

CTE Course Description and Standards Crosswalk

Course Information

Course Name	Networking 3 – Cisco Academy
Course Number	83630
Number of High School Credits	1
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the EED-CTE system.)	Network Technician
Date of district Course Revision	Spring 2016

Career & Technical Student Organization (CTSO)

CTSO embedded in this sequence	BPA
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Occupational Standards

Source of Occupational Standards	States Career Cluster Initiative (SCCI), National Business Education Association (NBEA), International Society for Technology in Education (ISTE)
Names/Numbers of Occupational Standards	SCCI: Network Systems Pathway (ITPA), Information Support and Services Pathway (ITPB); NBEA: Career Development (CD), Computation (COMP), Information Technology (IT); ISTE: 1-6

Registration Information

Course Description (brief paragraph – as shown in your student handbook or course list)	Networking 3 (<i>CISCO Academy</i>) is the third of four semesters designed to provide students with classroom and laboratory experience in current and emerging networking technology that will empower them to enter employment and/or further education and training in the information technology field. Instruction includes basics of switching and intermediate routing skills. This course is designed to prepare students for the <i>Cisco Certified Network Associate Certification</i> . Sample job possibilities include tech desk, network technician, network analyst, and network support specialist.
Instructional Topic Headings (please separate each heading by a semi-colon)	Networking in the Enterprise; Exploring the Enterprise Network Infrastructure; Switching in an Enterprise Network; Addressing in an Enterprise Network; Routing with a Distance Vector Protocol; Routing with a Link-State Protocol; Implementing Enterprise WAN Links; Filtering Traffic Using Access Control Lists; Troubleshooting an Enterprise Network; Course Summary: Putting it all together; Safety; Career & Technical Student Organizations (CTSO)s; Entrepreneurship; Ethics

Summative Assessments and Standards

Technical Skills Assessment (TSA)	CISCO
Course addresses:	Switching and Wireless
New Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Employability Standards	Yes

Employability Standards

DISTRICT NAME: Mat-Su Borough School District

Source of Employability Standards	State of Alaska
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	Yes
Date of Current Agreement	May 2015
Postsecondary Institution Name	UAA Mat Su College
Postsecondary Course Name	Switching and Wireless
Postsecondary Course Number	CNT A270
# of Postsecondary Credits	4

Source of Occupational Skills Standards

Source/Organization /Agency	Acro nym	Website or Location of Information	Section, Chapters, etc. referenced in Performance Standards	Date of Edition or Version
States Career Cluster Initiative	SCCI	www.careerclusters.org	Marketing & Communication	2008
National Business Education Assn.	NBEA	http://www.nbea.org	Career Development, Computation, Entrepreneurship, Information Technology, Marketing,	2013
National Education Technology	NETS /ISTE	http://cnets.iste.org/currstands/cstand s-netss.html	Digital Citizenship	2007

Additional CTE Course Information

Author	
Course developed by	Trish Zugg
Course adapted from	Previous MSBSD Course
Date of previous course revision	May 2008
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/Career Readiness Standards	All Aspects of Industry/Systems	Assessment
Implement a LAN for an approved network design	NBEA IT IV, XIII SCCI ITC.10; ITPA1; ITPB1 ISTE 4,6	IT-NET 2,3,4,5	SL.11-12.1 L.11-12.6 RST.11-12.4,10	MP 1,5,6	B2,4	A2	Technology Technical Skills	Module Assessment, Final Exam
Configure a switch with VLANs and inter-switch communication	NBEA IT IV, XIII SCCI ITC.10; ITPA1; ITPB1 ISTE 4,6	IT-NET 2,3,4,5	SL.11-12.1 L.11-12.6 RST.11-12.4,10	MP 1,5,6	B2,4	A2	Technology Technical Skills	Module Assessment, Final Exam

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Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
Implement access lists to permit or deny specified traffic	NBEA IT XIII, XV SCCI ITC.10; ITPA1; ITPB1 ISTE 4,6	IT-NET 2,3,4,5	SL.11-12.1 L.11-12.6 RST.11-12.4,10	MP 1,5,6	B2,4	A2	Technology Technical Skills	Module Assessment, Final Exam
Configure a routing protocol on Cisco devices	NBEA IT IV, XIII SCCI ITC.10; ITPA1; ITPB1 ISTE 4,6	IT-NET 2,3,4,5	SL.11-12.1 L.11-12.6 RST.11-12.4,10	MP 1,5,6	B2,4	A2	Technology Technical Skills	Module Assessment, Final Exam
Implement WAN links	NBEA IT XIII SCCI ITC.10; ITPA1; ITPB1 ISTE 4,6	IT-NET 2,3,4,5	SL.11-12.1 L.11-12.6 RST.11-12.4,10	MP 1,5,6	B2,4	A2	Technology Technical Skills	Module Assessment, Final Exam
Perform LAN, WAN, and VLAN troubleshooting using a structured methodology and the OSI model	NBEA IT XIII, XVI SCCI ITC.3,10; ITPA1; ITPB1 ISTE 4,6	IT-NET 2,3,4,5	SL.11-12.1 L.11-12.6 RST.11-12.4,10	MP 1,5,6	B2,4	A2	Technology Technical Skills	Module Assessment, Final Exam
Recognize entrepreneurship opportunities and the role of employer vs. employee.	NBEA IT XVIII SCCI ESS 07,09 ISTE 1	CRP 10	SL.11-12.1.a-d L.11-12.6 RST.11-12.4	MP 1	B 2,3,4	A2,5,7	Technical Skills Labor	BPA Workplace Skills Assessment

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Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
Encourage CTSO involvement.	NBEA IT XVIII SCCI ESS 07,09 ISTE 2,4	IT 3	SL.11-12.1.a-d L.11-12.6 RST.11-12.4	MP 1	B 1,2,3,4	A1-7 B1-5	Technology Technical Skills Work Habits Planning	BPA Workplace Skills Assessment
Research career opportunities in the Business/IT career area.	NBEA IT XVIII SCCI ESS 07,09 ISTE 3,4	CRP 10	SL.11-12.1.a-d L.11-12.6 RST.11-12.4	MP 1	B 2,3,4	A2,5 B1,2,3,4,5	Technical Skills Work Habits Planning Labor	Portfolio
Demonstrate safe use of tools and equipment, cyber safety and ergonomic safety in the workplace.	NBEA IT XV SCCI ESS 06 ISTE 5	IT 4,8, 10	SL.11-12.1.a-d L.11-12.6 RST.11-12.4	MP 1	B 2,3,4	A1,2,6	Technology Technical Skills Work Habits Health/ Safety	AK EED Safety Manual for Bus & Info. Systems
Practice and promote ethics and ethical behavior in the workplace.	NBEA IT III SCCI ESS 08 ISTE 5	IT 4,8, 10	SL.11-12.1.a-d L.11-12.6 RST.11-12.4	MP 1	B 2,3,4	A1,2,6	Technology Technical Skills Work Habits	CTSO Participation

Instructional Resources

List the major instructional resources used for this course: (websites, textbooks, essential equipment, reference materials, supplies)

- Cisco Networking Academy On-line Interactive Curriculum (cisco.netacad.net): Discovery - Introducing Routing and Switching in the Enterprise (or) Exploration - LAN Switching and Wireless
- CCNA3 Companion Guide: Switching Basics and Intermediate Routing

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