

# INFORMATION TECHNOLOGY, NETWORK ENGINEERING, ASSOCIATE IN APPLIED SCIENCE (DPRN)

Effective: Fall 2016

The Network Engineering option prepares students for employment as networking specialists in the communications industry. The material presented in the Network Engineering curriculum provides students with the knowledge and skills necessary to successfully complete many of the exams required for Computing Technology Industry Association (CompTIA) and Microsoft (MS) certifications.

The Associate in Applied Sciences in the Information Technology (IT) Career Degrees at Delaware County Community College blends the theoretical with the practical. Students are offered a choice of specializations: Computer Programming, Game Development, Help Desk/Technical Support, Interactive Multimedia, Network Engineering, Mobile Computing and Web Development. Students have the benefit of classroom or online instruction, dedicated laboratory facilities and participation in co-curricular activities. Students in the IT Career Degrees are required to take program courses and related electives in their specialization as well as four IT core courses. In addition, students are required to take the general education courses listed below.

## Program Outcomes

- Install and configure a Linux network operating system.
- Install and configure a MS Windows Network operating system.
- Administer, manage and troubleshoot a Linux operating system.
- Administer, manage and troubleshoot a MS Windows operating system.
- Analyze, test and propose solutions for problems relating to network cabling, hubs, servers, workstations and other physical network devices.
- Analyze, test and propose solutions relating to network printing.
- Analyze, test and propose solutions for problems relating to network protocols, including the Internet protocol suite (TCP/IP).

## Curriculum

First Semester	Hours
ENG 100 English Composition I	3
CS 100 Introduction to Information Technology	3
NET 110 Network Communications	3
NET 115 Microsoft Windows	4
Social Science Elective (Select any transferable Diversity and Social Justice (DJ) and Global Understanding (GU) designated social science course)	3
<b>Hours</b>	<b>16</b>
Second Semester	Hours
CS 127 Introduction to PC Support	3
CS 128 PC Repair and Maintenance	3
NET 230 Linux Operating Systems I	4
COMM 100 Interpersonal Communication or COMM 111 or Public Speaking	3
Select one of the following:	3-4
MAT 120 Modern College Mathematics	

MAT 121	Introduction to Probability and Statistics	
MAT 135	Business Precalculus	
MAT 151	College Algebra	
MAT 152	Precalculus	
MAT 160	Calculus I	
<b>Hours</b>		<b>16-17</b>
Third Semester		
IMM 120	Web Page Design and Development	3
NET 116	Microsoft Server I: Installation and Storage	4
NET 231	Network Systems Administration	4
Science Elective (Select any transferable Scientific Inquiry (SI) designated science course)		4
<b>Hours</b>		<b>15</b>
Fourth Semester		
NET 117	Microsoft Server: Networking	4
NET 210	CCNA CISCO Network Support	6
NET 142	Cyber and Network Security Concepts	4
Mathematics Elective		3-4
<b>Hours</b>		<b>17-18</b>
<b>Total Hours</b>		<b>64-66</b>

## Notes

**Diversity and Social Justice and Global Understanding designated courses ([https://catalog.dccc.edu/academic-programs/college-academic-learning-goals/#Dual\\_DJ\\_GU\\_CourseList](https://catalog.dccc.edu/academic-programs/college-academic-learning-goals/#Dual_DJ_GU_CourseList)).**

**Scientific Inquiry designated courses. ([https://catalog.dccc.edu/academic-programs/college-academic-learning-goals/#SR\\_Course\\_List](https://catalog.dccc.edu/academic-programs/college-academic-learning-goals/#SR_Course_List))**

### Mathematics Elective:

Code	Title	Hours
Select second course from one of the following sequences:		
MAT 120 & MAT 121	Modern College Mathematics and Introduction to Probability and Statistics	6
MAT 135 & MAT 136	Business Precalculus and Business Calculus	6
MAT 151 & MAT 152	College Algebra and Precalculus	8
MAT 152 & MAT 160	Precalculus and Calculus I	8
MAT 160 & MAT 161	Calculus I and Calculus II	8

## Career

### Career Information for this Program

(Information Technology, Network Engineering (Associate in Applied Science))

### Career Coach

Browse or search for careers and we will give you relevant data on wages, employment, and the training you need.

### DCCC Career and Counseling Services

Faculty and staff in Career & Counseling Services are eager to help you become successful in college and in life. We offer services to assist you

at any point in your academic journey and we tailor our approach to meet your individual needs.