequisites: Instructor Approval
Instructor Consent Required

NETB 299 Second Year Independent Project in Business Network Administration
1-9 Credits. 0 Lecture Hour. 0 Lab Hour.
A project related to Business Network Administration that is completed by one or more students to meet specific educational goals. Projects must have prior approval and supervision by Business Network Administration faculty. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: Instructor Approval
Instructor Consent Required

NETC Courses

NETC 121 Network Communications 1
3 Credits. 2 Lecture Hours. 2 Lab Hours.
A course on computer networks and network operating systems. Topics include: network topology, local and wide area networks, connecting devices to networks, basic network software and file sharing, and problem solving. This course helps students prepare for the NET+ exam.
Prerequisites: AFL 085 and MAT 115 or MAT 120, or appropriate placement test scores

NETC 122 Network Communications 2
3 Credits. 2 Lecture Hours. 2 Lab Hours.
A continuation of NETC 121. Topics include: routing protocols, spanning tree, VLANs and network security, and network address translation.
Prerequisites: NETC 121

NETC 170 Governance and Management of IT
4 Credits. 3 Lecture Hours. 3 Lab Hours.
A course on frameworks for organizational governance of information technology. Topics include: IT portfolio management, risk and compliance, and business continuity planning and impact analysis.
Prerequisites: MGT 130, NETC 121

NETC 180 Information Risk Management
4 Credits. 3 Lecture Hours. 3 Lab Hours.
A course on methods for analyzing and classifying organizational data to maintain information security. Topics include: information ownership; information threats, vulnerabilities, and exposure; and investigating and assessing risk.
Prerequisites: NETC 122, NETB 155

NETC 191 Part-Time Cooperative Education 1: Computer Network Engineering Technology
1 Credit. 1 Lecture Hour. 20 Lab Hours.
Students seeking an associate's degree participate in their first part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: None

NETC 192 Part-Time Cooperative Education 2: Computer Network Engineering Technology
1 Credit. 1 Lecture Hour. 20 Lab Hours.
Students seeking an associate's degree participate in their second part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETC 191

NETC 193 Part-Time Cooperative Education 3: Computer Network Engineering Technology
1 Credit. 1 Lecture Hour. 20 Lab Hours.
Students seeking an associate's degree participate in their third part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETC 192

NETC 194 Part-Time Cooperative Education 4: Computer Network Engineering Technology
1 Credit. 1 Lecture Hour. 20 Lab Hours.
Students seeking an associate's degree participate in their fourth part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETC 193

NETC 195 Part-Time Cooperative Education 5: Computer Network Engineering Technology
1 Credit. 1 Lecture Hour. 20 Lab Hours.
Students seeking an associate's degree participate in their fifth part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETC 194

NETC 196 Part-Time Cooperative Education 6: Computer Network Engineering Technology
1 Credit. 1 Lecture Hour. 20 Lab Hours.
Students seeking an associate's degree participate in their sixth part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETC 195

NETC 198 First Year Special Topics in Computer Network Engineering Technology
1-9 Credits. 0 Lecture Hour. 0 Lab Hour.
A course on selected topics related to Computer Network Engineering Technology, which gives students opportunities to study information not currently covered in other courses. Grades issued are A, B, C, D, or F.
Prerequisites: Instructor Approval

NETC 199 First Year Independent Project in Computer Network Engineering Technology
1-9 Credits. 0 Lecture Hour. 0 Lab Hour.
A project related to Computer Network Engineering Technology that is completed by one or more students to meet specific educational goals. Projects must have prior approval and supervision by Computer Network Engineering Technology faculty. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: Instructor Approval

NETC 230 Network Security Design
3 Credits. 2 Lecture Hours. 2 Lab Hours.
Topics include: design and testing of various layered network security software and hardware to protect business systems.
Prerequisites: NETC 121

NETC 240 Emerging Topics in Computer Network Engineering Technology
3 Credits. 2 Lecture Hours. 3 Lab Hours.
A course on current industry needs related to Computer Network Engineering Technology. Topics include: voice over internet protocol (VoIP) and Linux.
Prerequisites: NETC 122, NETB 155

NETC 280 IT Documentation
4 Credits. 3 Lecture Hours. 3 Lab Hours.
A course on documentation of IT systems focusing on general regulatory compliance requirements. Students use Microsoft Visio for laboratory activities.
Prerequisites: NETC 170, ENG 101

NETC 290 Computer Network Engineering Technology Capstone Project
3 Credits. 2 Lecture Hours. 2 Lab Hours.
Students work in teams to design and build network solutions while demonstrating knowledge and skills gained in the Computer Network Engineering Technology program.
Prerequisites: NETC 122, NETC 230, NETB 155, ENG 102

NETC 291 Full-Time Cooperative Education 1: Computer Network Engineering Technology
2 Credits. 1 Lecture Hour. 40 Lab Hours.
Students seeking an associate's degree participate in their first full-time field learning experience related to their degree. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: None

NETC 292 Full-Time Cooperative Education 2: Computer Network Engineering Technology
2 Credits. 1 Lecture Hour. 40 Lab Hours.
Students seeking an associate's degree participate in their second full-time field learning experience related to their degree. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETC 291

NETC 293 Full-Time Cooperative Education 3: Computer Network Engineering Technology
2 Credits. 1 Lecture Hour. 40 Lab Hours.
Students seeking an associate's degree participate in their third full-time field learning experience related to their degree. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETC 292

NETC 294 Internship 1: Computer Network Engineering Technology
2 Credits. 1 Lecture Hour. 40 Lab Hours.
Students seeking an associate's degree participate in their first unpaid field learning experience related to their degree. Students must follow applicable policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: CIT 190

NETC 295 Internship 2: Computer Network Engineering Technology
2 Credits. 1 Lecture Hour. 40 Lab Hours.
Students seeking an associate's degree participate in their second unpaid field learning experience related to their degree. Students must follow applicable policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: NETC 294

NETC 298 Second Year Special Topics in Computer Network Engineering Technology
1-9 Credits. 0 Lecture Hour. 0 Lab Hour.
A course on selected topics related to Computer Network Engineering Technology, which gives students opportunities to study information not currently covered in other courses. Grades issued are A, B, C, D, or F.
Prerequisites: Instructor Approval

NETC 299 Second Year Independent Project in Computer Network Engineering Technology
1-9 Credits. 0 Lecture Hour. 0 Lab Hour.
A project related to Computer Network Engineering Technology that is completed by one or more students to meet specific educational goals. Projects must have prior approval and supervision by Computer Network Engineering Technology faculty. Grades issued are Satisfactory or Unsatisfactory.
Prerequisites: Instructor Approval