

COMPUTER STUDIES AND INFORMATION PROCESSING, NETWORKING TECHNOLOGY - ASSOCIATE IN SCIENCE



CNTD

Knight Campus, Warwick only

Networks continue to expand in all aspects of our personal activities in business, manufacturing, education, and health care. This program provides balanced coverage of technology fundamentals, emphasis on this concentration prepares students for careers in modern office environments, focused on both client/server technologies and networking technology. Importance is placed on operating principles of programming, hardware, software, networking models, network operating systems, internetworking components, and industry standards along with hands-on laboratory activities for developing practical problem-solving skills. Students develop the ability to design, configure, secure, and troubleshoot basic local area networks (LANs) and internetworks using servers, routers, and switches. Integrated into the program are courses that prepare students to sit for both the server and networking certifications. Depending on the path taken, students can choose between networking or programming emphasis.

Note: Students enrolled in this program must earn a grade of at least C in all computer course requirements and must maintain a 2.0 GPA. Many courses require prerequisites, corequisites and/or testing. See course descriptions for details (<https://catalog.ccri.edu/course-descriptions/>).

Requirements

Code	Title	Hours
General Education Requirements		
ENGL 1010	Composition I	3
or ENGL 2100	Technical Writing	
COMM 1100	Public Speaking	3
or COMM 1180	Oral Interpretation	
MATH 1200	College Algebra (or Above)	3
or MATH 1139	Mathematics for Liberal Arts Students	
Social Science Elective (https://catalog.ccri.edu/academic-information/general-education/courses-approved-general-education-credits/#ssci/)		3
Humanities, Math/Science OR Social Science Elective (https://catalog.ccri.edu/academic-information/general-education/courses-approved-general-education-credits/#ssci/)		9
Subtotal		21
Major Core Requirements		
CNVT 1810	Networking Technology	3
CNVT 1820	Intermediate Networking ¹	3
CNVT 1830	LAN Design and Management ¹	3
COMI 1150	Programming Concepts	3
COMI 1461	Introduction to UNIX	1

COMI 1800	Computer Networking Software Linux	3
COMI 1840	Microsoft Windows Server	3
COMI 2020	Network Security Software Fundamentals	3
COMI 2036	Introduction to Computer Ethics	3
COMP 1230	Systems Analysis and Design ²	4
Subtotal		29
Network Hardware Emphasis (CNTH)		
CNVT 1840	WAN Design and Management	3
CNVT 2010	Cisco CCNP Route ³	5
or CNVT 2030	Cisco CCNP Switch	
CNVT 2100	Basic Voice Over Internet Protocol (VoIP)	3
or CNVT 2200 Network Security Hardware		4
Subtotal		11
or		12
Network Software Emphasis (CNTS)		
COMI 1100	Introduction to Computers	3
COMP 1200	Database Design & Management	3
COMP 2430	Operating Systems	4
Subtotal		10
Total Hours		60-62

- ¹ 7.5-weeks sections, students must take Intermediate Networking (CNVT 1820) (7.5 weeks) followed by LAN Design and Management (CNVT 1830) (7.5 weeks)
- ² Computer Studies Department recommends taking Systems Analysis and Design (COMP 1230) in your final semester
- ³ Cisco CCNP Route (CNVT 2010) is offered in the Spring semester only. Cisco CCNP Switch (CNVT 2030) is offered in the Fall semester only.

Recommended Course Sequence - Software Emphasis (CNTS)

Course	Title	Hours
Year 1		
Semester 1		
CNVT 1810	Networking Technology	3
COMI 1100	Introduction to Computers	3
COMI 1461	Introduction to UNIX	1
ENGL 1010	Composition I	3
or ENGL 2100	or Technical Writing	
Social Science Elective (https://catalog.ccri.edu/academic-information/general-education/courses-approved-general-education-credits/#ssci/)		3
Hours		13
Semester 2		
CNVT 1820	Intermediate Networking ¹	3
CNVT 1830	LAN Design and Management ¹	3
COMI 1150	Programming Concepts	3
COMI 1840	Microsoft Windows Server	3
MATH 1200	College Algebra (or Above)	3
or MATH 1139	or Mathematics for Liberal Arts Students	
Hours		15

Year 2**Semester 1**

COMI 1800	Computer Networking Software Linux	3
COMI 2020	Network Security Software Fundamentals ²	3
COMI 2036	Introduction to Computer Ethics	3
COMP 2430	Operating Systems	4
Humanities, Math/Science OR Social Science Elective (https://catalog.ccri.edu/academic-information/general-education/courses-approved-general-education-credits/)		3
Hours		16

Semester 2

COMP 1200	Database Design & Management	3
COMP 1230	Systems Analysis and Design	4
COMM 1100	Public Speaking	3
or COMM 1180	or Oral Interpretation	
Humanities, Math/Science OR Social Science Elective (https://catalog.ccri.edu/academic-information/general-education/courses-approved-general-education-credits/)		6
Hours		16
Total Hours		60

Recommended Course Sequence - Hardware Emphasis (CNTH)

Course	Title	Hours
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Year 1**Semester 1**

CNVT 1810	Networking Technology	3
COMI 1150	Programming Concepts	3
COMI 1461	Introduction to UNIX	1
ENGL 1010	Composition I	3
or ENGL 2100	or Technical Writing	
Social Science Elective (https://catalog.ccri.edu/academic-information/general-education/courses-approved-general-education-credits/#ssci/)		3
Humanities, Math/Science OR Social Science Elective (https://catalog.ccri.edu/academic-information/general-education/courses-approved-general-education-credits/)		3
Hours		16

Semester 2

CNVT 1820	Intermediate Networking ¹	3
CNVT 1830	LAN Design and Management ¹	3
COMI 1840	Microsoft Windows Server	3
COMM 1100	Public Speaking	3
or COMM 1180	or Oral Interpretation	
MATH 1200	College Algebra (or Above)	3
or MATH 1139	or Mathematics for Liberal Arts Students	
Hours		15

Year 2**Semester 1**

CNVT 1840	WAN Design and Management	3
CNVT 2100	Basic Voice Over Internet Protocol (VoIP)	3 or 4
or CNVT 2200	or Network Security Hardware	
COMI 2020	Network Security Software Fundamentals ²	3
COMI 2036	Introduction to Computer Ethics	3

Humanities, Math/Science OR Social Science Elective (https://catalog.ccri.edu/academic-information/general-education/courses-approved-general-education-credits/)	3
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Hours	15-16
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Semester 2

CNVT 2010	Cisco CCNP Route	5
or CNVT 2030	or Cisco CCNP Switch	
COMI 1800	Computer Networking Software Linux	3
COMP 1230	Systems Analysis and Design	4
Humanities, Math/Science OR Social Science Elective (https://catalog.ccri.edu/academic-information/general-education/courses-approved-general-education-credits/)		3

Hours	15
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Total Hours	61-62
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¹ 7.5-weeks sections, students must take Intermediate Networking (CNVT 1820) (7.5 weeks) followed by LAN Design and Management (CNVT 1830) (7.5 weeks).

² This course is only offered in the Fall Semester only.

Transfer

If you are interested in earning a bachelor's degree, please meet with an Academic Advisor (https://www.ccri.edu/advising/transfer_information/) who can help you select the courses that best prepare you for transfer to a four-year college or university. For more information, you can also visit [ritransfers.org](http://www.ritransfers.org/) (<http://www.ritransfers.org/>) with resources on course and program transfer to Rhode Island College and the University of Rhode Island, or visit CCRl's Transfer Articulation (<https://www.ccri.edu/oes/records/transfers/traagree.html>) page for information on articulation agreements with colleges and universities throughout New England.