CTE Approval Self-Study Report

Cyber Security

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Self-study

> *Self-study is the first step in the career and technical education approval process. The self-study review is required for all existing programs and new programs seeking approval. Its purpose is to bring together partners to review the CTE program, propose relevant modifications, and evaluate the degree to which the program meets the policy requirements approved by the Board of Regents on February 6, 2001.*

Self-study review will include:

Curriculum review

Benchmarks for student performance and student assessment

Teacher certification and highly-qualified status of instructional staff

Work-based learning opportunities

Teacher and student schedules

Resources, including staff, facilities, and equipment

Accessibility for all students

Work skills employability profile

Professional development plans

Projected number of students to be served

Source: http://www.p12.nysed.gov/cte/ctepolicy/guide.html

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Cybersecurity (Information Security Analysts)

*Quick Facts: Information Security Analysts	
2015 Median Pay	$90,120 per year $43.33 per hour
Typical Entry-Level Education	Bachelor's degree
Work Experience in a Related Occupation	Less than 5 years
On-the-job Training	None
Number of Jobs, 2014	82,900
Job Outlook, 2014-24	18% (Much faster than average)
Employment Change, 2014-24	14,800
* The Bureau of Labor Statistics does not provide a specific description of the Cybersecurity. The data and descriptions here are from their Information Security Analyst information.	

What Information Security Analysts Do

Information security analysts plan and carry out security measures to protect an organization's computer networks and systems. Their responsibilities are continually expanding as the number of cyberattacks increases.

Work Environment

Most information security analysts work for computer companies, consulting firms, or business and financial companies.

How to Become an Information Security Analyst

Most information security analyst positions require a bachelor's degree in a computer-related field. Employers usually prefer to hire analysts with experience in a related occupation.

Pay

The median annual wage for information security analysts was $90,120 in May 2015.

Job Outlook

Employment of information security analysts is projected to grow 18 percent from 2014 to 2024, much faster than the average for all occupations. Demand for information security analysts is expected to be very high, as these analysts will be needed to create innovative solutions to prevent hackers from stealing critical information or causing problems for computer networks.

Related Occupations

Occupational Title	SOC Code	Employment, 2014	Projected Employment, 2024	Change, 2014-24	
				Percent	Numeric
Computer and information research scientists	15-1111	25,600	28,300	11	2,700
Computer and information systems managers	11-3021	348,500	402,200	15	53,700
Information security analysts	15-1122	82,900	97,700	18	14,800
Computer user support specialists	15-1151	585,900	661,000	13	75,100
Computer network support specialists	15-1152	181,000	194,600	8	13,600
Computer systems analysts	15-1121	567,800	686,300	21	118,600

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, Information Security Analysts, on the Internet at https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm (visited February 14, 2017).

New York Employment Demand Profile: **Cybersecurity**

Source: Labor Insight Jobs (Burning Glass Technologies), Summary Demand and Requirements Table by Occupation, New York state data, Mar. 01, 2016 - Feb. 28, 2017, Monday, March 6, 2017

Category:		**Demand and Employment**				**Salary**		**Education level based on posting requirements (*excluding NA)**					**Education level of employed individuals**		
Source:		**Burning Glass**	**BLS/OES, 2015**			**Burning Glass**	**BLS/OES, 2015**	**Burning Glass**					**ACS, 2014**		
SOC Code (ONET-6)	Occupation Title	Number of Job Postings	Number Employed	% Change in Employment, 2014-2015	Projected Statewide Change in Employment, 2016-2026	Mean Advertised Salary	Mean Salary	% Requiring high school*	% Requiring Post-Secondary or Associate's Degree*	% Requiring Bachelor's Degree*	% Requiring Graduate or Professional Degree*	% with Unspecified Education	% with a H.S. diploma or less	% with Some College or an Assoc.	% with a Bachelor's or higher
15-1151	Computer User Support Specialists	9,191	39,910	10%	19.8%	$57,317	$55,610	28%	29%	65%	7%	58%	13%	47%	41%
15-1121	Computer Systems Analysts	8,784	36,720	9%	30.1%	$102,269	$97,000	6%	10%	88%	20%	41%	5%	23%	72%
15-1122	Information Security Analysts	5,858	4,820	1%	17.2%	$111,283	$111,170	4%	6%	92%	21%	38%	7%	31%	62%
11-3021	Computer and Information Systems Managers	2,238	26,010	3%	24.4%	$129,708	$166,560	3%	2%	90%	39%	31%	5%	23%	72%
15-1111	Computer and Information Research Scientists	1,795	850	-1%	N/A	$128,380	N/A	0%	0%	50%	84%	28%	2%	7%	92%
15-1152	Computer Network Support Specialists	958	10,170	14%	11.9%	$83,515	$77,620	19%	25%	77%	15%	46%	13%	47%	41%

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A. Curriculum Review

> *The curriculum review is a step in the self-study process. It is an opportunity for members of the self-study team to evaluate the proposed curriculum for completeness in terms of the knowledge, skills, and competencies required in the program field. The team reviews the curriculum to ensure that course content in the career and technical education program meets State Education Department regulations, contributes to achievement of state and industry standards, and prepares students for successful completion of a technical assessment. Approved curriculum content is nonduplicative, challenging, organized along a continuum of difficulty, and free of bias.*
>
> *CTE program approval does not constitute Department approval or endorsement of proprietary curriculum or related curriculum products. Program approval indicates only that a school district or BOCES has provided the Department with assurances that the curriculum review has been completed.*

Process

- The school district or BOCES identifies the faculty members and other individuals who will be involved in conducting the curriculum review
- The school district or BOCES determines the procedures used in completing the curriculum review
- Reviewers confirm that CTE program content aligns with state CDOS standards, relevant state academic standards, and related business and industry standards
- Reviewers confirm that CTE program content includes integrated or specialized units of credit
- Reviewers confirm that the CTE program meets unit of credit and other distributive requirements
-

Documentation

Documentation of the curriculum review is maintained by the school district or BOCES and is updated whenever modifications are made to the approved CTE program. Recommendations from curricular review should be included in the self-study report and reviewed by the external committee.

Resources

New York State graduation requirements

http://www.emsc.nysed.gov/part100/pages/1005.html

Source: http://www.p12.nysed.gov/cte/ctepolicy/guide.html

Cyber Security

We live in a digital world. Whether it's keeping in touch with friends, operating a city's energy grid or strengthening national security, it happens online. The need to secure our networks has never been greater. The number of cyber attacks increases dramatically every year, and people with technical skills are needed to ensure online security.

As a student in the Cybersecurity program at the Public Service Leadership Academy at Fowler, you'll learn how to make online information more secure and protect users from the growing threat of cyber attacks. This program teaches the core concepts needed to understand, assess and protect information security systems.

This pathway will develop the knowledge and skills needed to master the core concepts in cybersecurity. The pathway will cover the three foundation areas of information security:

- Networking
- Operating Systems
- Systems Administration

CAREER OPPORTUNITIES:
Security Manager, Cyber Threat Analyst

Course of Study **Cyber Security**

9th Grade	10th Grade	11th Grade	12th Grade
■ PSLA Exploratory (1 Credit CTE)	■ CTE Cyber Security 100 CSS100 (1 Credit CTE) (CRJ107UC)	■ CTE Cyber Security 200 CSS200 (2 Credits CTE) (CRJ333UC) ■ Cyber Security CTE Integrated Science CTE300 (1 Credit)	■ CTE Cyber Security 300 CSS300 (2 Credits CTE) (CRJ335UC) ■ Cyber Security CTE Integrated ELA CTE400 (1 Credit)

DISTRICT REQUIREMENTS

- Students must pass CTE Cyber Security 100, 200 and 300 to challenge the course approved technical assessment.
- All students in 9th grade will receive Career and Financial Management and CTE Exploratory classes.
- Student will have earned the 11th grade integrated science credit upon successful completion of the CTE Cybersecurity 100 and 200.
- Student will have earned the 12th grade integrated ELA credit upon successful completion of the CTE Cybersecurity 100, 200 and 300.
- Student will receive the CTE Endorsement upon successful completion of the CTE Cybersecurity Program and must pass the prescribed technical assessment and complete a commencement level project.

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Syracuse City School District
Career and Technical Education Program
Course Syllabus
CSS 100: Cyber Security 100

Program Overview

Cyber Security is the study of information technology security and focuses on protecting computers, networks, programs, and data from unintended or unauthorized access, change, or destruction. The Cyber Security Program is designed to help students explore the process of securing computers and computer networks, and conducting investigations of cybercrimes and forensic analysis of digital devices. Students will be equipped with the knowledge and skills to manage helpdesk functions and small to medium business IT operations as well as continue on to post-secondary training for careers in computer and network security, cybercrime investigation and computer forensics. Throughout the program, students gain mastery of these skills by performing simulated hands-on exercises Students who successfully complete the program will earn up to nine college credits and obtain CompTIA A+ Certification, a fundamental accreditation for work in many IT fields.

Course Description

This course will introduce students to the fundamentals of computers and computer systems. Through hands-on experience, students will learn the basics of computers, hardware, peripherals, and networking. This course will give students the foundational knowledge and skills for the Cyber Security sequence.

Pre-Requisites

N/A

Course Objectives

1. Students will understand the historical and societal context of cyber security.
2. Students will understand computer operations and how it relates to cyber security.
3. Students will be able to assemble and troubleshoot computers.
4. Students will understand the relation between the physical and virtual worlds.

Integrated Academics

- **Concurrent Enrollment College Credit:** Upon successful completion of Cyber Security 100, students who earn a grade of B or higher will earn 3 college credits for CRJ 107 Computer Hardware and Peripherals from Utica College.

Equipment and Supplies

- **School will provide:** All necessary lab and classroom equipment.
- **Student will provide:** N/A

Textbook

TBD

Grading

10% Class Attendance and Participation
10% Oral Presentation
25% Assignments
25% Mid-Term Exam
30% Final Exam

All work is due at the time and day specified when the assignment is given. Submission details for work to be graded will be given at the time the work is assigned.

Quizzes will be given throughout the semester. The lowest quiz score (one score only) will be dropped when calculating the final course grade.

Additional Course Policies

Students are required to follow all safety procedures.

Course Calendar

Quarter	Units of Study
1	• Introduction to Computer Components • Lab Safety and Tools • Computer Memory • Storage Devices • Computer Assembly
2	• System Configuration • Windows Setup • Windows Operating System • Internet of Things (IoT) • Network Connections
3	• LAN and WAN • IP Addresses and Network Protocols • Network Media and Cables • Network Security • Computer Security: Threats and Prevention
4	• Computer Security: Virus Removal • Printers and Scanners • Communication Skills • Review and Final Exam

Syracuse City School District
Career and Technical Education Program
Scope and Sequence
CSS 100: Cyber Security 100

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
Weeks 1-2 **Unit 1** **Introduction to Computer Components**	• What are the many types of computer hardware involved in a computer? • What are motherboards, cases, and power supplies? • What is a central processing unit?	• Locate the North Bridge and the South Bridge. • Explain which motherboards and processors are compatible. • Match different form factors together to produce a complete computer system.	• Quiz: Computer Components • Processor Lab • Performance Assessment: Identification of Computer Components	**Career Ready Practices** CRP 2,4,7,11,12	**ELA** RI.9-10.1-4,6,7 W.9-10.1-6,8,9,10
				Cluster Standards IT 2,5,11	**Literacy** RST.9-10.2,3,4 WHST.9-10.2,4
				Pathway Standards IT-SUP 1,9,10	**Math**
				Industry Standards	**Science**
Weeks 3-4 **Unit 2** **Lab Safety and Tools**	• What are the proper tools needed for working on computer systems? • What are the proper safety procedures when working on electronics?	• Demonstrate how to properly use different tools that relate to computers. • Demonstrate how to prevent electrostatic discharge.	• Quiz: Safety and Tools • Performance Assessment: Tool Use for Assembling and Disassembling a Computer	**Career Ready Practices** CRP 2,4,6,7,11	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 11,12	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,8
				Pathway Standards IT-SUP 3,8	**Math**
				Industry Standards	**Science**
Weeks 5-6 **Unit 3** **Computer Memory**	• What is the function of Random Access Memory (RAM)? • What type of RAM should be purchased for a computer?	• Understand RAM and how it helps a computer function. • Distinguish between volatile and non-volatile memory. • Distinguish between the different types of RAM and how they relate to desktops and laptops.	• Quiz: RAM	**Career Ready Practices** CRP 1,2,3,5,12	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 11,12	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,4,8
				Pathway Standards IT-SUP 1,3	**Math**
				Industry Standards	**Science**

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
Weeks 7-8 **Unit 4** **Storage Devices**	• What is the function of different storage devices? • What are the differences between hard drives, floppy drives, and removable devices?	• Explain the advantages and disadvantages of different storage devices and different storage sizes. • Explain the difference between a Hard Disk Drive and a Solid State Drive.	• Quiz: Computer Memory • Research Paper: Difference Between RAM, ROM, and Hard Drive	**Career Ready Practices** CRP 2,4,8,12	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 1,3,11	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,4,8
				Pathway Standards IT-SUP 3,10	**Math**
				Industry Standards	**Science**
Weeks 9-10 **Unit 5** **Computer Assembly**	• How is a computer safely assembled and disassembled? • How do all the computer components tie together?	• Demonstrate how to successfully assemble and disassemble a computer. • Demonstrate how to make proper connections between computer components.	• Quiz: Computer Assembly • Worksheets • Performance Assessment: Computer Assembly	**Career Ready Practices** CRP 2,4,12	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 6,11,12	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,4,9
				Pathway Standards IT-SUP 2,3	**Math**
				Industry Standards	**Science**
Weeks 11-12 **Unit 6** **System Configuration**	• How is a system configured? • What is the BIOS? • How are PC cards, USB devices, and other computer peripherals configured?	• Demonstrate how to boot a computer into the BIOS. • Demonstrate how to create a bootable USB drive. • Demonstrate how to change the boot order and other BIOS functions.	• Quiz: System Configuration • Worksheets • Performance Assessment: System Configuration	**Career Ready Practices** CRP 2,4,12	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 6,11,12	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,4,8
				Pathway Standards IT-SUP 1,3	**Math**
				Industry Standards	**Science**
Weeks 13-14 **Unit 7**	• What is an operating system (OS)? • How is a Windows	• Distinguish between Windows, Linux, and Mac OS. • Demonstrate how to install	• Quiz: Operating Systems • Worksheets • Performance	**Career Ready Practices** CRP 2,4,11,12	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
Windows Setup	Operating System installed on a computer?	Windows on a computer.	Assessment: Windows Setup		L.9-10.1-6
				Cluster Standards IT 6,11,12	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,4,8
				Pathway Standards IT-SUP 1,3	**Math**
				Industry Standards	**Science**
Weeks 15-16 **Unit 8** **Windows Operating System**	• What are the basics of the Windows operating system? • How are user accounts created? • What is the function of the Windows Command Prompt?	• Demonstrate how to create administrator, standard, and guest accounts. • Demonstrate how to use the command prompt to navigate through a computer system.	• Quiz: Windows OS • Worksheets • Performance Assessment: Windows OS	**Career Ready Practices** CRP 2,4,11,12	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 6,10,11,12	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,4,8
				Pathway Standards IT-SUP 1,3	**Math**
				Industry Standards	**Science**
Weeks 17-18 **Unit 9** **Internet of Things (IoT)**	• What is the internet? • How does a computer connect to the internet? • What is the internet of things? • How do modems connect computers to the internet?	• Explain how the internet was created. • Explain the evolution of the internet and the progress that has been made. • Explain how current devices are interconnected.	• Quiz: Internet • Worksheets • Performance Assessment: Modems and Connecting to the Internet	**Career Ready Practices** CRP 1,2,5,11,12	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 4,6,9	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,4,8
				Pathway Standards IT-SUP 5 IT-NET 1,2,3,4,5	**Math**
				Industry Standards	**Science**
Weeks 19-20 **Unit 10** **Network Connections**	• What are different types of network connectors? • Why are Telecommunications Industry Association	• Demonstrate how to use different types of network connectors. • Explain the differences between TIA and EIA standards.	• Quiz: TIA/EIA Standards • Worksheets • Performance Assessment: Network Connectors	**Career Ready Practices** CRP 7,8,11	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 1,3,5,6	**Literacy** RST.9-10.2,3,4,9

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
	(TIA) and Electronic Industries Alliance (EIA) Standards important?				WHST.9-10.2,4,8
				Pathway Standards IT-SUP 3,4,7	**Math**
				Industry Standards	**Science**
Weeks 21-22 **Unit 11** **LAN and WAN**	• What is the difference between a Local Area Network (LAN) and a Wide Area Network (WAN)?	• Explain the difference between a LAN and WAN and where to implement them.	• Quiz: LAN and WAN • Performance Assessment: LAN and WAN	**Career Ready Practices** CRP 2,7,8,10	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 7	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,4,8
				Pathway Standards IT-SUP 3,4,7	**Math**
				Industry Standards	**Science**
Weeks 23-24 **Unit 12** **IP Addresses and Network Protocols**	• What is the Open Systems Interconnection (OSI) model? • What is involved in setting up IP addresses?	• Demonstrate an understanding of the OSI model. • Demonstrate the difference between IPV4 and IPV6.	• Quiz: IP Addresses and Network Protocols • Quiz: OSI Model • Performance Assessment: IP Addresses and Network Protocols	**Career Ready Practices** CRP 2,7,8	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 1,2,5,10,11,12	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,4,8
				Pathway Standards IT-SUP 5 IT-NET 1,2,3,4,5	**Math**
				Industry Standards	**Science**
Weeks 25-26 **Unit 13** **Network Media and Cables**	• What are the different types of networking cables? • How does a technician create an Ethernet cable? • What are the different network media?	• Demonstrate the difference between cat5, cat5e, and cat6 cables. • Demonstrate how to successfully create an Ethernet cable. • Demonstrate how to test Ethernet cable connectivity. • Demonstrate the different network media the internet runs	• Quiz: Networking Cables • Worksheets • Performance Assessment: Creating cat5e Cable	**Career Ready Practices** CRP 2,4,7,8	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 2,11,12	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,8
				Pathway Standards IT-SUP 4,5,6,9	**Math**

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
		on.		IT-NET 1,2,3	
				Industry Standards	**Science**
Weeks 27-28 **Unit 14** **Network Security**	• What are the basics of network security? • What is physical security?	• Demonstrate the difference between physical security and network security.	• Quiz: Network Security and Perimeter Protection • Performance Assessment: Securing a Network	**Career Ready Practices** CRP 2,8,11	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 2,6,11,12	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,4,8
				Pathway Standards IT-SUP 1,3,9 IT-NET 1	**Math**
				Industry Standards	**Science**
Weeks 29-30 **Unit 15** **Computer Security: Threats and Prevention**	• What are some common security threats? • What are several important security prevention methods?	• Explain the different types of security threats that could affect a computer system. • Demonstrate how to analyze and prevent security threats.	• Quiz: Computer Threats • Performance Assessment: Incident Response	**Career Ready Practices** CRP 2,7,11	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 4,6,11	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,4,8
				Pathway Standards IT-SUP 2,3,5,9 IT-NET 4,5	**Math**
				Industry Standards	**Science**
Weeks 31-32 **Unit 16** **Computer Security: Virus Removal**	• Why is security awareness important? • What are the best practices for virus prevention and removal?	• Demonstrate safety and security when working with computers. • Explain the function of a firewall. • Demonstrate how to identify and remove viruses.	• Quiz: Computer Viruses • Video/PowerPoint Presentation on Security Awareness • Performance Assessment: Firewalls and Viruses	**Career Ready Practices** CRP 2,7,11	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 2,3,6,11	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,4,8
				Pathway Standards IT-SUP 2,3,5,9 IT-NET 4,5	**Math**

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
				Industry Standards	**Science**
Weeks 33-34 **Unit 17** **Printers and Scanners**	• What are the different types of printers? • What are the proper ways to setup and maintain a printer?	• Demonstrate the difference between inkjet printers and laser printers. • Demonstrate how to set up and connect a printer to a computer.	• Quiz: Printers and Scanners • Performance Assessment: Printer Installation and Repair	**Career Ready Practices** CRP 2,8,11	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 2,6,11,12	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,4,8
				Pathway Standards IT-SUP 1,3,9 IT-NET 1,4	**Math**
				Industry Standards	**Science**
Weeks 35-36 **Unit 18** **Communication Skills**	• What are the proper ways to communicate effectively in the technical field?	• Demonstrate professional phone etiquette. • Demonstrate how to communicate effectively with clients and employees.	• Quiz: Professional Communication Skills • Performance Assessment: Communication Skills	**Career Ready Practices** CRP 2,4,9,11	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 1	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,4,8
				Pathway Standards IT-SUP 3,9 IT-NET 1	**Math**
				Industry Standards	**Science**
Weeks 37-40 **Review and Final Exam**	• How can knowledge and skills be applied? • What was the learning outcome of the year?	• Review and apply previous learning and skills.	• Performance Assessment: Application of Skills to Authentic Tasks • Final Exam	**Career Ready Practices** CRP 1-12	**ELA** RI.9-10.2,3,4 W.9-10.2,4 SL.9-10.1-6 L.9-10.1-6
				Cluster Standards IT 1-12	**Literacy** RST.9-10.2,3,4,9 WHST.9-10.2,4,8
				Pathway Standards IT-SUP 1-10 IT-NET 1-5	**Math**

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
				Industry Standards	**Science**

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CSS 200: Cyber Security 200

Program Overview

Cyber Security is the study of information technology security and focuses on protecting computers, networks, programs, and data from unintended or unauthorized access, change, or destruction. The Cyber Security Program is designed to help students explore the process of securing computers and computer networks, and conducting investigations of cybercrimes and forensic analysis of digital devices. Students will be equipped with the knowledge and skills to manage helpdesk functions and small to medium business IT operations as well as continue on to post-secondary training for careers in computer and network security, cybercrime investigation and computer forensics. Throughout the program, students gain mastery of these skills by performing simulated hands-on exercises Students who successfully complete the program will earn up to nine college credits and obtain CompTIA A+ Certification, a fundamental accreditation for work in many IT fields.

Course Description

This course provides an overview and exploration of software and technology foundations for cyber security. The course emphasizes practical hands-on labs and exercises that will be used by students to gain an understanding of software technologies that are relevant to cyber security. By writing lab reports that document their findings and results, students will implement knowledge and skills in authentic situations. Students who successfully complete the course will have the opportunity to obtain CompTIA A+ Certification.

Pre-Requisites

CSS 100: Cyber Security 100

Course Objectives

1. Students will know and understand computers and how they relate to cyber security.
2. Students will understand the historical and societal context of cyber security.
3. Students will understand the basics of computer system and network fundamentals.
4. Students will understand the basics of computer math and computer number systems.
5. Students will be able to troubleshoot and diagnose computers.
6. Students will understand the relation between the physical and virtual worlds.

Integrated Academics

- 1 Integrated Science Credit
- **Concurrent Enrollment College Credit:** Upon successful completion of Cyber Security 200, students who earn a grade of B or higher will earn 3 college credits for CRJ 205 Software Foundations for Cybersecurity.

Equipment and Supplies

- **School will provide:** All necessary lab and classroom equipment.
- **Student will provide:** N/A

Textbook

TBD

Grading

10% Class Attendance and Participation
10% Oral Presentation

25% Assignments
25% Mid-Term Exam
30% Final Exam

All work is due at the time and day specified when the assignment is given. Submission details for work to be graded will be given at the time the work is assigned.

Quizzes will be given throughout the semester. The lowest quiz score (one score only) will be dropped when calculating the final course grade.

Additional Course Policies

Students are required to follow all safety procedures.

Course Calendar

Quarter	Units of Study
1	• Course Introduction • Computer System and Network Fundamentals • Computer Math and Computer Number Systems • Virtual Machines: VMware, VirtualBox, Kali Linux • Command Line Interface: Windows
2	• Command Line Interface: Linux • File System Management • Open-Source Software Management • Host-Based Security Tools • Network-Based Security Tools
3	• Penetration Testing • Reconnaissance • Scanning
4	• Exploitation • Social Engineering • Web-Based Exploitation • Post-Exploitation and Maintaining Access • Penetration Testing Wrap-Up • Review • CompTIA A+ Certification Exam • Final Examination

Syracuse City School District
Career and Technical Education Program
Scope and Sequence
CSS 200: Cyber Security 200

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
Weeks 1-2 **Unit 1** **Course Introduction** **Computer System and Network Fundamentals**	• What knowledge and skills are developed in this course? • What is a computer system and how does it relate to a network?	• Configure a computer system and its software. • Explain how a computer is attached to the network. • Define and explain the Internet of Things (IoT).	• Computer System Review • Lab: IoT	**Career Ready Practices** CRP 1,2,3,4,8,9	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 1,2,3,4	**Literacy** RST.11-12.1,2,3,4 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 1,2,3,5 IT-NET 1,2,3,4,5 IT-PRG 3,7,9	**Math**
				Industry Standards	**Science**
Weeks 3-6 **Unit 2** **Computer Math and Computer Number Systems**	• How do computers store data? • How are numbers converted between binary and decimal systems?	• Describe how computers store data. • Explain decimal, binary, octal, and hexadecimal number systems. • Perform binary addition. • Convert numbers from binary to decimal and decimal to binary forms.	• Assignment #2: Computer Math and Computer Number Systems • Quiz: Number Systems	**Career Ready Practices** CRP 2,4,8,11,12	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 12	**Literacy** RST.11-12.1,2,3,4 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 6,9	**Math**
				Industry Standards	**Science**
Weeks 7-8 **Unit 3** **Virtual Machines: VMware, VirtualBox, Kali Linux**	• What is a virtual machine? • How is a virtual machine implemented?	• Define a virtual machine and describe its function. • Set up and maintain a virtual machine. • Compare and contrast different virtualization software. • Install Windows and Kali VM software.	• Assignment #3: Virtual Machines • Quiz: Virtual Machine Functions • Lab: VMware	**Career Ready Practices** CRP 2,7,8,11	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 4,5,7,12	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
				Pathway Standards IT-SUP 1,2,4,7,8,9 IT-NET 3,4 IT-PRG 1,3,7,9	**Math**
				Industry Standards	**Science**
Weeks 9-10 **Unit 4** **Command Line Interface: Windows**	• What is the Windows Command line (CMD)? • What are the advantages of the CMD?	• Explain and use basic Windows commands. • Navigate through a Windows system via CMD.	• Assignment #4: Windows CMD • Lab: Navigating Through Windows CMD	**Career Ready Practices** CRP 2,4,11,12	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 1	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 1,2,6 IT-NET 2	**Math**
				Industry Standards	**Science**
Weeks 11-12 **Unit 5** **Command Line Interface: Linux**	• What is the Linux Terminal? • What are the advantages of the Terminal?	• Explain and use basic Linux commands. • Navigate through a Linux system via Terminal.	• Assignment #5: Linux Terminal • Lab: Navigating Through Terminal	**Career Ready Practices** CRP 2,4,11	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 12	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 1,2,6 IT-NET 2	**Math**
				Industry Standards	**Science**
Weeks 13-15 **Unit 6** **File System Management**	• Why are different file system structures used to manage files? • What is open source software?	• Compare and contrast different file types. • Explain how files are saved using different file systems including Fat32, NTFS, and EXT.	• Assignment #6: File Structures • Lab: Viewing File Structures	**Career Ready Practices** CRP 2,4,7,8,11	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards	**Literacy**

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
Open-Source Software Management		• Use different file systems to manage files. • Describe open source software and its uses.		IT 7,9	RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 2,4,9,10 IT-NET 1	**Math**
				Industry Standards	**Science**
Weeks 16-18 **Unit 7** **Host-Based Security Tools**	• How can security measures be implemented on a computer?	• Describe host-based security tools including antivirus software and firewalls. • Use host-based security tools to improve computer security.	• Assignment #7: Antivirus Setup • Lab: Firewall • Quiz: Types of Malware	**Career Ready Practices** CRP 2,3,4,5,7,8,9,11,12	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 5,8,9	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 5,6,9,8	**Math**
				Industry Standards	**Science**
Weeks 19-20 **Unit 8** **Network-Based Security Tools**	• How do network-based security tools protect computer systems? • How are network security tools implemented on a system?	• Describe network-based security tools including intrusion detection systems (IDS) and intrusion prevention systems (IPS). • Explain the function of Network Access Controls and Demilitarized Zone (DMZ) in computer security.	• Assignment #8: Intrusion Detection • Lab: IDS and IPS • Quiz: Network Security Functions	**Career Ready Practices** CRP 2,4,7,8,11,12	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 5,8,9	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 5,6,9,8 IT-NET 1,4,5	**Math**
				Industry Standards	**Science**
Weeks 21-24 **Unit 9** **Penetration**	• What is penetration testing (pentesting)? • What are the benefits of conducting a	• Describe penetration testing tools. • Use penetration testing to find vulnerabilities in a computer	• Assignment #9: Linux Pentesting • Lab: Vulnerable Mary	**Career Ready Practices** CRP 1,2,4,5,7,8,9,11	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
Testing	penetration test?	system.		**Cluster Standards** IT 5,8,9	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 2,5,6,9,10 IT-NET 1,4,5	**Math**
				Industry Standards	**Science**
Weeks 25-28 **Unit 10** **Reconnaissance**	• How can outsiders obtain information about a computer system?	• Define reconnaissance. • Explain the connection between reconnaissance and control panel. • Explain the connection between reconnaissance and computer systems information.	• Assignment #10: Source Code • Lab: HTML View	**Career Ready Practices** CRP 2,4,7,11	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 9,10	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 5,6 IT-NET 2	**Math**
				Industry Standards	**Science**
Weeks 29-30 **Unit 11** **Scanning**	• What is the purpose of doing a port scan? • What information does a port scan reveal?	• Define open ports in a computer system. • Check for open ports in a computer system using the Command line.	• Assignment #11: Nmap • Lab: Nmap Linux	**Career Ready Practices** CRP 1,2,7,8,11	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 5,8,9	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 5,6 IT-NET 2	**Math**
				Industry Standards	**Science**
Weeks 31-33 **Unit 12**	• How can a computer system be exploited?	• Define exploitation of a computer system.	• Assignment #12: Open Ports	**Career Ready Practices** CRP 1,2,3,5,7,8,9,11,12	**ELA** RI.11-12.2,3,4 W.11-12.2,4

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
Exploitation		• Gain access into a computer system.	• Lab: Exploitation		SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 5,8,9,10	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 5,6 IT-NET 2	**Math**
				Industry Standards	**Science**
Weeks 34-36 **Unit 13** **Social Engineering** **Web-Based Exploitation**	• How can someone use social engineering to exploit a computer user?	• Define social engineering and explain methods for preventing it. • Compare and contrast exploitation and social engineering.	• Assignment #13: Social Engineering • Lab: Methods of Social Engineering	**Career Ready Practices** CRP 1,2,3,5,7,8,9,11,12	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 4,5,8,9,10	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 5,6 IT-NET 2	**Math**
				Industry Standards	**Science**
Weeks 37-39 **Unit 14** **Post Exploitation and Maintaining Access** **Penetration Testing Wrap-Up**	• What is a backdoor and how is it used to access computer information?	• Explain how access into a system is maintained after exploitation. • Describe and use Backdoor Trojan software.	• Assignment #14: Maintaining Access • Lab: Backdoor Access	**Career Ready Practices** CRP 1,2,3,5,7,8,9,11,12	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 5,8,9	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 1,2,3,4,9,10 IT-NET 1,5 IT-PRG 3	**Math**
				Industry Standards	**Science**

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
Week 40 **Unit 15** **Review** **CompTIA A+ Certification Exam** **Final Examination**	• How can the knowledge and skills learned in this course be applied?	• Apply knowledge and skills to solve problems. • Complete the CompTIA A+ Certification Exam, if eligible. • Complete the Final Examination.	• Assignment #15: Review • CompTIA A+ Certification Exam (if eligible) • Final Examination: NOCTI	**Career Ready Practices** CRP 1,2,4,5,6,10,12	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 1-12	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 9	**Math**
				Industry Standards	**Science**

Return to TOC

Syracuse City School District
Career and Technical Education Program
Course Syllabus
CSS 300: Cyber Security 300

Program Overview

Cyber Security is the study of information technology security and focuses on protecting computers, networks, programs, and data from unintended or unauthorized access, change, or destruction. The Cyber Security Program is designed to help students explore the process of securing computers and computer networks, and conducting investigations of cybercrimes and forensic analysis of digital devices. Students will be equipped with the knowledge and skills to manage helpdesk functions and small to medium business IT operations as well as continue on to post-secondary training for careers in computer and network security, cybercrime investigation and computer forensics. Throughout the program, students gain mastery of these skills by performing simulated hands-on exercises Students who successfully complete the program will earn up to nine college credits and obtain CompTIA A+ Certification, a fundamental accreditation for work in many IT fields.

Course Description

This course presents the student with foundational concepts and processes to achieve better information security in a modern organization. The student will develop an appreciation for the threat and risk of information exposure, as well as risk management and mitigation techniques to limit losses. Students will explore the essential elements of an information security policy and the importance of incident response, reporting, and containment in the context of timely restoration of information. Students will also learn procedures for notification of appropriate authorities leading to potential prosecution. Modern information security technologies and their limitations will be explored as well as legal, ethical, and privacy issues.

Pre-Requisites

CSS 100: Cyber Security 100 and CSS 200: Cyber Security 200

Course Objectives

Students will:

1. Understand the role of information and the need for security in a modern organization.
2. Identify general classes of security threats and vulnerabilities in an organization.
3. Understand how to create and critically evaluate an information security policy to ensure that critical functions are sustainable while addressing the greatest information security risks.
4. Apply the security management process to mitigate threats of information disclosure for core processes.
5. Understand the fundamentals behind currently-employed computer security technologies.
6. Understand the legal, ethical, and privacy-related issues pertaining to information security.
7. Develop an incident response and recovery plan for first responders as well as the entire organization.
8. Realize that there is no such thing as perfect security.

Integrated Academics

- 1 Integrated ELA Credit
- **Concurrent Enrollment College Credit**: Upon successful completion of Computer Forensics 300, students who earn a grade of B or higher will earn 3 college credits for CRJ 355 Cyber Crime Investigations and Forensics I at Utica College

Equipment and Supplies

- **School will provide:** All necessary lab and classroom equipment.
- **Student will provide:** Outside access to the Internet, preferably broadband hi-speed, to complete readings, assignments, and communicate with the teacher and other students.

Textbook

TBD

Grading

Grading will be on the following system:

93%-100%	= A
90 %– 92.9%	= A-
87%-89.9%	= B+
83%-86.9%	= B
80%-82.9%	= B-
77% – 79.9%	= C+
73%-76.9%	= C
70%-72.9%	= C-
67%-69.9%	= D+
60-66.9%	= D
Below 60	= F

Course components are evaluated as follows:

Quizzes	30%
Labs	20%
Classroom Participation Assignments	10%
Final Project	20%
Final Exam	20%

Assignments:

- **Quizzes:** Quizzes will consist of T/F, multiple choice, fill-in-the-blank, and short essay questions.
- **Labs:** Labs will be assigned to address topics related to information security and cybersecurity. Labs will typically consist of hands-on assignments. The output of each lab will be a 2-3 page lab report. The lab report will consist of an introduction section, a results section, and a conclusion. The lab report must be cited using APA format. Lab assignments will be done in groups.
- **Classroom Participation Assignments:** Classroom participation assignments will range from answering questions at the end of each chapter to addressing contemporary topics. The output of these assignments will be either written material or PowerPoint slides. All work must be cited in APA format. These assignments will be done in groups.

- **Final Project:** The final project will be a hands-on lab project of the student's choice. The topic must be approved by the instructor. The output of this project will be a 10 to 20 minute PowerPoint presentation. Work must be cited using APA format.
- **Final Exam:** The final exam will be comprehensive and will consist of T/F, multiple choice, fill-in-the-blank, and short essay questions.

Group work is a very important part of the cyber security field. Many class assignments will be done in groups. It is important that every group member participate in group assignments and activities. The instructor reserves the right to adjust individual grades for group projects based on participation, frequency of communication, and feedback from group members.

Course Calendar

Quarter	Units of Study
1	• Course Introduction • Introduction to Cyber Security • Computer Number Systems • Cyber Conflict • Measuring and Weighing the Risks • Security Policies • Auditing and Accountability
2	• Access Control, Authentication, and Authorizations • Cryptography • Data Hiding and Steganography • Monitoring and Diagnosing Networks • Understanding Devices and Infrastructures
3	• Protecting Wireless Networks • Securing the Cloud • Host, Data, and Application Security • Malware, Vulnerabilities, and Threats • Social Engineering and Other Foes • Operations Security (OPSEC) • Security Administrations
4	• Computer Forensics and Digital Evidence • Disaster Recovery and Incident Response • SANS Top 20 Security Controls • Internship • Review for Final • CompTIA A+ Certification Exam • Final Examination

Syracuse City School District
Career and Technical Education Program
Scope and Sequence
CSS 300: Cyber Security 300

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
Weeks 1-2 **Unit 1** **Course Introduction** **Introduction to Cyber Security**	• What knowledge and skills are developed in this course? • What is cyber security? • Why is cyber security important? • How does cyber security affect individuals and organizations?	• Explain what cyber security is and how it affects the world. • Create an argument on the importance of cyber security and its effects. • Define and explain key vocabulary terms.	• Syllabus • Assignment #1: Cyber Security • Cyber Lab • Cyber Terms Bingo	**Career Ready Practices** CRP 2,3,4,5,9,10	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 4,5,6,	**Literacy** RST.11-12.1,2,3,4 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 1,2,6	**Math**
				Industry Standards	**Science**
Weeks 3-6 **Unit 2** **Computer Number Systems**	• How do computers store data? • How are different number conversions used to solve problems? • How are number systems related to computers?	• Describe how computers store data. • Explain decimal, binary, octal, and hexadecimal number systems. • Perform binary addition. • Convert numbers to different number systems.	• Assignment #2: Conversions • Assignment #3: Addition • Assignment #4: Subtraction • Quiz	**Career Ready Practice** CRP 2,4,8,11	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 11,12	**Literacy** RST.11-12.1,2,3,4 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 6,9	**Math**
				Industry Standards	**Science**
Weeks 7-8 **Unit 3** **Cyber Conflict** **Measuring and Weighing the Risks**	• What is cyber conflict? • What are potential solutions for cyber conflict? • How can risks be measured and weighed? • What can be done to minimize risks?	• Explain what a cyber conflict is and analyze how it can impact businesses and people. • Weigh and measure different risks and explain the impact they each have.	• Assignment #5: Cyber Conflicts • Security Lab • Quiz	**Career Ready Practice** CRP 2,7,8,11	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 4,5,7,12	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 1,2,4,7,8,9	**Math**

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
				IT-NET 3,4 IT-PRG 1,3,7,9	
				Industry Standards	**Science**
Weeks 9-10 **Unit 4** **Security Policies** **Auditing and Accountability**	• What are security policies and what is their purpose? • Why might security policies be crucial to have? • How is an audit and what is its significance? • What accountability do individuals and organizations have for cyber security?	• Develop security policies for cyber security. • Demonstrate how an audit is conducted through example.	• Assignment #6: Creating Policies • Assignment #7: Audit of Policies • Security Policy Lab	**Career Ready Practice** CRP 2,4,11,12	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 1	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 1,2,6 IT-NET 2	**Math**
				Industry Standards	**Science**
Weeks 11-12 **Unit 5** **Access Control, Authentication, and Authorizations**	• What are access control, authentication, and authorization and what purpose do they serve?	• Explain access control, authentication, and authorization. • Develop examples and scenarios that illustrate access control, authentication, and authorization.	• Assignment #8: Access Control • Assignment #9: Authentication and Authorization • Password Lab	**Career Ready Practice** CRP 2,4,11	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 12	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 1,2,6 IT-NET 2	**Math**
				Industry Standards	**Science**
Weeks 13-15 **Unit 6** **Cryptography**	• What is the main purpose of cryptography? • What significance does cryptography have in the cyber field?	• Explain how cryptography is used. • Create a secret message using cryptographic principles. • Decrypt encrypted emails and passwords.	• Assignment #10: Caesar Cipher Wheel • Assignment #11: Encrypting Secret Messages • Assignment #12: Decrypting Secret	**Career Ready Practice** CRP 2,4,7,8,11	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 7,9	**Literacy** RST.11-12.1,2,3,4,7

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
			Messages • Cryptography Lab		WHST.11-12.2,4,6
				Pathway Standards IT-SUP 2,4,9,10 IT-NET 1	**Math**
				Industry Standards	**Science**
Weeks 16-18 **Unit 7** **Data Hiding and Steganography**	• What purpose does steganography serve and why is it important to someone in the cyber field? • How can steganography be used both ethically and unethically?	• Describe steganography and its purpose. • Explain how criminals use steganography. • Hide data within an image.	• Assignment #13: Hiding and Finding Data within images • Data Hiding Lab • Quiz: Date Hiding and Steganography	**Career Ready Practice** CRP 1,2,4,7,8,9,11,12	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 2,3,4,5,8,10	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 6,8,10	**Math**
				Industry Standards	**Science**
Week 19-20 **Unit 8** **Monitoring and Diagnosing Networks** **Understanding Devices and Infrastructures**	• What are some different network-based security tools? • How are network security tools implemented on a system? • What devices are needed in building a network?	• Describe network-based security tools including intrusion detection and prevention systems. • Explain the function of Network Access Controls and demilitarized zone (DMZ) in computer security. • Create a network working collaboratively in a team.	• Assignment #14: Diagnosing Networks • Assignment #15: Devices • Network Security Tools Lab	**Career Ready Practice** CRP 2,4,5,7,8,11,12	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 2,3,4,8,9	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 5,6,9,8 IT-NET 1,4,5	**Math**
				Industry Standards	**Science**
Weeks 21-24 **Unit 9** **Protecting Wireless Networks**	• Why is it important to protect wireless networks? • What is “The Cloud” and what data can be used to support its	• Describe penetration testing tools • Use penetration testing to find vulnerabilities in a computer system. • Understand WEP, WPA, and WPA2.	• Assignment #16: Protecting Wireless • Assignment #17: Creating a Cloud • Application Security Lab	**Career Ready Practice** CRP 1,2,4,5,7,8,9,11	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 5,8,9	**Literacy** RST.11-

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
Securing the Cloud **Host, Data and Application Security**	description? • How are host, data, and application security evaluated?	• Create a Cloud application.			12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 2,5,6,9,10 IT-NET 1,4,5	**Math**
				Industry Standards	**Science**
Weeks 25-28 **Unit 10** **Malware, Vulnerabilities and Threats**	• How can outsiders obtain information about a computer system? • What steps should be taken to secure a personal computer?	• Explain how access into a system is maintained after exploitation. • Describe and use Backdoor Trojan software. • Secure a system from vulnerabilities. • Securely remove malware and document procedures.	• Assignment #18: Malware • Keylogger Lab • Phishing Email Review Game	**Career Ready Practice** CRP 2,4,7,11	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 9,10	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,8,9
				Pathway Standards IT-SUP 5,6 IT-NET 2	**Math**
				Industry Standards	**Science**
Weeks 29-30 **Unit 11** **Social Engineering and Other Foes** **Operations Security (OPSEC)** **Security Administrations**	• How does social engineering compare to other foes? • What does available data indicate about social engineering and phishing? • What is OPSEC? • What is the purpose of security administrations?	• Define social engineering and explain methods for preventing it. • Compare and contrast exploitation and social engineering. • Define and explain OPSEC. • Demonstrate the role of security administrations. • Create and compare security admin accounts and non admin accounts.	• Assignment #19: Social Engineering Scenarios • Social Engineering Lab	**Career Ready Practice** CRP 1,2,7,8,11	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 5,8,9	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 5,6 IT-NET 2	**Math**
				Industry Standards	**Science**
Weeks 31-32 **Unit 12**	• What are the similarities and differences	• Explain the differences between cyber security and computer	• Assignment #20: Computer Forensics	**Career Ready Practice** CRP 1,2,3,5,7,8,9,11,12	**ELA** RI.11-12.2,3,4 W.11-12.2,4

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
Computer Forensics and Digital Evidence	between cyber security and computer forensics? • What is the relationship between cyber security and computer forensics?	forensics. • Analyze the similarities between cyber security and computer forensics. • Demonstrate knowledge of computer forensics through examining files and hard drives. • Demonstrate how to secure an area.	• Assignment #21: What is Digital Evidence? • Digital Investigation Lab • Quiz: Computer Forensics and Digital Evidence		SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 5,8,9,10	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 5,6 IT-NET 2	**Math**
				Industry Standards	**Science**
Weeks 33-34 **Unit 13** **Disaster Recovery and Incident Response** **SANS Top 20 Security Controls**	• What is the impact of a major incident on a company? • How would a cyber team would handle a major incident?	• Explain chain of custody. • Demonstrate how an incident is properly handled using chain of custody form. • Create a scenario of an incident and how it would be handled.	• Assignment #22: SANS Top Twenty • Incident Response Report • Data Breach Project • Quiz: Disaster Recovery and Incident Response	**Career Ready Practice** CRP 1,2,3,5,7,8,9,11,12	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 4,5,8,9,10	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 5,6 IT-NET 2	**Math**
				Industry Standards	**Science**
Weeks 35-39 **Unit 14** **Internship**	• What purpose does the internship serve? • What is the benefit of an internship activity log? • How does an internship help a student determine possible career paths? • How might a student impact the internship organization?	• Explain and demonstrate professionalism and ethics in the workplace. • Perform and complete a variety of real world activities. • Apply the knowledge and skills learned in the classroom to working in a professional setting. • Explain how various professionals work together toward the common goal of solving problems. • Explain how the demands of a job can change according to the setting and the needs of the employer or client.	• Final Project Based on Internship • Internship Evaluation	**Career Ready Practice** CRP 1,2,3,5,7,8,9,11,12	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 5,8,9	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 1,2,3,4,9,10 IT-NET 1,5 IT-PRG 3	**Math**
				Industry Standards	**Science**

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS ELA, Literacy, Math, Science
Week 40 **Unit 15** **Review for Final** **CompTIA A+ Certification Exam** **Final Examination**	• How can the knowledge and skills learned in this course be applied?	• Apply knowledge and skills to solve problems. • Complete the CompTIA A+ Certification Exam, if eligible. • Complete the Final Examination.	• Presentation • CompTIA A+ Certification Exam (if eligible) • Final Examination	**Career Ready Practice** CRP 1,2,4,5,6,10,12	**ELA** RI.11-12.2,3,4 W.11-12.2,4 SL.11-12.1,2,4,5,6 L.11-12.1-6
				Cluster Standards IT 1-12	**Literacy** RST.11-12.1,2,3,4,7 WHST.11-12.2,4,6
				Pathway Standards IT-SUP 6,8,9,10 IT-NET 5 IT-PRG 3	**Math**
				Industry Standards	**Science**

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B. Teacher Certification

> *The self-study team reviews the teacher certification and training of the school or BOCES' instructional, paraprofessional, and support staff who deliver services within the CTE program seeking approval. New York State teacher certification review should include both CTE teachers and teachers of academic content within the proposed program.*

Process

- Reviewers confirm that all CTE teachers hold appropriate New York State teacher certification for the program in which they will teach.
- Reviewers confirm that all teachers of academic content hold appropriate New York State teacher certification for the program in which they will teach.
- Reviewers confirm the appropriate NCLB highly-qualified status for the CTE teachers in programs offering academic credit.
- Reviewers confirm that staff delivering instruction in programs where certification, licensure, or registration by an external entity have acquired the necessary credentials.
- Reviewers confirm that professional development opportunities exist within the school district or BOCES for instructional, paraprofessional, and support staff to acquire and improve skills and knowledge related to instructional enhancement of the CTE program.

Documentation

Recommendations from the review of teacher certification should be included in the self-study report and reviewed by the external committee. A list of all teachers for the program and the New York State teacher certification(s) held by each must be attached to the Application for Career and Technical Education Program Approval.

Resources

New York State Office of Teaching Initiatives
http://www.highered.nysed.gov/tcert/certificate/certprocess.htm

Source: http://www.p12.nysed.gov/cte/ctepolicy/guide.html

Account Information

Person Information

Name	BRITTANY A MAZZAFERRO	**SSN**	[redacted]
Teacher Id	[redacted]	**Date of Birth**	
Address		**Gender**	

Certificates

Credential	Status	Application Type	Issued / Effective Date	Original Exp. Date	Time Extended Exp. Date	Control Number
Cybersecurity 7-12, Transitional A Certificate	Issued	CERTIFICATE	09/29/2017	01/31/2021		1176958171

Applications are valid for three years or two evaluations, whichever comes first.

Applications

Credential	Cert Path	Application Type	Status	Application Date	Evaluation History	Application Paid?
No Data Found						

C. Technical Assessments Based on Industry Standards

> *The self-study team reviews the selection of a technical assessment for the program seeking approval. The selected technical assessment must be nationally-recognized and based on industry standards. It must be available to students enrolled in the approved program and must consist of three parts: written, student demonstration, and student project. Successful completion of the technical assessment is not a requirement for high school graduation, but is required for a student to earn a technical endorsement on the high school diploma*
>
> *The New York State Education Department does not approve, endorse, or certify any technical assessment.*

Process

- The school district or BOCES selects an appropriate industry standard technical assessment to measure student proficiency in the technical field for the program. The school district or BOCES may select a New York State licensing examination as the technical assessment.
- The school district or BOCES determines the scheduling and administration of technical assessments. It is not required that the technical assessment be administered at the conclusion of the program. Parts may be administered throughout a student's learning experience.
- The school district or BOCES determines the number of times a student may take a particular technical assessment.
- The school district or BOCES must comply with existing laws and regulations related to administration of technical assessments to students with disabling conditions and provide appropriate testing modifications. Restrictions on student eligibility for testing are the responsibility of the test producer.
- In the absence of an appropriate nationally-recognized industry standard based assessment, a consortium of local, regional, state, business and industry representatives may be formed to produce such an instrument.
    - Technical assessments must meet generally recognized psychometric criteria. Therefore, the consortium approach may be expensive because of the many steps required to insure assessment validity, reliability, and security.
    - An existing CTE advisory committee or craft committee is not a technical assessment consortium. The school district or BOCES must ensure that the assessment consortium adequately represents current business and industry standards for the specific career area for the program.
- Where an appropriate technical assessment exists, but consists of only one or two parts, a consortium must be formed to develop the missing part(s).
- The school district or BOCES must develop a system to collect student-level and program-level data on performance on the technical assessment.

Documentation

Recommendations on the technical assessment selection should be included in the self-study report and reviewed by the external committee.

Resources

New York State graduation requirements: http://www.emsc.nysed.gov/part100/pages/1005.html

Information on the Technical Endorsement: http://www.emsc.nysed.gov/cte/ctepolicy/endorsement.html

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Source: http://www.p12.nysed.gov/cte/ctepolicy/guide.html

Measuring What Matters in CTE

Job Ready Assessment Blueprint

Computer Technology

Test Code: 4122 / Version: 01

General Assessment Information

Blueprint Contents

Test Type: The Computer Technology industry-based credential is included in NOCTI's Job Ready assessment battery. Job Ready assessments measure technical skills at the occupational level and include items which gauge factual and theoretical knowledge. Job Ready assessments typically offer both a written and performance component and can be used at the secondary and post-secondary levels. Job Ready assessments can be delivered in an online or paper/pencil format.

Revision Team: The assessment content is based on input from secondary, post-secondary, and business/industry representatives from the states of California, Kentucky, Missouri, New Jersey, North Dakota, Oklahoma, Pennsylvania, and Virginia.

CIP Code

11.1006- Computer Support Specialist

Learning that works for America CTE™

Career Cluster 11- Information Technology

o*net™ in*it

15-1151.00- Computer User Support Specialists

Association for Career and Technical Education ACTE www.acteonline.org

The Association for Career and Technical Education (ACTE), the leading professional organization for career and technical educators, commends all students who participate in career and technical education programs and choose to validate their educational attainment through rigorous technical assessments. In taking this assessment you demonstrate to your school, your parents and guardians, your future employers and yourself that you understand the concepts and knowledge needed to succeed in the workplace. Good Luck!

NATIONAL COLLEGE CREDIT RECOMMENDATION SERVICE
University of the State of New York - Regents Research Fund

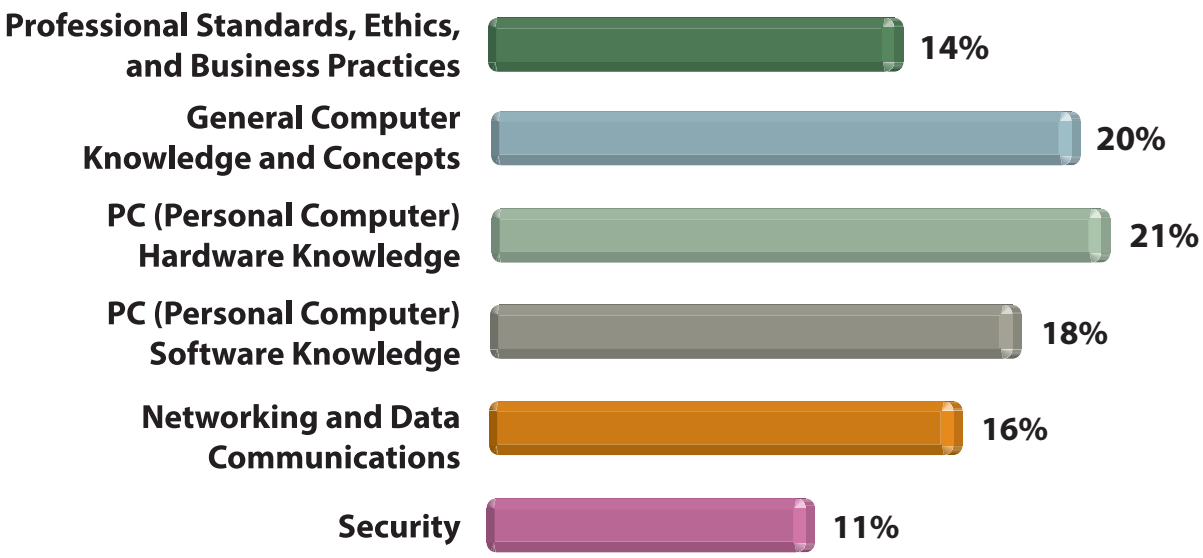
In the lower division baccalaureate/associate degree category, 3 semester hours in Computer Technology, Information Technology

Written Assessment

NOCTI written assessments consist of questions to measure an individual's factual theoretical knowledge.

Administration Time: 3 hours
Number of Questions: 153
Number of Sessions: This assessment may be administered in one, two, or three sessions.

Areas Covered



Specific Standards and Competencies Included in this Assessment

Professional Standards, Ethics, and Business Practices

- Identify professional standards and etiquette, including social media
- Demonstrate awareness of copyright laws, licensing, and intellectual freedoms and properties
- Identify characteristics of computer ethics (e.g., Internet, confidentiality, user policies, billing practices)
- Demonstrate effective technical and professional communication skills

General Computer Knowledge and Concepts

- Identify and convert between different number systems (e.g., binary, hexadecimal, decimal)
- Identify basic computer terminology (e.g., software, hardware, networking, and security)
- Identify basic concepts of computer programming (e.g., flow charts, general knowledge)
- Demonstrate understanding of troubleshooting skills
- Identify and apply general safety procedures
- Demonstrate familiarity with basic task management, prioritization, and planning

(Continued on the following page)

Specific Standards and Competencies (continued)

PC (Personal Computer) Hardware Knowledge

- Identify various technologies (e.g., processors, memory, storage, interfaces, mobile devices)
- Demonstrate understanding of different printing technologies
- Exhibit knowledge of input devices (e.g., cameras, scanners, keyboards, mice)
- Exhibit knowledge of output devices (e.g., LCD, printers, tablets, external storage, entertainment devices)
- Display knowledge of communication devices (e.g., modem, NIC, hub, switch, router)
- Differentiate between servers, workstations, and virtual clients

PC (Personal Computer) Software Knowledge

- Exhibit familiarity with operating systems
- Demonstrate familiarity with common software applications
- Exhibit knowledge of email software
- Demonstrate ability to install and maintain computer software
- Demonstrate proficiency with web browsing software (e.g., search engine items, HTML, Javascript, XML, plug-ins)
- Demonstrate familiarity with utility software (e.g., defrag, chkdsk, system restore)

(Continued on the following page)

Specific Standards and Competencies (continued)

Networking and Data Communications

- Recognize various network types and topologies
- Identify network protocols and LAN access methods
- Demonstrate familiarity with network services (e.g., VPN, video conferencing, file/printer sharing, DNS, DHCP, web services)
- Identify data communications media (e.g., wired, wireless, and satellite)
- Identify various Internet connectivity methods (e.g., cable modem, DSL, T1, dial-up, WiFi)

Security

- Exhibit knowledge of information security, passwords, firewalls, and malicious software
- Exhibit knowledge of secure PKI, SSL, and Web communications
- Demonstrate understanding of security concepts

Sample Questions

Once a user purchases software with a single-use license, the user may

A. copy the software to another DVD or thumb drive to be used as a back-up
B. allow a coworker to copy the software onto another computer
C. allow a family member to copy the software onto another computer
D. copy the software to a network for further distribution

Organizing a solution that proceeds from the general to the specific is called a/an

A. modular approach
B. end result of structured programming
C. simple sequence logic
D. top-down design

What software is required to access .pdf files?

A. Real Player
B. DirectX
C. Acrobat Reader
D. Internet Explorer

Which of the following transmits data using light pulses?

A. Ethernet cables
B. satellite systems
C. fiber optic cables
D. coaxial cables

Select the most secure password from the list below.

A. 078uhBU*38
B. PassWord
C. qwerty1
D. 93niGhkL

(Continued on the following page)

Sample Questions (continued)

The term, computer ethics, refers to

A. the physical protection of computer hardware and software
B. the protection of data from accidental or malicious destruction
C. a person's conduct and behavior as a computer user
D. actions taken by management to prevent breaches in security

The binary number 1101101011111 becomes _____ when converted to hexadecimal.

A. DAF
B. ADE
C. DDD
D. EAD

A megabyte equals

A. 1,024 bytes
B. 1,004,096 bytes
C. 1,024,000 bytes
D. 1,048,576 bytes

The general way to transfer files over the Internet is to use

A. SMTP
B. FTP
C. NNTP
D. VOIP

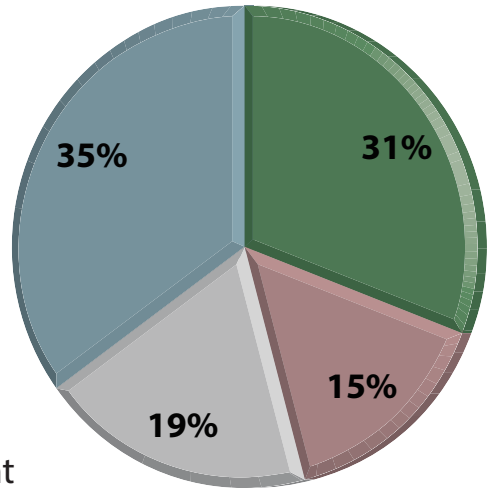
A virus is a small piece of software that

A. may enter computers through unpatched vulnerabilities
B. is blocked as long as the virus detection program is running
C. is always easy to remove
D. rarely harms the computer

Performance Assessment

NOCTI performance assessments allow individuals to demonstrate their acquired skills by completing actual jobs using the tools, materials, machines, and equipment related to the technical area.

Administration Time: 3 hours
Number of Jobs: 4



Areas Covered:

31% File Management Using Windows GUI
Participant will make folders on a flash drive, locate/copy and create/save specified files to SYSTEM folder, create/save specified files to the root of SYSTEM and create a folder tree on SYSTEM, copy files into Test.txt, Print Test.txt and write name on it, rename .txt extensions to .doc extensions, save a copy of SYSTEM to DATA1, and submit material to evaluator.

15% Word Processing Applications
Participant will prepare, save and print, and edit a draft letter, then print, save and submit the completed letter.

19% Spreadsheet Applications
Participant will set up a spreadsheet, with correct content, format the spreadsheet for printing, print showing formulas, print showing all values, and save and submit the completed spreadsheet.

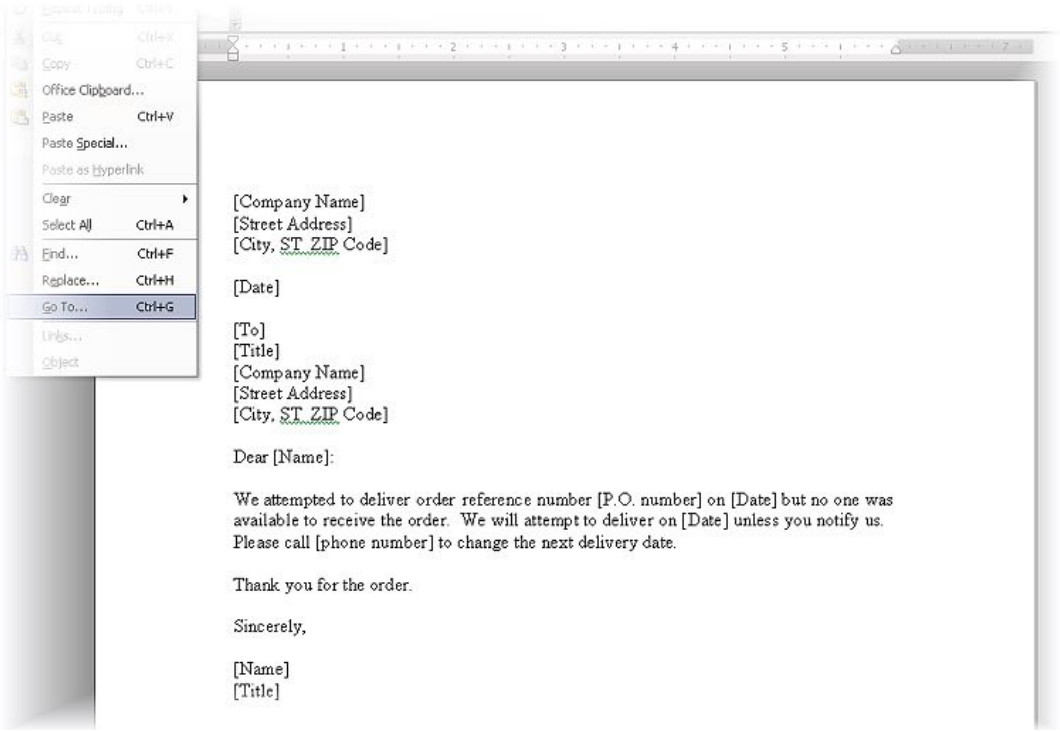
35% Network Connectivity
Participant will set the proxy server for Internet access, identify and record the proxy server address and port, the computer name, computer workgroup or domain, IP address and subnet mask, the DNS server and suffix, DHCP server, MAC address, and connectivity to the server, trace a route to the server, submit the completed worksheet to the evaluator, and turn in flash drive.

Sample Job

Word Processing Applications

Maximum Time: 45 minutes

Participant Activity: The participant will use a word processing application to type a business letter using the formatting directions provided. These directions include using various functions such as the thesaurus and spell checker.



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SCSD CTE Student Portfolio

Definition: Student portfolios are a collection of personal documents, which showcase an individual's learning experiences, goals and achievements. Student portfolios are created and controlled by the student, facilitated by the instructor, and evaluated by outside entities.

Purpose: Students should be able to leave a program with as many tools in their toolbox as possible. Student portfolios are a way to assist students in marketing themselves in future interviews, by using the portfolio to illustrate his or her skills and/or talents.

SCSD CTE Student Portfolio Requirements

☐	**Table of Contents:**	This should list each section and piece of the portfolio in the order it appears
☐	**Cover letter**	A cover letter introducing the student to a potential employer about a specific job in his or her chosen pathway. Should focus on why the student is the best candidate for the job. It should compliment the resume, not repeat it.
☐	**Resume**	Should be professionally formatted. Usually a one-page document listing the student's name, personal information (address, phone, and email), an objective, work history or extracurricular/community involvement, education, certifications/credentials, personal skills/interests, and references.
☐	**Letters of Recommendation**	Students must include at least two (2) reference letters, provided by people outside the school who are familiar with his or her work or character. The reference letters can be employment-related, personal, or they can attest to the character of the student.
☐	**Certifications/Credentials**	Students should include copies of any credentials and/or certifications they have earned as a result of their program.
☐	**Transcript**	Student provides a copy of his or her full academic transcript.
☐	**Employability Profile**	Per NYSED: The work skills employability profile is intended to document student attainment of technical knowledge and work-related skills. Documents to validate skills reported on the profile could include, but are not limited to, an employer/teacher review of student work based on learning standards and expectations in the workplace, performance evaluations and observations. Students must have at least one employability profile completed within one year prior to school exit. If a student is involved in a number of work-based learning experiences and/or is employed part time, he/she may also have additional employability profiles as completed by others knowledgeable about his or her skills (e.g.,

	employer and/or job coach).
☐ **College Research**	A written research assignment focusing on three colleges offering programs in the student's chosen career pathway.
☐ **Career Plan**	Per NYSED: "Career Plans are an important mechanism to add relevance and meaning to learning experiences across subject areas. The career development model used to create the Career Plan aligns with the CDOS standards." A Career Plan document can be found here: http://www.p12.nysed.gov/cte/careerplan/docs/SecondaryCommencLvl.pdf
☐ **Student Awards**	This section is completely open ended. Students should use this section to illustrate any awards, projects, exemplars, service learning, or scholarships, they participated or earned during their high school years. They can show evidence through pictures, project documentation, news articles, program agendas, meeting minutes, videos, etc.
☐ **Work Samples**	Examples highlighting ***only the student's best work***, demonstrating the skills and competencies he or she has mastered. These should be presented professionally and be clearly captioned. ***Should not be thought as a scrapbook.*** Potential employers are only interested in the very best examples.

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D. Postsecondary Articulation

> *The self-study team reviews the postsecondary articulation agreement for the program seeking approval. Postsecondary articulation agreements help students prepare for the transition from high school to advanced study in a particular career area. Articulation agreements provide direct benefits to students such as dual credits, college credits, advanced standing, or reduced tuition at a postsecondary institution. Articulation agreements may include several school districts and/or BOCES and multiple postsecondary institutions. The school district or BOCES may enter into multiple articulation agreements for a program seeking approval.*

Process

- Reviewers confirm that the postsecondary articulation agreement is designed to prepare students for the transition from high school study to postsecondary study in the career area of the program seeking approval.
- Reviewers confirm that a postsecondary articulation agreement has been obtained that offers direct benefits to students in the program seeking approval.
- Reviewers confirm that the postsecondary articulation agreement includes the
    - prerequisite skills, knowledge, or coursework required of students to participate in the agreement
    - roles and responsibilities of each institution
    - duration of the agreement
    - endorsement by officials of each institution
- Signed articulation agreements must be on file within the school district or BOCES.

Documentation

Documentation of the postsecondary articulation agreement is maintained by the school district or BOCES and updated whenever modifications are made. Recommendations on the technical assessment selection should be included in the self-study report and reviewed by the external committee. A copy of the signed postsecondary articulation agreement must be attached to the Application for Career and Technical Education Program Approval.

Source: http://www.p12.nysed.gov/cte/ctepolicy/guide.html

Articulation Agreement
between
Syracuse City School District (SCSD)
725 Harrison St, Syracuse, NY
and
Onondaga Community College
4585 West Seneca Turnpike, Syracuse, NY

The signatories of this articulation agreement, Syracuse City School District (SCSD) and Onondaga Community College (OCC), declare their intention to participate in a partnership for the purpose of delivering educational instruction to eligible students. The parties to this agreement have reached the following understanding:

1. **Term**
   The term of this agreement shall be for four years from July 1, 2017-June 30, 2021 and subject to the following conditions:

   - Both parties have the option to extend this Agreement for one (1) additional four year period giving written notice to the College no later than ninety (90) days prior to the expiration date.

2. **Modification and Waiver**
   No waiver or modifications shall be valid unless it is in writing and signed by OCC and SCSD.

3. **Curriculum and Courses**
   - Students who have enrolled in the Cybersecurity program at Syracuse City School District will be eligible to enroll in courses and earn credit for:
     - ENG 103 and ENG 104: Freshman Composition and Literature I and II, subject to an annual Memorandum of Understanding and the identification of an OCC faculty member to teach the course on-premises at the Public Service Leadership Academy at Fowler High School; and;
     - CRJ 101, Justice System, through the Onondaga Community College, College Credit Now Program.
   - The above courses offered through the OCC College Credit Now Program are required for the Computer Forensics, A.S. degree at OCC.
   - Tuition for concurrent enrollment courses will be incurred according to all applicable requirements in place by the State University of New York. For courses taught by Onondaga Community College faculty, the Syracuse City School District will additionally incur the cost set by annual Memorandum of Understanding between SCSD and OCC.
   - Students will be assisted in the course registration process by OCC. Students will also be supported in the admission process to Onondaga Community College through a specialized workshop and the Office of Student Recruitment.

4. **Students**
   Each student must enroll and remit payment as required by SUNY for the course(s) with OCC through the College Credit Now registration process as

directed by the Director of Concurrent Enrollment and Secondary School Programs.

5. **Entire Agreement**
   This Agreement Constitutes the entire Agreement between the College and SCSD with respect to the subject matter hereof. This Agreement supersedes any and all other agreements, whether oral or in writing, between parties with respect to the subject matter hereof.

Casey Crabill, Ed.D. President Onondaga Community College	Jaime Alicea Superintendent Syracuse City School District
3/27/17 Date	4/3/17 Date

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E. Work-based Learning

> *Work-based learning (WBL) is the "umbrella" term used to identify activities which collaboratively engage employers and schools in providing structured learning experiences for students. These experiences focus on assisting students to develop broad, transferable skills for postsecondary education and the workplace. A quality WBL experience can make school-based learning more relevant by providing students with the opportunity to apply knowledge and skills learned in the classroom to real world situations.*
>
> *Time requirements that students in an approved program may devote to work-based learning experiences are set by administrators of the approved program. This time should be an outcome of the self-study report and external review phases of the approval process. Work-based learning experiences must be sufficient in length and rigor to contribute to student achievement of the State learning standards as well as specific technical competencies.*

Process

- The school district/BOCES and the employer cooperatively plan all work experiences.
- The school district/BOCES set up a formal procedure for the supervision/coordination of all work-based learning experiences and must ensure that work-based learning coordinators are appropriately certified.
- The school district/BOCES provide work-based learning experiences for students with disabilities
- The school district/BOCES and employer must ensure compliance with federal and state labor laws, and the State Department of Labor regulations and guidelines.
- The school district/BOCES must explore and develop work-based learning experiences in settings that are relevant to the program.
- The school district/BOCES must comply with Commissioner's Regulations and Department policy where credit towards graduation is being awarded.

Documentation

Recommendations for work-based learning should be included in the self-study report and reviewed by the external committee.

Resources

New York State Education Department Work Experience Manual **http://www.emsc.nysed.gov/cte/wbl/**

Source: http://www.p12.nysed.gov/cte/ctepolicy/guide.html

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SYRACUSE CITY SCHOOL DISTRICT

Career and Technical Education

CTE

Internship Handbook

Preparing today's students for tomorrow's careers.

Table of Contents

Syracuse City School District

Career and Technical Education Internship

Forms are available on SCSD CTE website www.syracusecityschools.com/cte

Introduction

Syracuse City School District Career and Technical Education Work Based Learning

Learning in the workplace is not a new concept. Informal, on-the-job training is an integral part of all workforce development. Work based learning (WBL) provides structured learning experiences for students through exposure to a range of occupations. The Harvard University report, Pathways to Prosperity (February, 2011) suggested that "Work-linked learning should play an especially important role in the new American system of pathways to prosperity. There is mounting evidence that this would be an effective strategy for encouraging young adults to complete both high school and post-secondary degrees. Co-operative education is a tested model that provides students with extensive work experience that is monitored by the school."

Learning in the workplace is connected to and supports learning in the classroom. Work based learning also helps students achieve established academic standards. Properly developed and supported, work based learning provides a practical context for school subject matter and enhances the traditional classroom learning. Work based learning activities promote the development of broad, transferable skills and are a key element of a rigorous and relevant education for students. It enables students to acquire the attitudes, skills and knowledge needed to succeed in today's workplace.

Employer partners can develop and support work based learning experiences that promote the attainment of workplace knowledge and skills. In doing so, they can support academic achievement and personal growth by designing, structuring, supporting and connecting work based learning experiences. Work based learning also supports professional, technical, and work-readiness skills development. Quality work based learning should:

- Be designed to enhance the learning of skills and workplace knowledge in all aspects of the industry
- Be structured to be safe, legal and measurable
- Be developmentally appropriate
- Have identified learning objectives and assess student performance
- Develop career ready practices and provide opportunities for reflection
- Be supported and documented by appropriate planning and training; and
- Comply with State and Federal labor laws

Syracuse City School District Career and Technical Education Internship

A Career and Technical Education Internship provides an important link between the classroom and the workplace for students age 16 and older. It is a structured, time-limited, career preparation activity in which students are assigned to a workplace for a defined period of time to participate in and observe firsthand within a given industry. The internship enhances and adds relevance to classroom learning. The internship may provide the opportunity to work in teams, rotate through a number of departments and job functions, or work on a project of interest to the student. It is essentially a partnership that links school, community, and business/industry to provide a real-world environment in which students are given the opportunity to apply, and thereby enhance, the knowledge and skills obtained in the classroom. The internship is related to the student's CTE program of study, with the primary goals of promoting:

- The exploration of and experience in a field of interest
- Exposure to a wide range of careers and jobs within an industry
- Opportunities to develop, practice and demonstrate new skills
- The acquisition of occupational knowledge and awareness of the skills and education needed to be successful in the industry

Career & Technical Program/ Teacher Guidelines

Legal Requirements of SCSD CTE Internship Program

All Career and Technical Education Internship Programs have the common objective of providing opportunities for students to develop and demonstrate job skills at a supervised worksite. They are supported by training plans developed cooperatively by the employer, instructor, and student. There should be ongoing communication between the job mentors and the CTE teacher or work based learning coordinator concerning students' performance and needs.

Each internship program needs to have the following:

- New York State Education Department (NYSED) approval of the CTE program
- The employer understands that the student placement is governed by NYSED, New York State Workers' Compensation Board (NYSWCB), New York State Department of Labor (NYSDOL), and United States Department of Labor (USDOL) labor laws and regulations
- Employer is provided a Certificate of Insurance from school where school liability insurance protects the employer from any damage student may do in the workplace
- Students are given written notification that this program is unpaid and they are not due any wages per NYSDOL regulations
- Per NYS, students are required to receive coverage under the employer's Workers' Compensation Insurance if student is interning for a for-profit company. If student is interning at a non-profit entity, the student is required to be covered by the employer's visitors or volunteer insurance.
- Worksite must be in compliance with Occupational Safety and Health Administration (OSHA) regulations. Health and safety instruction/training appropriate for the job is provided by the SCSD and employer specific training is provided by the employer on the worksite.
- Memorandum of Agreement is in effect between the cooperating business and the education agency and outlines the responsibilities of the student, employer, parent/guardian, and school/coordinator, all of whom must sign to confirm their support of the agreement.
- Students complete an Internship Application indicating their understanding of, and agreement to, all rules and regulations of the program.
- Students receive instruction embedded within their CTE curriculum relating to the technical and career ready practices.
- An Internship Training Plan (ITP) is developed and used for each participating student. The plan identifies the general and specific job tasks the student will perform on the job, the desired learning outcomes of the experience, and the time frame the student will spend at each task. The training plan should be designed to ensure that the student will have a progressive learning experience.
- All participating students are meeting, or have met, academic requirements of their CTE programs and academic subjects. No students on academic probation will participate in the internship.
- Employment Certificate (Working Papers) for students provide verification that a student under age 18 is eligible for employment. The student, employer, and school must complete the form. Employment certificates are obtained at the high school – typically the main office, health office, or guidance office.
- Time Log/Record of Attendance provides an official record of the weekly and cumulative hours the student has worked during the experience. It must be maintained for each student.
- An intern evaluation will be done by the CTE teacher before the internship, at the midpoint of the internship and at the end of the internship. This same form will be completed by the on-site supervisor in the midpoint and at the end of the internship.

SCSD CTE Internship Program Checklist (To be completed by CTE teacher or WBL coordinator)

- ☐ NYSED has approved the CTE program
- ☐ The employer understands that the student placement is governed by NYSED, NYSWCB, NYSDOL, and USDOL labor laws and regulations
- ☐ NYSED Application for Employment certificate (working papers, usually available in school counseling office) has been verified (NYSED form attached)
- ☐ Employer is provided with a Certificate of Insurance from school to cover liability (sample attached)
- ☐ A written Memorandum of Agreement is in effect between the cooperating business and the education agency (**Form #1**)
- ☐ Students complete an Internship Application indicating their understanding of, and adherence to all rules and regulations set forth by the program. (**Form #2**)
- ☐ Students receive instruction embedded within their CTE curriculum relating to the technical and Career Ready Practices. The CTE teacher and the student have completed the SCSD CTE Internship Ready to Work Assessment (**Form #3**)
- ☐ An Internship Training Plan (ITP) is developed and used for each participating student (**Form #4**)
- ☐ Students are given written notification that this program will be unpaid and they are not due any wages per NYS DOL regulations (**Form #5**)
- ☐ All SCSD internship candidates have received appropriate safety certification for the industry provided by the school before internship and employer specific training and orientation is provided by the employer on the worksite (**Form #6 & Form #7**)
- ☐ All participating students are meeting, or have met, academic requirements of their CTE programs and academic subjects
- ☐ Review Time Log/Record of Attendance which serves as an official record of the hours the student has worked during the experience (**Form #8**)

REQUIRED FORMS

NYSED Application for Employment Certificate

Certificate of Insurance

SCSD Memorandum of Agreement
(Form #1)

SCSD Internship Program Application
(Form #2)

SCSD Internship Ready to Work Assessment
(Form #3)

SCSD Internship Training Plan
(Form #4)

SCSD Notification of unpaid internship
(Form #5)

SCSD Internship Safety Certification
(Form #6)

SCSD Worksite Orientation
(Form #7)

SCSD Weekly Time Log/Record of Attendance
(Form #8)

Forms are available online at the SCSD CTE website : www.syracusecityschools.com/cte

CTE Teacher/WBL Coordinator

Date

Employer Internship Partner Guidelines

SCSD CTE Internship Employer Requirements

Safety

At all times, both school personnel and the employment site personnel must take appropriate steps to ensure that safe practices are stressed and followed. However, it is impossible to guarantee that no injuries resulting in medical expenses and liability will occur. The following prudent steps are encouraged:

1. In-school course content must include training related to safety at the worksite. Appropriate safety certification should be offered if possible. SCSD internship candidates will have received appropriate safety training before beginning their internship.
2. Any sites used for SCSD CTE internships will be reviewed by school personnel prior to placing a student at the worksite.
3. Employers must provide safety training information to interns as they would a new employee. Safety training must be provided if the employer engaged in a particularly hazardous occupation for minors as defined by the USDOL.
4. Provisions for student safety must be included as part of the training agreement signed by the employer, student, parent, and school representative.

Types of Liability Insurance and Risk Management

Workers' Compensation and Employer Liability Insurance

All employers will have a policy that provides coverage for the Workers' Compensation statutory benefits as well as liability coverage for certain employment-related situations. Verification of employer's Workers Compensation insurance will be included in the Memorandum of Agreement. The SCSD will also have insurance that covers the student participating in a school-related internship experience.

SCSD CTE Internship Expectations & Responsibilities of Employer

Before

- Determine projects or activities that would be appropriate for your student intern
- Communicate with staff that an intern will be at the workplace and identify mentors
- Designate one employee, the on-site supervisor, to work with coordinator/teacher to develop and define successful student objectives and experiences and record on the student Internship Training Plan

During

- Provide student with a Work Site Orientation to organization and any required training
- Train student intern for your work site, including all work site safety training
- Maintain a quality, safe and legal learning experience; provide effective supervision
- Use the Internship Training Plan as a guide for the internship; hold intern to employee standards/ expectations; oversee, direct, and provide adequate tasking to maximize learning
- Meet with coordinator/teacher and student to decide on an ongoing communications strategy
- Evaluate intern work and provide constructive criticism
- Assist student in working toward learning outcomes
- Coordinate student schedule, approve weekly timesheets
- Communicate successes and opportunities at the workplace that the teacher can use to enhance the value of classroom connections
- Complete a student evaluation midway through internship and discuss with student

After

- Complete a final evaluation of the student
- Hold debriefing session and review performance with the student and teacher
- Complete a Program Evaluation

SCSD CTE Internship Employer Internship Partner Checklist (To be completed by On-Site Supervisor/Mentor)

- ☐ Meet with coordinator/teacher and student to agree on ongoing communication strategy (e-mail, text, telephone, etc.)
- ☐ A written Memorandum of Agreement is in effect between the cooperating business and the education agency (**Form #1**)
- ☐ Work with coordinator/teacher to develop and define successful student objectives and experiences and record on the student Internship Training Plan (**Form #4**)
- ☐ Coordinate student schedule, approve weekly time log/record of attendance (**Form #8**)
- ☐ Communicate with staff that an intern will be at the workplace and identify on-site supervisor and/or mentor

On-Site Supervisor _____

Mentor Name _____

- ☐ Provide student with Work Site Orientation to organization and any required training (Form #7)
- ☐ Create and maintain a quality, safe and legal learning experience
- ☐ Hold intern to employee standards/expectation; provide student support and candid feedback
- ☐ Communicate successes and opportunities at the workplace that the teacher can use to enhance the value of classroom connections
- ☐ Complete an interim SCSD CTE Internship Ready to Work Assessment of student performance and discuss with student (**Form #3**)
- ☐ Provide effective supervision
- ☐ Complete a final assessment of the student (**Ready to Work Assessment, Form #3 and Student Training Plan, Form #4**)
- ☐ Complete a program evaluation (**Form #10**)

REQUIRED FORMS

SCSD Memorandum of Agreement
(Form #1)

SCSD Internship Ready to Work Assessment
(Form #3)

SCSD Internship Training Plan
(Form #4)

SCSD Worksite Orientation
(Form #7)

SCSD Weekly Time Log/Record of Attendance
(Form #8)

SCSD Mentor Program Evaluation
(Form #10)

Forms are available online at the SCSD CTE website : www.syracusecityschools.com/cte

_____ _____

Employer/ Mentor Date

Student Intern Guidelines

Expectations and Responsibilities of Students

Before

- Obtain working papers (if under 18)
- Return Internship Application and all permission slips with appropriate signatures
- Meet with your teacher/coordinator and worksite supervisor to finalize an Internship Training Plan

During

- Attend Orientation at the worksite
- Observe all workplace rules and regulations particularly those applicable to safety and security concerns
- Perform all duties, jobs and assigned tasks; treat internship like a real job
- Maintain regular work schedule and notify supervisor in advance of any vacation/appointments
- Track you hours as instructed on Weekly Timesheet
- Develop skill specific learning outcomes with your worksite supervisor
- Participate in ongoing reflection journal activities and skill building classroom assignments
- Communicate with your teacher/coordinator and worksite supervisor if issues arise
- Keep copies of all necessary paperwork (work journal, training plan, Weekly Time Log/Record of Attendance, and evaluations)

After

- Participate in self-evaluation and reflection activities
- Update your resume based upon new skills and experiences gained
- Send thank you note to employer

SCSD CTE Internship Student Checklist (To be completed by student)

- ☐ Obtain NYSED Application for Employment Certificate (usually available in school counseling office, application attached)
- ☐ A written Memorandum of Agreement is in effect between the cooperating business, the education agency, and signed by student and parents (**Form #1**)
- ☐ Return Internship Application (**Form #2**) and all permission slips with appropriate signatures
- ☐ Develop skill specific learning outcomes with your worksite supervisor
- ☐ Meet with your teacher/coordinator and worksite supervisor to finalize an Internship Training Plan for the internship (**Form #4**)
- ☐ Attend orientation at the worksite (**Form #7**)
- ☐ Observe all workplace rules and regulations particularly those applicable to safety and security concerns
- ☐ Perform all duties, jobs and assigned tasks; treat internship like a real job
- ☐ Maintain regular work schedule and notify supervisor in advance of any vacation/appointments
- ☐ Track you hours as instructed on time log/record of attendance (**Form #8**)
- ☐ Participate in ongoing reflection activities and skill building classroom assignments
- ☐ Communicate with your teacher/coordinator and worksite supervisor, if issues arise and keep copies of all necessary paperwork (work journal, training plan, Weekly Time Log/Record of Attendance, and evaluations)
- ☐ Participate in self-evaluation and reflection activities (**Forms #3 & #9**)
- ☐ Update your resume based on new skills and experiences gained
- ☐ Send thank you note to employer

REQUIRED FORMS

SCSD Memorandum of Agreement
(Form #1)

SCSD Internship Program Application
(Form #2)

SCSD Internship Ready to Work Assessment
(Form #3)

SCSD Internship Training Plan
(Form #4)

SCSD Worksite Orientation
(Form #7)

SCSD Weekly Time Log/Record of Attendance
(Form #8)

SCSD Student Evaluation
(Form #9)

Forms are available online at the SCSD CTE website : www.syracusecityschools.com/cte

Student _____ Date _____

SCSD CTE Internship Forms

NYSED Application for Employment Certificate

SCSD Certificate of Insurance to Cover Student Liability (Sample)

Form #1	SCSD Memorandum of Agreement
Form #2	SCSD Internship Program Application
Form #3	SCSD Internship Ready to Work Assessment
Form #4	SCSD Internship Training Plan
Form #5	SCSD Notification of unpaid internship
Form #6	SCSD Internship Safety Certification
Form #7	SCSD Worksite Orientation
Form #8	SCSD Weekly Time Log/Record of Attendance
Form #9	SCSD Student Evaluation
Form #10	SCSD Mentor Program Evaluation

Forms are available on SCSD CTE website at www.syracusecityschools.com/cte

AT-17
Rev. 5/10

THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
ALBANY, NY 12234

APPLICATION FOR EMPLOYMENT CERTIFICATE

See reverse side of this form for information concerning employment of minors.

All signatures must be handwritten in ink, and applicant must appear in person before the certifying official.

THIS APPLICATION DOES NOT AUTHORIZE EMPLOYMENT

PART I – Parental Consent – (To be completed by applicant and parent or guardian)

Parent or guardian must appear at the school or issuing center to sign the application for the first certificate for full-time employment, unless the minor is a graduate of a four-year high school and presents evidence thereof. For all other certificates, the parent or guardian must sign the application, but need not appear in person to do so.

Date……

I, …… Age ……..…
[Applicant]

Home Address ……....., apply for a certificate as checked below
[Full Home Address including Zip Code]

- ☐ Nonfactory Employment Certificate – Valid for lawful employment of a minor 14 or 15 years of age enrolled in day school when attendance is not required.
- ☐ Student General Employment Certificate – Valid for lawful employment of a minor 16 or 17 years of age enrolled in day school when attendance is not required.
- ☐ Full-Time Employment Certificate – Valid for lawful employment of a minor 16 or 17 years of age who is not attending day school.

I hereby consent to the required examination and employment certification as indicated above.

……
[Signature of Parent or Guardian]

PART II – Evidence of Age – (To be completed by issuing official only)

……. – Check evidence of age accepted – Document # (if any) ……..
[Date of Birth]

Birth Certificate State Issued Photo I.D Driver's License Schooling Record Other……
[Specify]

PART III – Certificate of Physical Fitness

Applicant shall present documentation of physical exam from a school or private physician, physician's assistant or nurse practitioner licensed to practice within New York State. Said examination must have been given within 12 months prior to issuance of the employment certificate. Date of physical exam on file with school …… If physical exam is over 12 months, provide student with certificate of physical fitness to be completed by school medical director or private health care provider.

If the physical exam or Certificate of Physical Fitness is limited with regards to allowed work/activity, the issuing official shall issue a Limited Employment Certificate (valid for a period not to exceed 6 months unless the limitation noted by the physician is permanent, then the certificate will remain valid until the minor changes jobs. Enter the limitation on the employment certificate. THE PHYSICIAN'S CERTIFICATION SHOULD BE RETURNED TO THE APPLICANT.

PART IV – Pledge of Employment – (To be completed by prospective employer)

Part IV must be completed only for: (a) a minor with a medical limitation; and (b) for a minor 16 years of age or legally able to withdraw from school, according to Section 3205 of the Education Law, and must show proof of having a job.

The undersigned will employ …… residing at ……
[Applicant]

as …… at ……
[Description of Applicant's Work] [Job Location]

for …… days per week …….. hours per day, beginning …… a.m. ……..…… p.m.

…… Factory ending…….. a.m. ……p.m.
[Name of Firm]

Nonfactory ……..
[Address of Firm]

…… Starting date …….. ……..
[Telephone Number] [Signature of Employer]

PART V – Schooling Record – (To be completed by school official)

Part V must be completed only for a minor 16 years of age who is leaving school and resides in a district (New York City and Buffalo) which require a minor 16 years of age to attend school, according to Section 3205 of the Education Law.

I certify that the records of …… ……
[Name of School] [Address]

Show that …….. whose date of birth is ……
[Name of Applicant]

Is in grade…… ……
[Signature of Principal or Designee]

PART VI – Employment Certification – (To be completed by issuing official only)

Certificate Number ……..... Date Issued ……

……. …….. …….
[School or Issuing Center] [Address] [Signature of Issuing Officer]

GENERAL INFORMATION

An employment Certificate (Student Nonfactory, Student General, or Full Time) may be used for an unlimited number of successive job placements in lawful employment permitted by the particular type of certificate.

A Nonfactory Employment Certificate is valid for 2 years from the date of issuance or until the student turns 16 years old, with the exception of a Limited Employment Certificate. A Limited Employment Certificate is valid for a maximum of 6 months unless the limitation noted by the physician is permanent, then the certificate will remain valid until the minor changes job. It may be accepted only by the employer indicated on the certificate.

A new Certificate of Physical Fitness is required when applying for a different type of employment certificate, if more than 12 months have elapsed since the previous physical for employment.

An employer shall retain the certificate on file for the duration of the minor's employment. Upon termination of employment, or expiration of the employment certificate's period of validity, the certificate shall be returned to the minor. A certificate may be revoked by school district authorities for cause.

A minor employed as a Newspaper Carrier, Street Trades Worker, Farmworker, or Child Model, must obtain the Special Occupational Permit required.

A minor 14 years of age and over may be employed as a caddy, babysitter, or in casual employment consisting of yard work and household chores when not required to attend school. Employment certification for such employment is not mandatory.

An employer of a minor in an occupation which does not require employment certification should request a Certificate of Age.

PROHIBITED EMPLOYMENT

Minors 14 and 15 years may not be employed in, or in connection with a factory (except in delivery and clerical employment in an enclosed office thereof), or in certain hazardous occupations such as: construction work; helper on a motor vehicle; operation of washing, grinding, cutting, slicing, pressing or mixing machinery in any establishment; painting or exterior cleaning in connection with the maintenance of a building or structure; and others listed in Section 133 of the New York State Labor Law.

Minors 16 and 17 years of age may not be employed in certain hazardous occupations such as: construction worker; helper on a motor vehicle, the operation of various kinds of power-driver machinery; and others listed in Section 133 of the New York State Labor Law.

HOURS OF EMPLOYMENT

Minors may not be employed during the hours they are required to attend school.

Minors 14 and 15 years of age may not be employed in any occupation (except farmwork and delivering, or selling and delivering newspapers):

When school is in session:

- more than 3 hours on any school day, more than 8 hours on a nonschool day, more than 6 days in any week, for a maximum of 18 hours per week, or a maximum of 23 hours per week if enrolled in a supervised work study program approved by the Commissioner.
- after 7 p.m. or before 7 a.m.

When school is not in session:

- more than 8 hours on any day, 6 days in any week, for a maximum of 40 hours per week.
- after 9 p.m. or before 7 a.m.

This certificate is not valid for work associated with newspaper carrier, agriculture or modeling.

Minors 16 and 17 years of age may not be employed: --

When school is in session:

- more than 4 hours on days preceding school days; more than 8 hours on days not preceding school days (Friday, Saturday, Sunday and holidays), 6 days in any week, for a maximum of 28 hours per week.
- between 10 p.m. and 12 midnight <u>on days followed by a school day</u> without written consent of parent of guardian <u>and</u> a certificate of satisfactory academic standing from the minor's school (to be validated at the end of each marking period).
- between 10 p.m. and 12 midnight <u>on days not followed by a school day</u> without written consent of parent or guardian.

When school is not in session:

- more than 8 hours on any day, 6 days in any week, for a maximum of 48 hours per week.

EDUCATION LAW, SECTION 3233

"Any person who knowingly makes a false statement in or in relation to any application made for an employment certificate or permit as to any matter by this chapter to appear in any affidavit, record, transcript, certificate or permit therein provided for, is guilty of a misdemeanor."

ACORD® CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
	PHONE (A/C, No, Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:	

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A :	
INSURER B :	
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	**GENERAL LIABILITY**						EACH OCCURRENCE	$
	☐ COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
	☐ CLAIMS-MADE ☐ OCCUR						MED EXP (Any one person)	$
	☐ 500,000 Retained						PERSONAL & ADV INJURY	$
	☐						GENERAL AGGREGATE	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$
	☐ POLICY ☐ PRO-JECT ☐ LOC							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	☐ ANY AUTO						BODILY INJURY (Per person)	$
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
	☐ ☐							$
	☐ **UMBRELLA LIAB** ☐ OCCUR						EACH OCCURRENCE	$
	☐ **EXCESS LIAB** ☐ CLAIMS-MADE						AGGREGATE	$
	☐ DED ☐ RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						☐ WC STATU-TORY LIMITS ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ **(Mandatory in NH)**	N / A					E.L. EACH ACCIDENT	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Teacher

Employer

Student

Syracuse City School District

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

Memorandum of Agreement

(Form #1)

Type of Work Based Learning Experience: Non-Paid Internship

This Work Based Learning Experience Agreement is entered into by and between the Syracuse City School District (SCSD) _____ (Student), his/her Parents/Guardian, _____ (Parent/Guardian), and his/her Work Experience Employer, _____ (Employer), on the date indicated below, whereby the Student will participate in a CTE Internship (Program at the Employer's place of business located at _____ , on _____ , during the hours of _____ .

THE STUDENT UNDERSTANDS THAT HIS/HER CONDUCT IS A REFLECTION UPON THE SCHOOL NAME AND AGREES THAT HE/SHE WILL:

1. Provide his/her own transportation to and from the Employer's place of business (the SCHOOL, the Student's home school, the SCHOOL and the Employer are in no way responsible for providing the Student with transportation to and/or from the Employer's place of business at any time or for any incidents or accidents which may occur while the Student is on route to or from the Employer's place of business)
2. Demonstrate a conscientious attitude and be honest, punctual, cooperative, courteous and willing to learn while at the Employer's place of business.
3. Keep regular attendance as agreed upon with the Employer, excluding Employer-observed holidays, days on which the Employer's place of business is closed or other legal absences and understands that his/her attendance will be taken from his/her weekly attendance reports.
4. Keep regular attendance at his/her home school.
5. Give the Employer as much advance notice as possible if unable to report for work or to do so in a timely manner and contact the CTE teacher at (315) _____.
6. Report to SCHOOL if the Internship location is closed for any reason during at time in which the student is scheduled to be at the Internship location and SCHOOL is in session.
7. Complete weekly time log/record of attendance (Form # 8) reports as required by SCHOOL.
8. Engage in only those work based learning experiences approved by the supervisor at the work-site.

THE EMPLOYER AGREES THAT IT WILL:

1. Not permit the Student to replace any paid employee (in the case of an Internship).
2. Advise the Student of all company rules, regulations and policies which relate to the Student.
3. Explain to the Student the responsibilities and duties of his/her internship and shall correlate on-the-job training with safety instructions given by the SCHOOL.
4. The work of the Student in occupations declared particularly hazardous by the U.S. Department of Labor shall be (i) incidental to the Student's training; (ii) intermittent and for short periods of time; and (iii) under the direct and close supervision of a qualified and experienced person.
5. Provide direct supervision by an authorized employee to the Student as needed.
6. Complete an accident report form and return to SCHOOL in the event of an accident.
7. Review the Student's performance with him/her on a weekly basis and sign a weekly time sheet, complete an evaluation of the Student on forms provided by the SCHOOL.
8. Inform the SCHOOL Instructor/Coordinator when the Student is absent or not performing adequately by calling (315)_____ .

9. Observe any and all laws that may relate to the Student's work experience.

THE SCHOOL AGREES THAT IT WILL:

1. Carry the insurance listed for students during class activities including internships, job experiences and work placement.
2. Accident Insurance: SCHOOL carries tertiary accident insurance to cover medical expenses as a result of an accident. The parent's health insurance is primary and the home school district would be secondary. General Liability Insurance: SCHOOL carries general liability insurance to cover up to one million dollars for a single event. As added protection, a ten million dollar umbrella policy is also in effect.
3. Assist the Student in securing internship placement regardless of his/her sex, race, color, national origin or disability (all inquiries and/or complaints regarding discrimination should be directed to the compliance officer, Patty Clark, SCSD Central Office, 725 Harrison Street, Syracuse, New York 13210. Telephone: (315) 435-4131.
4. Provide the STUDENT with safety instructions correlated by the EMPLOYER with on-the-job training.
5. Review with the Student and the Employer their respective responsibilities and obligations while participating in the Program.

The parties/signatories hereby agree that good communication and understanding between them is vital if the objectives of this Program are to be met and that joint conferences between the Student, Employer, Parent/Guardian, Instructor, and others may be scheduled from time to time in order to discuss:

1. the student's progress
2. any misunderstandings
3. the reason for termination of the Agreement

This Agreement is not in effect until signed by all parties. This Agreement may be terminated at any time by any party upon written notice to the other parties.

We the undersigned, have reviewed and agreed to the terms and conditions set forth herein.

Date __/__/____ _____ Student

Date __/__/____ _____ Parent/ Guardian

Date __/__/____ _____ Daytime Phone

_____ Evening Phone

Date __/__/____ _____ Employer/ Supervisor

Date __/__/____ _____ CTE Teacher

Date __/__/____ _____ Home School Principal

The Syracuse City School District hereby advises students, parents, employees and the general public that it is committed to providing equal access to all categories of employment, programs and educational opportunities, including career and technical education opportunities, regardless of actual or perceived race, color, national origin, Native American ancestry/ethnicity, creed or religion, marital status, sex, sexual orientation, age, gender identity or expression, disability or any other legally protected category under federal, state or local law.
Inquiries regarding the District's non-discrimination policies should be directed to:
Executive Director of Student Support Services, Civil Rights Compliance Officer, Syracuse City School District, 725 Harrison Street • Syracuse, NY 13210
(315) 435-4131, Email: CivilRightsCompliance@scsd.us

Teacher

Student

Syracuse City School District

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

CTE Internship Program Application Form

(Form #2)

Personal Information

Last Name	First Name	Age	Date of Birth
Street		Home Telephone Number	Cell Phone Number
City, State, Zip		Emergency Contact Name	Telephone Number
Email Address		Relationship to Emergency Contact	
Primary Parent/ Guardian Name		Parent/ Guardian's Telephone Number Home Cell	
Primary Parent/ Guardian Email			
Secondary Parent/ Guardian Name		Secondary Parent/ Guardian's Telephone Number Home Cell	
Secondary Parent/ Guardian Email			
Working Papers Certificate Number		SCSD Student schedule should be attached to this form School Counselor	

School Year Training/ Work Schedule Availability

Please list the hours you can work during a typical weekly schedule

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Please check applicable box: ☐ Fixed Schedule ☐ Schedule will vary

Sports, Clubs, and Other Activities

Transportation

Please check the appropriate response

Do you have a license? ☐ Yes ☐ No	If YES, which license do you have? ☐ Full License ☐ Junior License
Do you drive to school? ☐ Yes ☐ No	License Number:

If you do not have a license, how do you plan on getting to and from your internship?

☐ Public Transportation ☐ Other

Teacher

Student

INSURANCE COVERAGE IN CASE OF INJURIES TO STUDENT AT INTERNSHIP:

EMPLOYER'S WORKER'S COMPENSATION MUST COVER THE STUDENT IN CASE OF INJURIES AT TRAINING SITE.

PROGRAM AWARENESS STATEMENT TO BE CHECKED BY STUDENTS:

☐ In order to receive credit for my work-based learning experience, I must be training at a legal site approved by the school's CTE Teacher or work-based learning coordinator.

☐ I must notify my CTE teacher or work-based learning coordinator immediately if there is a change of work schedule or duties at the training site.

☐ Failure to report any disciplinary action, termination, or proper documentation of hours may result in the student not earning school credit.

☐ Students must present all daily attendance records to CTE teacher or work-based learning coordinator weekly and complete all assignments related to the program.

☐ I must immediately notify my work-based learning coordinator if I have or develop any medical condition(s) which affects my ability to participate in training, such as allergies, lifting heavy items, movement, standing, sitting, migraine headaches, etc. If there are any current conditions, please state them below. The presence of such a condition will not necessarily preclude me from participating in the internship and accommodations may be provided.

PARENTAL/GUARDIAN PERMISSION AND PICTURE/NEWS STORY RELEASE:

I give my child,_____ permission to participate in the work-based learning internship at the Syracuse City School District. By signing the parental permission form, it is understood that:

- All the information is accurate.
- In order to receive credit, students must work a minimum of 150 hours during the school year.
- All students must report to CTE teacher or work-based learning coordinator in the case of any change in employment.
- Failure to report any disciplinary action, termination, or proper documentation may result in the student not earning school credit.
- Students must present all daily attendance records to CTE teacher or work-based learning coordinator weekly and complete all assignments related to the program.
- A student with a junior license must only drive to school if they go directly to work following the school day and they must carry with them the proper paperwork as directed by the work-based learning coordinator.

In addition to agreeing with the above statements, please check off one:

☐ I give permission for my child's photograph or name to be used to promote the Work Experience Program.

☐ I do not want my child's photograph or name to be used to promote the Work Experience Program.

_____	_____	___/___/___
Parent/ Guardian's Name	Parent/ Guardian's Signature	Date

_____
Relationship to Student

_____	_____	___/___/___
Student's Name	Student's Signature	Date

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Teacher

Employer

Student

Syracuse City School District

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

CTE Internship Ready to Work Assessment

(Form #3)

Name _____ Program _____ Date ___/___/___

Scale

1 = Seldom. 2 = Occasionally. 3 = Usually. 4 = Always.

		Student	Teacher	Onsite Supervisor
ZEST				
1	Actively participates			
2	Shows enthusiasm			
3	Invigorates others			
GRIT				
4	Finishes whatever he or she begins			
5	Tries very hard even after experiencing failure			
6	Works independently with focus			
SELF CONTROL SCHOOL WORK				
7	Comes to class prepared			
8	Pays attention and resists distractions			
9	Remembers and follows directions			
10	Gets to work right away rather than procrastinating			
SELF-CONTROL INTERPERSONAL				
11	Remains calm even when criticized or otherwise provoked			
12	Allows others to speak without interruption			
13	Is polite to adults and peers			
14	Keeps his/her temper in check			

		Student	Teacher	Onsite Supervisor
OPTIMISM				
15	Gets over frustrations and setbacks quickly			
16	Believes that effort will improve his or her future			
GRATITUDE				
17	Recognizes and shows appreciation for others			
18	Recognizes and shows appreciation for his/her opportunities			
SOCIAL INTELLIGENCE				
19	Is able to find solutions during conflicts with others			
20	Demonstrates respect for feelings of others			
21	Knows when and how to include others			
CURIOSITY				
22	Is eager to explore new things			
23	Asks and answers questions to deepen understanding			
24	Actively listens to others.			
ACADEMIC PERFORMANCE				
25	Completes all assignments with quality and timeliness			
26	Uses tools appropriately and safely			
COMMITMENT				
27	Attends class with one or less absences per quarter			
28	Demonstrates loyalty and appreciation to the program and instructors			

Teacher

Employer

Student

Syracuse City School District

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

CTE Internship Training Plan
(Form #4)

Student's Name	Email	
Student's Address	Telephone	Date of Birth
CTE Program Career Cluster	Working Papers Certificate #	
School Coordinator		
Phone Number		
Fax Number		
Email		
Employer		
Phone Number		
Fax Number		
Email		
Immediate Job Supervisor		
Phone Number		
Email		
Corporate Address		

Training Schedule

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Insurance Coverage

- ☐ Student is a non-paid intern – Worker's Compensation
- ☐ Student is a non-paid observer – Worker's Compensation

Transportation Provided by

- ☐ Student/parent will provide own transportation
- ☐ School district will provide transportation during school hours

Goals for this Work-Based Learning Student:

1. To explore, learn and develop the skills necessary for this career.
2. To develop the Career Ready Practices necessary for success in the global, competitive world.
3. To be trained in the safe operations of this job title.
4. To be able to demonstrate positive behavior and appropriate dress.

(Form #4 Continued)

JOB TASKS AND LEARNING OUTCOMES (Determined by the Employer and Coordinator)	ACHIEVEMENT LEVEL AND COMMENTS 1. Mastered skill 2. Needs more training at the work site. 3. Needs more training at school. 4. Has not reached this training area.
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

CAREER READY PRACTICES	Always	Frequently	Occasionally	Rarely
1. Student works cooperatively as a team member?	☐	☐	☐	☐
2. Student is able to read instructions for information and application.	☐	☐	☐	☐
3. Student can calculate and measure for information and application.	☐	☐	☐	☐
4. Student can behave in a responsible manner without supervision.	☐	☐	☐	☐
5. Student can communicate verbally and in writing to evoke clear understanding.	☐	☐	☐	☐
6. Student demonstrates good listening and follow through skills.	☐	☐	☐	☐
7. Student demonstrates critical thinking and problem solving skills.	☐	☐	☐	☐
8. Student can locate and manage resources for problem solving.	☐	☐	☐	☐
9. Student demonstrates a positive work ethic.	☐	☐	☐	☐
10. Student demonstrates computer literacy.	☐	☐	☐	☐

(Form #4 Continued)

SAFETY TRAINING	DATE OF SAFETY TRAINING	ACHIEVEMENT LEVEL AND COMMENTS 1. Mastered safety training instruction. 2. Needs more safety training at work site. 3. Needs more safety training at school. 4. Has not reached this training area.
1. Safety precautions related to stairs, floors, office equipment and furniture.		
2. Safety precaution related to proper dress apparel, shoes, gloves, head, eye and ear protection.		
3. Safety precaution related to use of tools, machines, and chemicals.		
4. Safety precautions related to fire, weather and other natural disasters.		
5. Safety precautions related to sexual harassment and workplace violence.		

DRESS AND BEHAVIOR CODE FOR POSITION	ACHIEVEMENT LEVEL AND COMMENTS 1. Dresses/behaves appropriately 2. Needs to modify dress/behavior. 3. Needs personal consultation.

Employer Name	Employer Signature	Date / /
Work-based Learning Coordinator Name	Work Based Learning Coordinator Signature	Date / /
Parent/ Guardian Name	Parent/Guardian Signature	Date / /
Student Name	Student Signature	Date / /

If you have any questions please do not hesitate to contact me at (315) 435-_____.

Thank you for your cooperation! _____ , CTE Teacher

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

SCSD CTE Internship
Notification of Unpaid Internship
(Form #5)

This form serves as notification that the Syracuse City School District CTE Internship is an unpaid internship and students are not due any wages per New York State Department of Labor.

_____	____/____/____
Student	Date
_____	____/____/____
CTE Teacher/ WBL Coordinator	Date
_____	____/____/____
Worksite Representative/ Mentor	Date

Teacher

Syracuse City School District

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

SCSD Internship Safety Certification
(Form #6)

_____ _____ / / _____

Student Date

_____ _____

Mentor or Supervisor CTE/ WBL Teacher

Student CTE Program SCSD Career and Technical Program:

_____

SAFETY CERTIFICATIONS		Date
OSHA 10	☐	/ /
Safe Serv	☐	/ /
First Aid	☐	/ /
CPR	☐	/ /
Other	☐	/ /

Teacher

Employer

Student

Syracuse City School District

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

SCSD Internship Worksite Orientation
(Form #7)

Student _____ Date ___/___/___

Mentor or Supervisor _____ CTE/ WBL Teacher _____

Company Orientation

Directions: Be sure that your student employee obtains information about the factors listed below. Check the information on each item as it is completed. Return the completed form to the CTE Teacher or Work Based Learning Coordinator.

Tour of Workplace

- ☐ A tour of the workplace
- ☐ An overview of the company safety plan
- ☐ Introductions to co-workers

Tour of Employee Facilities

- ☐ Rest rooms
- ☐ Lunch room
- ☐ Where to store personal belongings

Other _____

Safety Plan

- ☐ Safety plan
- ☐ Stairwell/fire exits
- ☐ Fire Extinguishers
- ☐ Special hazards
- ☐ Accident prevention
- ☐ Safety Training Log, updated as needed

About the Company

- ☐ Discuss company organizational structure
- ☐ Review type of business, products, services
- ☐ Overview of who the customers are

Other _____

Department/Position Specifics

- ☐ Explanation of work schedule
- ☐ Review of dress and conduct code
- ☐ Review of hours, breaks and lunch policies
- ☐ Location of time clock or sign-in
- ☐ Attendance requirements, including procedures for calling in when absent
- ☐ Relationship to working with other departments or co-workers

Job Specific

- ☐ How to use the phones and office equipment
- ☐ Supplies, paper, pens, etc.
- ☐ Job description, Work-Based Learning Plan and evaluation process

Supervisors Expectations

- ☐ Dress code including clothing, hair and jewelry
- ☐ Work performance including productivity and work habits
- ☐ Company culture

Materials provided to intern

- ☐ Copy of personnel handbook
- ☐ Organizational charts
- ☐ Telephone directory
- ☐ Security procedures

Employer/training sponsor _____ Date ___/___/___

Student _____ Date ___/___/___

CTE Teacher/WBL Coordinator _____ Date ___/___/___

Teacher

Employer

Student

Syracuse City School District

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

Weekly Time Log/Record of Attendance
(Form #8)

Student _____ Training Title _____

Worksite Supervisor _____

Time Log for the Week of: ____/____/____

	Date	Start Time	End Time	Hours Worked
Sunday				
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				

Total Weekly Hours: _____

Student please list any new tasks performed this week: _____

By signing this timesheet, you are certifying that it is correct and truthful.

Student's Signature _____ Date ____/____/____

Supervisor Name _____ Phone _____ Date ____/____/____

Supervisor's Signature _____

Attention Worksite Supervisor:
If you have any questions or concerns, please contact: _____ CTE Teacher _____ Phone

Syracuse City School District

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SCSD CTE Internship Student Evaluation

(Form #9)

Name _____ CTE Program _____

Dates of Internship __/__/__ — __/__/__ Year to Graduate _____

Please complete this form upon completion of your internship.

	Strongly Agree	Agree	Indifferent	Disagree	Strongly Disagree
Overall, I had a great experience	☐	☐	☐	☐	☐
I was actively involved in the team meetings and felt free to express my thoughts and opinions	☐	☐	☐	☐	☐
My mentors encouraged and responded to my questions	☐	☐	☐	☐	☐
I have an increased appreciation for teamwork	☐	☐	☐	☐	☐
I have a greater ability to ask good questions and synthesize information	☐	☐	☐	☐	☐
I was presented with opportunities to learn by doing	☐	☐	☐	☐	☐
I gained factual knowledge about careers throughout the internship	☐	☐	☐	☐	☐
I would recommend this opportunity to others	☐	☐	☐	☐	☐
My time was well spent	☐	☐	☐	☐	☐
I would consider this employer as a future employer	☐	☐	☐	☐	☐
My co-workers are generally positive about work	☐	☐	☐	☐	☐

The best thing about my experience was… _____

The worst thing about my experience was… _____

Any suggestions on how we could improve the intern experience? _____

Other comments… _____

Syracuse City School District

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

SCSD CTE Internship Mentor Program Evaluation

(Form #10)

Student Name _____ SCSD School _____

Interning Location _____

Supervisor/ Mentor Name _____ Date ____/____/____

Internship Preparation

- ☐ Exceptional
- ☐ Adequate
- ☐ Inadequate

Modes of Communication with SCSD Personnel

- ☐ In-Person
- ☐ Email
- ☐ Phone

Amount of Communication with SCSD Personnel

- ☐ Exceptionally good
- ☐ Appropriate
- ☐ Too much
- ☐ Too little

Suggestions for improvement: _____

Additional comments: _____

Return to CTE teacher: _____
CTE Teacher Email

BOARD OF EDUCATION

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NOTICE OF NON-DISCRIMINATION

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(315) 435-4131

Email: CivilRightsCompliance@scsd.us

Return to TOC

F. Employability Profile

> *The employability profile is a record of student achievement. That may include documentation of the student's attainment of technical knowledge and work-related skills, endorsements, licenses, clinical experience, work experience, performance on core academic Regent's examinations, performance on industry based assessments, attendance, student leadership honors and achievements and other honors or accolades of student success.*

Process

- An employability profile model is developed for the program
- A profile of student achievement is developed for each student in the program and is maintained in accordance with records and retention policies of the school district/BOCES.
- The profile of student achievement is reviewed and updated on a continuous basis by the student and the appropriate program/guidance personnel.
- The work skills to be mastered by students with disabilities should be aligned with the student's Individualized Education Program (IEP).

Documentation

Recommendations for the employability profile model should be included in the self-study report and reviewed by the external committee.

Source: http://www.p12.nysed.gov/cte/ctepolicy/guide.html

Return to TOC

EMPLOYABILITY PROFILE

Cyber Security

Industry Based Skill Standards

Proficiency Definitions

NA = Not Applicable **1 = Developing** **2 = Basic** **3 = Proficient** **4 = Mastery**

	9th	10th	11th	12th
History of Computer Forensics				
Understands the origin and development of computer forensics. Identify organizations responsible for completing computer forensics lab work.				
Personal and Professional Goal Setting and Success				
Defines principles that contribute to personal and professional success. Name characteristics of a healthy, positive attitude				
Communicating for Success				
Demonstrates effective communication skills both verbally and in writing. Conducts public speaking in a proffesional manner. Understands how to deal				
Safety				
Understands how electrostatic discharge can effect electronics and destroy a piece of evidence. Understand how to safely enter a crime scene.				
Tools and Equipment				
Identify the proper tools associated with taking apart and repairing a computer system and its peripherals.				
Computer Hardware and Peripherals				
Understand all the components that make up a computer system. Be able to distinguish the difference between RAM and the hard drive. Troubleshoot a				
Computer Softwares				
Understands the difference between different computer softwares. Can explain the difference between opensource and proprietary software.				
Virtual Machines				
Understand the purpose and use of a virtual machine. Can setup and install a virtual machine of different operating systems.				
Windows Operating System				
Demonstrates an understanding how to navigate and modify settings in a Windows operating system. Understands the functions of Windows Command				

	9th	10th	11th	12th
Linux Operating System				
Demonstrates an understanding how to navigate and modify settings in a Linux operating system. Understands the functions of Terminal.				
Security Tools				
Understands and demonstrates the use of several security tools when applied to network security. Such tools as Nmap and WireShark.				
Networking				
Demonstrates a basic understanding of how a network is made up and how packets are delivered over the internet.				
Security Policies and Auditing				
Demonstrate how to create/review security policies. Understand the process of an audit and be able to perform one.				
Access Control, Authorization, Authe				
Demonstrate and understand what access control is, who has what kind of authorization, and what is authetication and how do you know.				
Monitoring and Diagnosing Network				
Demonstrates how to properly monitor networks and data. Understand how to diagnose any security issue that may occur.				
Maleware, Vulnerabilities and Threa				
Demonstrate and understand what maleware is and what it can do. Understand how to protect networks from vulnerabilities and security				
Computer Forensics				
Demonstrate understanding of computer forensics through examining files and hard drives				
Disaster Discover				
Demonstrate how an incident is properly handled using chain of custody form				

Industry Certifications Attained	**Yes**
NOCTI	
A+ Certification	

Internships	Hours
Agency	
Agency	

College Credits Attained		Yes
Utica College CRJ 107	3 CH	
Utica College CRJ 205	3 CH	
Utica College CRJ 333	3 CH	
Total		

Cyber Security
EMPLOYABILITY PROFILE

Student Name: _____ School Year: _____ Absences: _____

ID Number: _____ Teacher: _____ Final Grade: _____

Career Ready Practices / Career Development Standards

STANDARDS DEFINITIONS

NA = Not Applicable 1 = Developing 2 = Basic 3 = Proficient 4 = Mastery

	9th	10th	11th	12th
Acts as a responsible citizen/employee				
Is on time and prepared, follows workplace policies, demonstrates reliability and dependability, is polite and courteous to adults and peers, demonstrates appreciation, and is reliable and consistent in their actions				
Applies appropriate academic and technical skills				
Demonstrates an understanding of the academic knowledge and skills associated with their trade. Technical skills are developed with academic competencies including English language arts and science that are integrated within the CTE program.				
Attends to personal health and financial well-being				
Recognizes the benefits of physical, mental, social, and financial well-being to the importance of that success in their career. Accepts criticism and works towards self-improvement targets on a consistent basis.				
Communicates clearly, effectively, and with reason.				
Is able to communicate both verbally and in writing to express ideas and obtain information. Uses appropriate vocabulary to share information both verbally and in writing as well. Demonstrates active listening skills and verbal communication.				
Makes appropriate decisions				
Considers the environmental, social, and economic impacts of their decisions. Understands that their actions and decisions will impact other people directly. Works independently and responds positively to new ideas and suggestions.				
Demonstrates creativity and innovative thought				
Demonstrates creativity and new thinking to solve workplace problems as encountered. Is creative, innovative, and is eager to explore new ways of addressing issues and challenges that are encountered.				
Employs valid and reliable research strategies				
Seeks information to develop a deeper understanding of issues encountered. Uses technology as a tool to research, organize, and evaluate information critically incompetently. Interprets information and draws conclusions based on best analysis.				
Uses critical thinking skills and demonstrates perseverance				
Demonstrates problem-solving skills through the use of creative thinking, decision-making, and adaptability. Effectively reasons through difficult situations, and makes decisions even when faced with complex or challenging problems.				

	9th	10th	11th	12th
Models integrity, ethical behavior, and leadership				
Is accountable and transparent in all of their work and assignments. Consistently exhibits ethical behavior, and commitment to completing tasks as assigned. Develops and demonstrates leadership skills, assuming responsibility readily.				
Develops and implements a Career Plan				
Develops a career plan based on understanding of their personal goals and the career pathways that aligns to them. Develops resumes, cover letters, and examples of best work to aid in the job seeking process and/or entrepreneurial goals.				
Uses technology to enhance productivity				
Demonstrates an understanding of the use of technology related to their career pathway. Continually develops their ability to adapt to changing work environments using technology, including new tools and their associated applications.				
Works as a productive and respectful team member				
Actively participates as a member of a team recognizing and appreciating others skills and abilities. Adds to the collective value of the team, and invigorates others to add to the collective efforts and goals.				
Demonstrates reliability and dependability				
Regardless of tasks given, demonstrates reliable and dependable behaviors to meet the expectations as defined. Attendance and levels of participation meet expectations consistently. Take on additional responsibilities without prompting.				
Arrives on time and is prepared to work				
Consistently demonstrates promptness, reliability, and commitment to reporting for classes, work site experiences, and other assignments as defined. Reports prepared for work or education as requirements dictate, meets attendance requirements.				
Demonstrates safe working habits				
When engaging in worksite situations or learning labs, uses tools and equipment safely, observes general safety guidelines for material handling, and meets the expectations of maintaining a safe work environment for others.				
Demonstrates problem solving skills				
Addresses problems encountered using effective problem-solving strategies. Works to define potential solutions to problems, identifies and implements the best solution based on the information gathered and their skill and knowledge.				

Earned Technical Endorsement on Diploma **YES** ☐ NO ☐

Industry Credential(s) Awarded _____

Special Recognitions or Scholarships _____

Student Leadership Organization _____

Return to TOC