

## CTE Course Description and Standards Crosswalk

### Course Information

Course Name	Networking 1 – Cisco Academy
Course Number	83610
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 1 ( <i>CISCO Academy</i> ) is the first of four semester courses 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. It includes instruction in OSI model and industry standards, networking topologies, IP addressing, networking devices, and basic network design. This course is designed to prepare students for the Cisco Certified Network Associate Certification. Sample job possibilities include tech desk, network technician, network analyst, and network support specialist. This course is a two-hour block.
Instructional Topic Headings (please separate each heading by a semi-colon)	Personal Computer Hardware; Operating Systems; Connecting to the Network; Connecting to the Internet Through an ISP; Network Addressing; Network Services; Wireless Technologies; Basic Security; Troubleshooting Your 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:	Networking Basics
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
<b>Tech Prep</b>	
Current Tech Prep Articulation Agreement? (Y/N)	Yes
Date of Current Agreement	May 2015
Postsecondary Institution Name	UAA Mat Su College
Postsecondary Course Name	Network Fundamentals
Postsecondary Course Number	CNT A170
# of Postsecondary Credits	4

Source/Organization /Agency	Acronym	Website or Location of Information	Section, Chapters, etc. referenced in Performance Standards	Date of Edition or Version
States Career Cluster Initiative	SCCI	<a href="http://www.careerclusters.org">www.careerclusters.org</a>	Information Technology: Foundation, Network Systems, and Information Support and Services	2008
National Business Education Association	NBEA	<a href="http://www.nbea.org">www.nbea.org</a>	Career Development, Computation, and Information Technology,	2013
International Society for Technology in Education	ISTE	<a href="http://www.iste.org">www.iste.org</a>	NETS for students	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
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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
Set up a personal computer system, interface cards, and peripheral devices.	NBEA IT IV & VI SCCI ESS 04 & 10; ITPB 01 ISTE 6	IT- NET1,2,3,4,5	SL.11-12.1.a-d L.11-12.6 RST.11-12.4,10	MP 1,6	B 2,4	A2	Technology Technical Skills Planning	Module Assessment and Final Exam
Plan and install a home or small business network and connect it to the Internet.	NBEA IT IV, XI, XIII, XIV, XVII SCCI ITPA 01; ITPB 01.05 ISTE 6	IT- NET1,2,3,4,5	SL.11-12.1.a-d L.11-12.6 RST.11-12.4,10	MP 1,6	B 2,4	A2,5	Technology Technical Skills Planning	Module Assessment and Final Exam
Verify and troubleshoot network and Internet connectivity.	NBEA IT XI, XIII, XVI, XVII SCCI ITPA 01; ITPB 01.05 ISTE 6	IT-NET 5	SL.11-12.1.a-d L.11-12.6 RST.11-12.4,10	MP 1,6	B 2,4	A2,5	Technology Technical Skills	Module Assessment and Final Exam

**DISTRICT NAME: Mat-Su Borough School District**

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
Share resources (files and printers) among multiple computers.	NBEA IT XI, XII, XIII, XVI, XVII SCCI ITPA 01; ITPB 01.05 ISTE 6	IT- NET1,2,3,4, 5	SL.11-12.1.a-d L.11-12.6 RST.11-12.4,10	MP 1,6	B 2,4	A2	Technology Technical Skills	Module Assessment and Final Exam
Recognize and mitigate security threats to the home network.	NBEA IT XI, XIII, XV, XVI SCCI ITPA 01; ITPB 01.05; ITC 10.11 & 10.15 ISTE 6	IT- NET1,2,3,4, 5	SL.11-12.1.a-d L.11-12.6 RST.11-12.4,10	MP 1,6	B 2,4	A2, 6	Technology Technical Skills	Module Assessment and Final Exam
Configure and verify common Internet applications.	NBEA IT XII SCCI ITPA 01; ITPB 01.05 ISTE 6	IT- NET1,2,3,4, 5	SL.11-12.1.a-d L.11-12.6 RST.11-12.4,10	MP 1,6	B 2,4	A2	Technology Technical Skills	Module Assessment and Final Exam
Configure basic IP services through a GUI interface.	NBEA IT XII SCCI ITPA 01; ITPB 01.05 ISTE 6	IT- NET1,2,3,4, 5	SL.11-12.1.a-d L.11-12.6 RST.11-12.4,10	MP 1,6	B 2,4	A2	Technology Technical Skills	Module Assessment and 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

**DISTRICT NAME: Mat-Su Borough School District**

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)**  
**Recommended Text:**

- Cisco Networking Academy On-line Interactive Curriculum (cisco.netacad.net): Discovery - Networking for Home and Small Business (or) Exploration - Network Fundamentals
- CCNA1 Companion Guide: Networking Basics