

# Computer Network Administration (NETA & NETAC)

## Computer Network Administration (NETA)

Students in the Computer 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.

For more information, please contact the Engineering and Information Technologies Division at (513) 569-1743.

To apply for this program at Cincinnati State, visit the Admissions (<http://www.cincinnati.state.edu/academics/admission/>) section of the College website.

## Computer Network Administration Certificate (NETAC)

The Computer Network Administration Certificate prepares students to implement and administer both client-based and server-based systems.

Students develop expertise in computer operating systems, network operating systems, server administration, and server configuration.

In addition, the certificate prepares students to qualify for Microsoft technical certification.

For more information, please contact the Engineering and Information Technologies Division at (513) 569-1743.

To apply for this program at Cincinnati State, visit the Admissions (<http://www.cincinnati.state.edu/academics/admission/>) section of the College website.

## Computer Network Administration (NETA)

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

FYE 1XX	First Year Experience Elective ( B )	1	0	1
<b>Semester 2</b>				
IT 116	Operating Systems Administration 2 ( B )	2	3	3
NETA 115	Networking Essentials ( T )	2	3	3
NETA 155	Server Administration 1 ( T )	3	2	4
ENG 1XX	English Composition Elective ( G )	3	0	3
MAT 105	Quantitative Reasoning ( G )	2	2	3
<b>Semester 3</b>				
NETA 291	Full-Time Cooperative Education 1: Computer Network Administration ( T )	1	40	2
<b>Semester 4</b>				
NETA 135	Information Technology Support Desk Concepts ( T )	3	2	4
NETA 256	Server Administration 2 ( T )	3	2	4
NETA 265	Server Configuration ( T )	3	2	4
XXX XXX	Social/Behavioral Science Elective ( G )	3	0	3
<b>Semester 5</b>				
NETA 125	Open Source Operating Systems and Applications ( T )	2	3	3
NETA 290	Networking and Computer Support Capstone ( T )	1	6	4
COMM 110	Public Speaking ( B )	3	0	3
XXX XXX	Arts/Humanities Elective ( G )	3	0	3
XXX XXX	Business Elective ( B )	3	0	3
<b>Semester 6</b>				
NETA 292	Full-Time Cooperative Education 2: Computer Network Administration ( T )	1	40	2

<b>Total Credits:</b>	<b>49</b>	<b>114</b>	<b>65</b>
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## Electives

### First Year Experience Elective

FYE 100	College Success Strategies: Overview	1
FYE 105	College Success Strategies: Overview and Application	2
FYE 110	College Success Strategies: Practice and Application	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
<b>Social/Behavioral Science Elective</b>		
Any ECO, GEO, HST, LBR, POL, PSY, SOC		3
<b>Arts/Humanities Elective</b>		
Any ART, CULT, FRN, SPN, LIT, MUS, PHI, REL, THE, or COMM 130		3
<b>Business Elective</b>		
ACC 101	Financial Accounting	3
LAW 101	Business Law	3
MGT 101	Principles of Management	3

Some courses are offered in alternative versions identified with a letter after the course number-- for example, ENG 101 and ENG 101A.

- This curriculum displays only course numbers without the added letter.
- The alternative version, when available, meets the requirements of the course version without the added letter.

The letters G, B, and T (displayed after course titles or elective descriptions) identify types of courses required by the Ohio Department of Higher Education as part of an associate's degree curriculum.

G = General Education course in this curriculum

B = Basic Skills course in this curriculum

T = Technical course in this curriculum

## Computer Network Administration Certificate (NETAC)

Semester 1		Lec	Lab	Credits
IT 105	Information Technology Concepts	2	3	3
IT 115	Operating Systems Administration 1	2	3	3
NETA 120	Computer Virtualization	2	3	3
Semester 2				
NETA 155	Server Administration 1	3	2	4
IT 116	Operating Systems Administration 2	2	3	3
NETA 115	Networking Essentials	2	3	3
Semester 3				
NETA 135	Information Technology Support Desk Concepts	3	2	4
NETA 256	Server Administration 2	3	2	4
NETA 265	Server Configuration	3	2	4
<b>Total</b>		<b>22</b>	<b>23</b>	<b>31</b>
<b>Credits:</b>				

Some courses are offered in alternative versions identified with a letter after the course number-- for example, ENG 101 and ENG 101A.

- This curriculum displays only course numbers without the added letter.
- The alternative version, when available, meets the requirements of the course version without the added letter.

## Computer Network Administration (NETA)

- Ability to utilize resources to solve technical problems involving operating systems and server software.
- Ability to manage multiple operating systems, systems software, and network services.
- Ability to understand compliance issues and corporate and federal compliance regulations.
- Ability to function independently and as a member of a team.
- Ability to effectively communicate technical information verbally, in writing, and in presentations.
- Ability to manage multiple tasks and deadlines.
- Ability to demonstrate professionalism in the workplace and maintain user/client confidentiality.

## Courses

### NETA 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; network hardware; protocols; network standards; network problem solving; and network administration, support, and security.

Prerequisites: IT 115

### NETA 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: FYE 120 or placement into ENG 101 MAT 093 or MAT 105A or appropriate Math placement

### NETA 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 115

### NETA 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 115

### NETA 155 Server Administration 1

**4 Credits. 3 Lecture Hours. 2 Lab Hours.**

A course on user administration for Microsoft Windows server technology. Topics include: managing software problems; managing virtualization; and client configuration, development, deployment, and security. This course prepares students for a Microsoft Certification exam.

Prerequisites: NETC 121 or IT 115 (minimum grade C for both)

**NETA 191 Part-Time Cooperative Education 1: Computer 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

**NETA 192 Part-Time Cooperative Education 2: Computer 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: NETA 191

**NETA 193 Part-Time Cooperative Education 3: Computer 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: NETA 192

**NETA 194 Part-Time Cooperative Education 4: Computer 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: NETA 193

**NETA 195 Part-Time Cooperative Education 5: Computer 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: NETA 194

**NETA 196 Part-Time Cooperative Education 6: Computer 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: NETA 195

**NETA 256 Server Administration 2****4 Credits. 3 Lecture Hours. 2 Lab Hours.**

A continuation of NETA 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: NETA 155 (minimum grade C)

**NETA 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: NETA 155 (minimum grade C)

**NETA 290 Networking and Computer Support Capstone****4 Credits. 1 Lecture Hour. 6 Lab Hours.**

Students demonstrate knowledge and skills while completing a project related to the Computer Network Administration and Computer Support and Administration programs. Topics include: analyzing and designing appropriate network architecture, developing business network solutions, and installing and implementing networks.

Prerequisites: NETA 256 or CSA 112

**NETA 291 Full-Time Cooperative Education 1: Computer 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

**NETA 292 Full-Time Cooperative Education 2: Computer 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: NETA 291

**NETA 293 Full-Time Cooperative Education 3: Computer 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: NETA 292

**NETA 294 Internship 1: Computer 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

**NETA 295 Internship 2: Computer 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: NETA 294