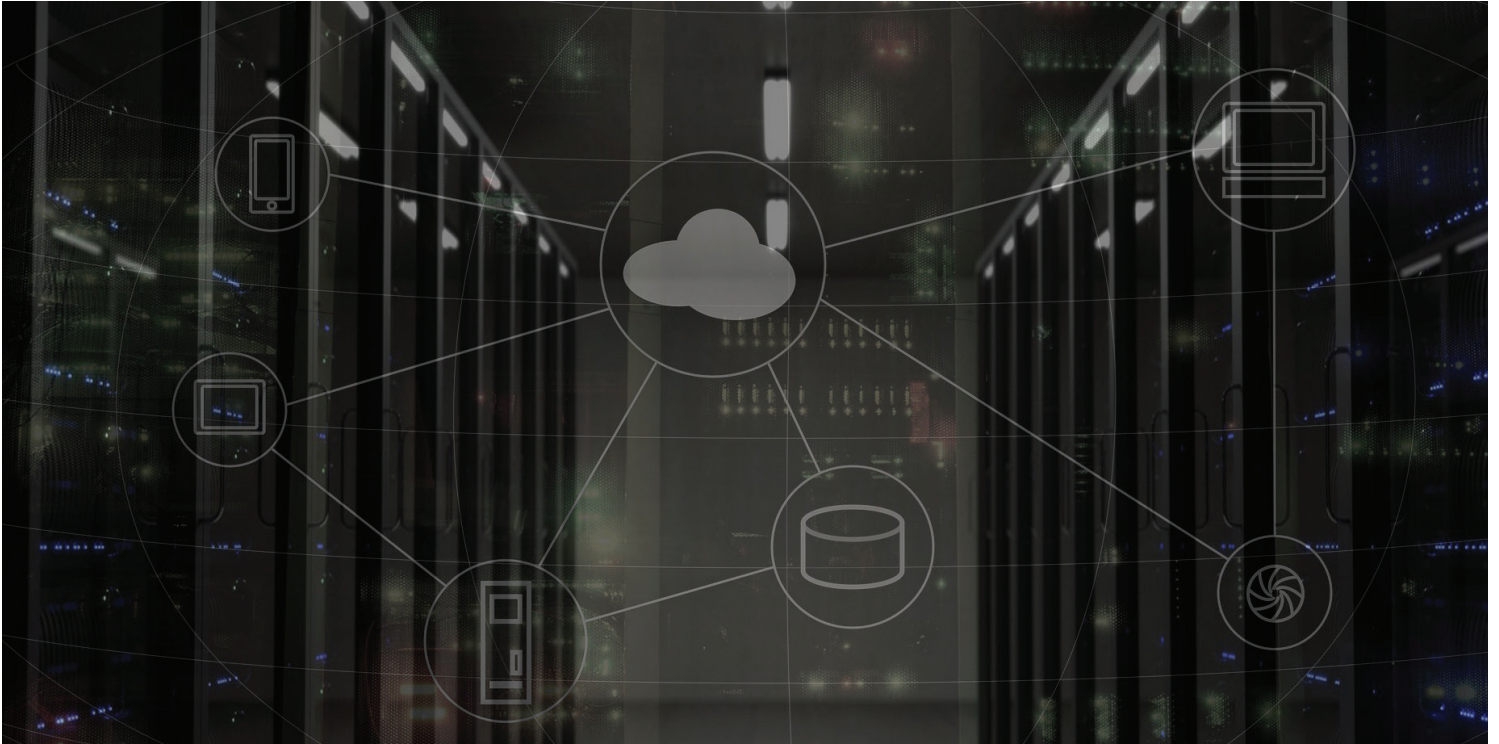


# Computer Networking

Applied Academic Certificate



This certificate will provide the students with the necessary skills to design and manage a local area network. Upon completion of the certificate, the student, in addition to acquiring an understanding of the basic data communication concepts, will be proficient in the basic skills to manage networks. Students completing the certificate may pursue careers in network support and administration. Students continuing into a two-year degree program are advised to consult the requirements for either the CIS, INM or BUS Applied Science degree programs. Prior to entry into the program the student should have a basic computer literacy.

**For more information, contact the Admissions Office at (845) 431-8010 or visit [www.sunydutchess.edu/academics](http://www.sunydutchess.edu/academics)**

# Computer Networking (CNC)

## COMPUTER INFORMATION SYSTEMS

(HEGIS 5104)

A Certificate is awarded upon completion of the requirements for this program.

Students who successfully complete the Certificate in Computer Networking (CNC) will be able to:

- Demonstrate an appreciation of the breadth and complexity of the IT communication field;
- Identify and describe the necessary required skills in each of the segments in the IT industry communication sector;
- Design an effective LAN and WAN;
- Manage, maintain and optimize a LAN;
- Demonstrate proficiency in Linux and Windows;
- Demonstrate the technical and business aspects of the Internet;
- Implement routing principles.

Courses should be selected in consultation with an advisor.

### FIRST SEMESTER

		credits
CIS 100	CIS Introductory Seminar	1
CIS 111	Computer Systems and Applications	3
CIS 117	Data Communication Concepts	3
CIS 126	UNIX/LINUX	3
CIS 216	Windows Server	3
CIS 160	Career Seminar, Career Exploration (a)	2
		<b>Total: 15</b>

### SECOND SEMESTER

ENG 101	Composition I	3
CIS 218	Routing and Switching Technology	3
CIS 107 <u>or</u>	Conducting Business on the Internet or	
CIS 108	Conducting Research on the Internet	3
CIS 217 <u>or</u>	Advanced Server	3
CIS 226 <u>or</u>	Advanced Unix/Linux	
CIS 150	Information Management Security	
CIS 161	Career Seminar, Career Advancement (a)	2
Elective (b)		3
		<b>Total: 17</b>
		<b>Total Credit Hours: 32</b>

- a. The cooperative education experience requires 10 hours per week of related work experience.
- b. Students must select courses from: ACC, BUS, CIS, MAT. Students wishing to become familiar with computer programming are encouraged to register for CIS 113.