

# COMPUTER SYSTEMS AND NETWORKING (AAS)

**Catalog Effective Term:** Fall 2024

**Program Code:** APCSN

**Credential:** Associate in Applied Science

*High Demand Occupation, High Skill Occupation, High Wage Occupation*

In this associate degree program, students will learn about the latest desktop, server, and networking technologies. This program has a core of hardware, operating system, networking, and scripting courses that all students must complete. In addition to the common core subjects, students will select a specialized track in one of the following areas:

- Microsoft Network Operating Systems (Server and Client)
- Local and Wide Area Networking

## Articulation

Eastern Michigan University, several BS degrees

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: <http://www.wccnet.edu/learn/transfer-wcc-credits/articulation-agreements.php>.

Select one of the following concentrations:

- Microsoft Network Operating System (MNOS)
- Local and Wide Area Networking (NETW)

*Students transferring to a 4-year college should consider taking and completing MTA.*

## Full-Time Students

### Microsoft Network Operating System Concentration (MNOS)

**Minimum Credits Required for the Concentration or Option: 62**

Course	Title	Credits
<b>First Semester</b>		
CST 120	Command Line Fundamentals	3
CST 160	Computer Systems Technology I	4
CST 165	Computer Systems Technology II	4
CST 185	Local and Mobile Networking Essentials	4
<b>Credits</b>		<b>15</b>
<b>Second Semester</b>		
CIS 120	Linux/UNIX I: Fundamentals	3
CNT 201	Microsoft Client/Server Administration	3
CNT 206	Introduction to Networks	4
Math Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#math">https://coursecatalog.wccnet.edu/academics/general-education/#math</a> )		3
Writing Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#writing">https://coursecatalog.wccnet.edu/academics/general-education/#writing</a> )		3
<b>Credits</b>		<b>16</b>
<b>Third Semester</b>		
CNT 211	Server Administration I	4
CNT 216	Switching, Routing and Wireless Essentials	4

CNT 223	Networking with Windows Server	4
Nat. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci">https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci</a> )		3
<b>Credits</b>		<b>15</b>
<b>Fourth Semester</b>		
BMG 205 or CST 270	Creating the Customer Experience or Computer Forensics	3-4
CNT 224	Identity with Windows Server	4
Soc. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci">https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci</a> )		3
Speech/Comp. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#writing">https://coursecatalog.wccnet.edu/academics/general-education/#writing</a> )		3
Arts/Human. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#arthuma">https://coursecatalog.wccnet.edu/academics/general-education/#arthuma</a> )		3
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>62</b>

### Local and Wide Area Networking Concentration (NETW)

**Minimum Credits Required for the Concentration or Option: 62**

Course	Title	Credits
<b>First Semester</b>		
CST 120	Command Line Fundamentals	3
CST 160	Computer Systems Technology I	4
CST 165	Computer Systems Technology II	4
CST 185	Local and Mobile Networking Essentials	4
<b>Credits</b>		<b>15</b>
<b>Second Semester</b>		
CIS 120	Linux/UNIX I: Fundamentals	3
CNT 201	Microsoft Client/Server Administration	3
CNT 211	Server Administration I	4
Math Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#math">https://coursecatalog.wccnet.edu/academics/general-education/#math</a> )		3
Writing Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#writing">https://coursecatalog.wccnet.edu/academics/general-education/#writing</a> )		3
<b>Credits</b>		<b>16</b>
<b>Third Semester</b>		
BMG 205 or CST 270	Creating the Customer Experience or Computer Forensics	3
CNT 206	Introduction to Networks	4
CNT 216	Switching, Routing and Wireless Essentials	4
Arts/Human. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#arthuma">https://coursecatalog.wccnet.edu/academics/general-education/#arthuma</a> )		3
Soc. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci">https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci</a> )		3
<b>Credits</b>		<b>17</b>
<b>Fourth Semester</b>		
CNT 226	Enterprise Networking, Security, and Automation (ENSA)	4
CNT 290 or CSS 210	Network Forensics or Network Perimeter Protection - CCNA Security	4
Nat. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci">https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci</a> )		3

Speech/Comp. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#writing">https://coursecatalog.wccnet.edu/academics/general-education/#writing</a> )	3
<b>Credits</b>	<b>14</b>
<b>Total Credits</b>	<b>62</b>

Speech/Comp. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#writing">https://coursecatalog.wccnet.edu/academics/general-education/#writing</a> )	3
<b>Credits</b>	<b>6</b>
<b>Total Credits</b>	<b>62</b>

## Part-Time Students

### Microsoft Network Operating Systems Concentration (MNOS)

Minimum Credits Required for the Concentration or Option: 62

Course	Title	Credits
<b>First Semester</b>		
CST 160	Computer Systems Technology I	4
CST 165	Computer Systems Technology II	4
<b>Credits</b>		<b>8</b>
<b>Second Semester</b>		
CIS 120	Linux/UNIX I: Fundamentals	3
CST 185	Local and Mobile Networking Essentials	4
<b>Credits</b>		<b>7</b>
<b>Third Semester</b>		
Math Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#math">https://coursecatalog.wccnet.edu/academics/general-education/#math</a> )		3
Writing Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#writing">https://coursecatalog.wccnet.edu/academics/general-education/#writing</a> )		3
<b>Credits</b>		<b>6</b>
<b>Fourth Semester</b>		
BMG 205 or CST 270	Creating the Customer Experience or Computer Forensics	3
CNT 201	Microsoft Client/Server Administration	3
<b>Credits</b>		<b>6</b>
<b>Fifth Semester</b>		
CNT 206	Introduction to Networks	4
CNT 216	Switching, Routing and Wireless Essentials	4
<b>Credits</b>		<b>8</b>
<b>Sixth Semester</b>		
Nat. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci">https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci</a> )		3
Soc. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci">https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci</a> )		3
<b>Credits</b>		<b>6</b>
<b>Seventh Semester</b>		
CST 120	Command Line Fundamentals	3
CNT 211	Server Administration I	4
<b>Credits</b>		<b>7</b>
<b>Eighth Semester</b>		
CNT 223	Networking with Windows Server	4
CNT 224	Identity with Windows Server	4
<b>Credits</b>		<b>8</b>
<b>Ninth Semester</b>		
Arts/Human. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#arthuma">https://coursecatalog.wccnet.edu/academics/general-education/#arthuma</a> )		3

### Local and Wide Area Networking Concentration (NETW)

Minimum Credits Required for the Concentration or Option: 62

Course	Title	Credits
<b>First Semester</b>		
CST 160	Computer Systems Technology I	4
CST 165	Computer Systems Technology II	4
<b>Credits</b>		<b>8</b>
<b>Second Semester</b>		
CIS 120	Linux/UNIX I: Fundamentals	3
CST 185	Local and Mobile Networking Essentials	4
<b>Credits</b>		<b>7</b>
<b>Third Semester</b>		
Math Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#math">https://coursecatalog.wccnet.edu/academics/general-education/#math</a> )		3
Writing Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#writing">https://coursecatalog.wccnet.edu/academics/general-education/#writing</a> )		3
<b>Credits</b>		<b>6</b>
<b>Fourth Semester</b>		
BMG 205 or CST 270	Creating the Customer Experience or Computer Forensics	3
CNT 201	Microsoft Client/Server Administration	3
<b>Credits</b>		<b>6</b>
<b>Fifth Semester</b>		
CST 120	Command Line Fundamentals	3
CNT 206	Introduction to Networks	4
<b>Credits</b>		<b>7</b>
<b>Sixth Semester</b>		
Nat. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci">https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci</a> )		3
Soc. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci">https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci</a> )		3
<b>Credits</b>		<b>6</b>
<b>Seventh Semester</b>		
CNT 211	Server Administration I	4
CNT 216	Switching, Routing and Wireless Essentials	4
<b>Credits</b>		<b>8</b>
<b>Eighth Semester</b>		
CNT 226	Enterprise Networking, Security, and Automation (ENSA)	4
CNT 290 or CSS 210	Network Forensics or Network Perimeter Protection - CCNA Security	4
<b>Credits</b>		<b>8</b>
<b>Ninth Semester</b>		
Arts/Human. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#arthuma">https://coursecatalog.wccnet.edu/academics/general-education/#arthuma</a> )		3

Speech/Comp. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#writing">https://coursecatalog.wccnet.edu/academics/general-education/#writing</a> )	3
<b>Credits</b>	<b>6</b>
<b>Total Credits</b>	<b>62</b>