



**2024-2025 Academic Year**

# Information Technology

**Associate in Applied Science Degree (A.A.S.)**

**Certificate of Proficiency: Network Engineering Technology**

**Business, Technology, and  
Professional Studies Division**

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The **Information Technology** associate degree and associated Network Engineering Technology certificate of proficiency, based on guidelines from the Association for Computing Machinery, prepare students for jobs that support computing in a networked environment. These include entry-level positions as PC technicians, network administrators, help desk specialists, technical support specialists, and customer service representatives. The A.A.S. degree may also prepare students for transfer to career-oriented B.S. degree programs in IT administration, network engineering, and computer system support.

## PROGRAM OUTCOMES

- ^ Pass industry certifications, including A+, NET+, Linux+, and Security+; ISC2 Certified in Cybersecurity Entry-Level Certification; Microsoft's MCTS, MCITP, MCSA, and MCSE; and Cisco's CCNA.
- ^ Understand, configure, and install hardware and software, including Internet user software;
- ^ Understand, describe, and apply network protocols and standards;
- ^ Explain computing practices and procedures found in most organizations;
- ^ Use printed and online technical documentation;
- ^ Describe how the Internet works;
- ^ Work effectively individually and in workgroups to install and implement information technology;
- ^ Demonstrate written and oral communication skills.

Admission requires a high school diploma or its equivalent, one year of high school algebra, and computer literacy. Applicants must demonstrate competency in English composition, reading, and mathematics, as determined by placement testing. Students who are required to complete foundations courses must plan their curriculum with an academic advisor.

The A.A.S. in Information Technology was not developed as a transfer curriculum; however, students have successfully transferred to, and completed bachelor's degrees at, several technically-oriented institutions including NJIT, Fairleigh Dickinson University, DeVry University, Drexel University, and Peirce College.

The Network Engineering Technology certificate of proficiency is intended to provide the technical material covered in the A.A.S. degree. Certificate coursework may be applied toward the A.A.S. degree.

## SEE ALSO:

- [Computer Information Systems](#) degree program
- [Computer Science](#) degree program
- [Computer Science](#) certificate program
- [Database Administration](#) certificate program
- [Information Technology: Cybersecurity](#) degree program
- [Mobile and Web Computing](#) certificate program

## DEGREE CURRICULUM

2024-2025 Academic Year

INFO.TECH.AAS  
CIP 110201

The course sequence below represents a recommended example of how this degree program can be completed in two years, presuming a Fall Term start and satisfaction of all Developmental Studies (foundation courses) requirements and prerequisites. Actual approaches toward completion depend on each student's anticipated transfer institution, career objectives, or other individual circumstances.

Students are encouraged to meet regularly with an academic advisor or Success Coach to consider options, establish plans, and monitor progress.

Code	Course (lecture/lab hours)	Credits	To Do This Semester
<b>FIRST SEMESTER</b>			
<a href="#">ENG 101</a>	English Composition I (3/0)	3	✓ Meet with your faculty advisor to complete an academic plan. Make sure you are aware of any course prerequisites you may need to take, and how long it will take to complete your degree.  ✓ Use your online tools: Check your <a href="#">MercerMail</a> daily, utilize features of Office 365, and get to know <a href="#">Student Planning</a> .  ✓ Take advantage of <a href="#">Learning Centers</a> or <a href="#">Online Tutoring</a> to support your studies and assignments.
<a href="#">NET 102</a>	Introduction to PC Hardware and Software (2/3)	3	
<a href="#">NET 104</a>	Fundamentals of Computer Networks (2/2)	3	
<a href="#">NET 120</a>	Windows Desktop OS Administration (2/2)	3	
<a href="#">IST</a> —	Computer Concepts requirement (2/2)	3	
	^ Select from IST 101, 102, or 105 in consultation with an academic advisor.		

## SECOND SEMESTER

<a href="#">ENG 102</a>	English Composition II (3/0)	3	<p>✓ Transitioning to college can be challenging. Meet with your <a href="#">Success Coach</a> for guidance and support.</p> <p>✓ Apply for <a href="#">financial aid</a> by May 1.</p> <p>✓ Contact professors with questions and use their office hours to develop a connection. Talk with them to get the inside scoop on how your profession works.</p> <p>✓ Be sure to visit the <a href="#">Career Services</a> office to explore jobs, internships, and career information and get help with your resume and other career tools.</p> <p>✓ Apply for Continuing Student scholarships at <a href="http://www.mccc.edu/m-scholarships">www.mccc.edu/m-scholarships</a>.</p>
<a href="#">MAT 125</a>	Elementary Statistics I (3/0)	3	
<a href="#">NET 103</a>	IT Essentials (2/3)	3	
<a href="#">NET 122</a>	Windows Server OS Administration (2/2)	3	
<a href="#">NET 130</a>	Routing and Switching Essentials (2/2)	3	

## THIRD SEMESTER

<a href="#">CMN 111</a>	Speech: Human Communication (3/0)	3	<p>✓ Keep in contact with each professor and your faculty advisor. Make sure you are on track to graduate on time.</p> <p>✓ Work with <a href="#">Career Services</a> to formulate plans for after you've earned this degree.</p> <p>✓ Develop team and leadership skills by getting involved in <a href="#">activities and clubs</a>.</p>
<a href="#">CMN 112</a>	<b>OR</b> Public Speaking (3/0)		
<a href="#">NET 124</a>	Windows Network Infrastructure Administration (2/2)	3	
<a href="#">NET 212</a>	Introduction to Linux (2/2)	3	
<a href="#">NET 230</a>	Scaling Networks (2/2)	3	
<a href="#">NET 244</a>	Network Defense and Countermeasures (2/2)	3	

✓ Apply for Continuing Student scholarships at [www.mccc.edu/m-scholarships](http://www.mccc.edu/m-scholarships).

✓ Manage your stress! Take advantage of the MCCC pool, [Fitness Center](#), free yoga and Zumba. Reach out for [counseling](#) or other support if you need it. Your [Success Coach](#) can connect you with resources.

## FOURTH SEMESTER

<a href="#">BUS 230</a>	Global Environment of Business (3/0)	3	✓ Get ready to start your career! Begin the job application process.	
<a href="#">NET 126</a>	Windows Directory Service Administration (2/2)	3		
<a href="#">NET 242</a>	Directory Services Infrastructure Design (2/2)	3		✓ Discuss your career plans with your faculty advisor. S/he can help you transition successfully.
<a href="#">NET 256</a>	Cloud Foundations (2/2)	3		
— —	<a href="#">Social Science or Humanities general education elective</a>	3		
		<b>60</b>		

**NOTE:** One or more NET courses may be substituted with acceptable IST or COS courses, in consultation with an academic advisor.

# CERTIFICATE CURRICULUM

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INFO.TECH.NET.CERT

CIP 521299

Credit-bearing certificate programs can serve as gateways to earning an associate degree. Students are encouraged to consult the program coordinator, an academic advisor or Success Coach to explore such opportunities.

Code	Course (lecture/lab hours)	Credits
<a href="#">ENG 101</a>	English Composition I (3/0)	3
<a href="#">NET 102</a>	Introduction to PC Hardware and Software (2/3)	3
<a href="#">NET 103</a>	IT Essentials (2/3)	3
<a href="#">NET 104</a>	Fundamentals of Computer Networks (2/2)	3
<a href="#">NET 120</a>	Windows Desktop OS Administration (2/2)	3
<a href="#">NET 122</a>	Windows Server OS Administration (2/2)	3
<a href="#">NET 124</a>	Windows Network Infrastructure Administration (2/2)	3
<a href="#">NET 130</a>	Routing and Switching Essentials (2/2)	3
<a href="#">NET 230</a>	Scaling Networks (2/2)	3
<a href="#">NET 244</a>	Network Defense and Countermeasures (2/2)	3
<a href="#">NET</a> —	Program elective Select from NET 126, 212, 239, 240.	3
— —	<a href="#">General Education elective</a> Select in consultation with an academic advisor. Students intending to apply certificate coursework toward the A.A.S. degree should select from Social Science, Humanities, or Diversity and Global Perspective <a href="#">general education</a> categories, or MAT 125.	3
		<b>36</b>

**NOTE:** One or more NET courses may be substituted with acceptable IST, CIS, COS, EET or SST courses, in consultation with an academic advisor.