

# COMPUTER NETWORKING INFORMATION TECHNOLOGY, ASSOCIATE IN SCIENCE

The Computer Networking/IT Associate in Science Degree prepares students for excellent career opportunities that are in demand such as an IT support specialist, network specialist, network engineer, network administrator, cybersecurity professional, WLAN specialist, cloud and virtualization specialist, and IT sales positions. Every CNIT course is mapped to a specific IT industry certification exam to help ensure that the training is current and prepares students for IT jobs that are in demand.

Due to our academic partnerships with prominent technology industry leaders, most CNIT courses come with either free or significantly discounted curriculum costs. Our program students are also entitled to significant academic discounts on IT certification exam vouchers. We are a Cisco Networking Academy, CompTIA Academy Partner Program, Amazon AWS Academy, Red Hat Linux Academy, Microsoft Azure for Education Partner, and TestOut Academic Partner. Through these collaborations, we aim to provide our students with access to the latest technologies and tools, to help ensure that they stay ahead of the curve in today's rapidly evolving IT landscape.

Course ID	Title	Units/ Hours
<b>Required Core Courses</b>		<b>21</b>
CNIT R101	IT Essentials	
CNIT R120	Cisco CCNA Computer Networking I	
CNIT R121	Cisco CCNA Computer Networking II	
CNIT R130	Administer Microsoft Windows Desktop Operating System	
CNIT R145	CompTIA Security+ IT Security and Certification Preparation	
CNIT R151	Cloud Computing and Virtualization	
<b>Select a minimum of 9 units from the following (no more than 4 units of COT may be selected):</b>		<b>9</b>
CNIT R127	Wireless Networking Fundamentals	
CNIT R131	Administer Microsoft Windows Server	
CNIT R142	CompTIA A+ Technician and Certification Preparation	
CNIT R143	Linux Fundamentals	
CNIT R144	CompTIA Network+ Fundamentals and Certification Preparation	
CNIT R146	Cybersecurity: Fundamentals of Ethical Hacking	
CNIT R161	Programming Essentials in Python	
COT R190V	Occupational Cooperative Unpaid Work Experience	
COT R191V	Occupational Cooperative Paid Work Experience	
<b>Total Required Major Units</b>		<b>30-33</b>
Oxnard College General Education Pattern		29
Double-Counted Units		0

Free Electives Required	0-1
<b>Total Units Required for A.S. Degree</b>	<b>60-62</b>

To complete the Associate Degree, students must meet requirements in the major, general education, competency, units, scholarship, and residency. Refer to Education Pathways - Earn an Associate Degree and the A.A. or A.S. Degree in Specific Majors sections of this catalog.

Year 1		
Fall Semester		Units/Hours
CNIT R101	IT Essentials	3
CNIT R120	Cisco CCNA Computer Networking I	4
GE Area D1 English Composition (choose ENGL R101 or ENGL R101H)		4
GE Area B1 American History/Institutions (choose one course)		3
Recommended: ENGL R101 support course (choose ENGL R101S or ENGL R101E)		2
<b>Units/Hours</b>		<b>16</b>
Spring Semester		
CNIT R121	Cisco CCNA Computer Networking II	4
CNIT R151	Cloud Computing and Virtualization	4
Select one course from CNIT elective list		3-4
GE Area D2/Math Competency (choose one math course)		3-6
GE Area B2 Social and Behavioral Sciences (choose one course)		3
<b>Units/Hours</b>		<b>17-21</b>
Year 2		
Fall Semester		Units/Hours
CNIT R130	Administer Microsoft Windows Desktop Operating System	3
CNIT R145	CompTIA Security+ IT Security and Certification Preparation	3
Select one course from CNIT elective list		1-4
GE Area A1 Biological Science (choose one course)		3-5
GE Area E1 Health Education (choose one course)		3
<b>Units/Hours</b>		<b>13-18</b>
Spring Semester		
Select one course from CNIT elective list		3-4
Select one course from CNIT elective list		1-4
GE Area A2 Physical Science (choose one course)		3-5
GE Area C1 Fine/Performing Arts (choose one course)		3
GE Area C2 Humanities		3
GE Area E2 Physical Education/Kinesiology (choose one activity course)		1
<b>Units/Hours</b>		<b>14-20</b>
<b>Total Units/Hours</b>		<b>60-75</b>

Upon successful completion of this program, students will be able to:

- Create a routed network utilizing the proper cabling, IP addressing scheme, and routing protocol.
- Troubleshoot and properly document a computer network problem using a structured methodology.
- Implement technologies to create a secure network to protect the confidentiality of data and demonstrate competency in mitigating network vulnerabilities.
- Demonstrate competency in soft skills to include the ability to communicate effectively, employ critical thinking, and problem solve.
- Create a virtual machine (VM) with specific resource settings, install an OS on the VM, and connect the VM to a computer network to share resources.
- Scan and assess the network and devices for vulnerabilities.