CTE Approval Self-Study Report

Construction Technology

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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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Construction and Extraction Occupations

Employment of construction and extraction occupations is projected to grow 10 percent from 2014 to 2024, faster than the average for all occupations, increasing from 6.5 million jobs to 7.2 million jobs. Overall growth in the economy and population will increase demand for new buildings, roads, and other structures, which will create new job openings for construction and extraction occupations.

The median annual wage for all construction and extraction occupations was $43,610 in May 2016, which was higher than the median annual wage for all occupations of $37,040.

Occupational Title	SOC Code	Employment, 2014	Projected Employment, 2024	Change, 2014-24	
				Percent	Numeric
Construction laborers	47-2061	1,159,100	1,306,500	13	147,400
Helpers--brickmasons, blockmasons, stonemasons, and tile and marble setters	47-3011	23,500	28,800	22	5,300
Helpers--carpenters	47-3012	39,700	42,700	7	3,000
Construction and building inspectors	47-4011	101,200	109,200	8	8,100
Carpenters	47-2031	945,400	1,005,800	6	60,400
Brickmasons and blockmasons	47-2021	78,100	92,600	19	14,500
Stonemasons	47-2022	14,900	17,100	14	2,100
Floor layers, except carpet, wood, and hard tiles	47-2042	17,100	19,200	12	2,100
Carpet installers	47-2041	45,300	45,100	-1	-200
Construction managers	11-9021	373,200	391,100	5	17,800

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2016-17 Edition*, Carpenters, on the Internet at https://www.bls.gov/ooh/construction-and-extraction.htm (visited *September 22, 2017*).

New York Employment Demand Profile: **Construction**

Source: Labor Insight Jobs (Burning Glass Technologies), Summary Demand and Requirements Table by Occupation, New York state data, Sep. 01, 2016 - Aug. 31, 2017.

Category:		Demand and Employment				Salary		Education level based on posting requirements (*excluding NA)						Education level of employed individuals		
Source:		Burning Glass	BLS/OES, 2016	BGT Projections		Burning Glass	BLS/OES, 2016	Burning Glass						ACS, 2014		
SOC Code (ONET-6)	Occupation Title	Number of Job Postings	Number Employed 2016	% Change in Employment, 2015-2016	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 Master's Degree*	% Requiring Doctoral Degree*	% with Unspecified Education	% with a high school diploma or less	% with Some College or an Associate's	% with a Bachelor's or higher
47-2061	**Construction Laborers**	1,117	61,050	4%	23.8%	$55,074	$48,080	100%	0%	0%	0%	0%	74%	73%	22%	5%
47-4011	**Construction and Building Inspectors**	602	7,240	0%	14%	$66,472	$65,810	50%	15%	62%	6%	2%	43%	29%	45%	26%
47-3012	**Helpers--Carpenters**	69	1,270	-43%	20.6%	$28,244	$32,670	N/A	N/A	N/A	N/A	N/A	1%	76%	21%	3%
47-3011	**Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters**	6	1,280	36%	21.1%	N/A	$35,880	N/A	N/A	N/A	N/A	N/A	17%	76%	21%	3%
11-9021	**Construction Managers**	**3,274**	**12,640**	**-9%**	**12.1%**	**$102,007**	**$121,030**	**14%**	**7%**	**88%**	**15%**	**1%**	**43%**	**33%**	**33%**	**34%**
47-2031	**Carpenters**	874	48,220	0%	16%	$44,936	$61,900	100%	0%	0%	0%	0%	87%	68%	26%	6%
47-2021	**Brickmasons and Blockmasons**	45	6,300	17%	23%	N/A	$73,990	N/A	N/A	N/A	N/A	N/A	2%	78%	18%	3%
47-2042	**Floor Layers, Except Carpet, Wood, and Hard Tiles**	44	470	6%	16.9%	N/A	$38,360	N/A	N/A	N/A	N/A	N/A	2%	77%	19%	4%
47-2022	**Stonemasons**	33	1,680	0%	25.6%	N/A	$46,890	N/A	N/A	N/A	N/A	N/A	3%	78%	18%	3%
47-2041	**Carpet Installers**	6	1,350	0%	10.7%	N/A	$61,020	N/A	N/A	N/A	N/A	N/A	17%	77%	19%	4%

*This report provides information on both the preferred and minimum/required education levels for job postings. For this reason, a job posting may be counted in more than one of the educational categories shown in the table below. Please also note that Bureau of Labor Statistics (BLS) data is only available at the 6-digit SOC code level.

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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
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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

Construction Technology

The Construction Technology program teaches students the essential skills needed to begin a career in the building and construction trades.

Students will gain real-world knowledge and hands-on experience in the fundamental components of carpentry, drywall, painting, framing, roofing, floor installation, door and window installation, blueprint reading, siding, electicral wiring, plumbing, proper tool use, and OSHA safety training. Student will develop and demonstrate integrated academics and emplyability skils through class activities, projects, community service and professional development.

Students in the Construction Technology program at Nottingham High School will earn OSHA & NOCTI construction safety standards and credentials. They will have the opportunity to earn the Core, Laborer 1 and Laborer 2 credentials as well.

CAREER OPPORTUNITIES:
Construction Worker, Framing Carpenter, Painter/Wall Coverer, Roofer, Carpenter, Electrician, Plumber, Concrete Finisher, Drywall Finisher, Glazier & Glass Worker, Tile/Floor/Window Installer

Course of Study **Construction Technology**

9th Grade	10th Grade	11th Grade	12th Grade
■ Construction Tech 100 CNT100 (1 Credit CTE)	■ Construction Tech 200 CNT200 (1 Credit CTE)	■ Construction Tech 300 CNT300 (1 Credit CTE) ■ Construction Tech CTE Integrated Science CTE300 (1 Credit)	■ Construction Tech 300 CNT400 (1 Credit CTE) ■ Construction Tech CTE Integrated ELA CTE400 (1 Credit)

DISTRICT REQUIREMENTS

- Students must pass CTE Construction Technology 100, 200, 300 and 400 to challenge the course approved technical assessment.
- Student will have earned the 11th grade integrated math credit upon successful completion of the CTE Construction Technology 100, 200 and 300.
- Student will have earned the 12th grade integrated ELA credit upon successful completion of the CTE Construction Technology 100, 200, 300 and 400.
- Student will receive the CTE Endorsement upon successful completion of the CTE Construction Technology Program, passage of the prescribed technical assessment and completion of a commencement level project.

CONSIDERATIONS

- Student will challenge the approved pathway assessment "Core Essentials" by their sophomore academic year.

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Syracuse City School District
Career & Technical Education Programs
Course Syllabus
CNT 100: Construction Trades Technology 100

Construction Trades Program Overview:

At the completion of this program, students will understand and be able to apply the trade skills necessary for entry-level employment, apprenticeships and post-secondary education. Units of study include safety training, framing, roofing, door and window installation, hand and power tool use, concrete, masonry and bricklaying, blueprint reading, plumbing, electrical, and construction equipment and rigging. The program includes theory and authentic hands-on, project-based activities. Students will earn a math and ELA credit upon successful program completion. Students will also have the opportunity to earn the National Center for Construction Education and Research (NCCER) Construction Core and OSHA 10 certifications, recognized throughout the construction industry as indicators that the applicant is "job ready."

Course Description:

Level 100 Construction Trades provides basic technical knowledge and safety skills to begin preparing for a career in the field. Topics include safety, construction math and measurement, project estimating, hand and power tool identification and use, construction drawings, materials handling and processing and construction rigging. Communication and customer service are also covered.

Course Objectives:

1. Implement key safety procedures while working on a construction site.
2. Pass the OSHA 10 Safety Certification exam.
3. Possess the knowledge and skill to safely and accurately use hand and power tools in construction projects.
4. Apply basic math to calculate measurements in construction activities.
5. Read and interpret building plans to access information necessary to complete construction projects.
6. Demonstrate an understanding of the working properties of materials used on a construction site.
7. Accurately handle and process various construction materials.

District Requirements:

- Students qualify for Occupational Safety and Health Administration (OSHA) 10-hour course at the successful completion of the Construction 100 Safety module.
- Students qualify to take the NCCER Core exam after Construction 100 at the end of 9th grade.
- Students will earn integrated science credit upon successful Completion of Construction 100, 200, and 300.
- Students will have earned 12th grade ELA credit upon successful completion of Construction 100, 200, 300 and 400.
- Students will receive the CTE Endorsement upon successful completion of the Building Construction Skills program and achieving a passing score on the NCCER Core Technical Assessment.

Integrated Academics: N/A

Student Equipment and Supplies

- **School will provide**: All necessary lab materials and classroom equipment
- **Student will provide**: A notebook for taking and saving notes; pen/pencils.

Additional Course Policies

Students are required to follow all classroom and lab conduct and safety procedures.

Textbooks:

- NCCER Core Curriculum: Introductory Craft Skills (Pearson) 4th edition
- NCCER Tools for Success: Critical Skills for the Construction Industry (Pearson) 3rd edition

Grading:

- Module classwork: 30%
- End of Module assessment: 30%
- Project work: 20%
- Participation: 20%

Academic Calendar:

Quarter	Units of Study
1	• Construction safety and OSHA 10 certification. • Construction Math measurement and materials estimates. • Construction related health, safety and environmental management.
2	• Hand tool use and safety. • Power tool use and safety. • Wood working projects.
3	• Construction drawings. • Architectural software applications. • Shed construction. • Resumes, cover letters, and personal profiles.
4	• Introduction to basic equipment rigging. • Device design and constructions for gaining a mechanical advantage. • Materials processing and handling.

Syracuse City School District
Career and Technical Education Program
Scope and Sequence
CNT100: Construction Trades Technology 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 Literacy, Math, Science
Weeks 1-4 **Basic Safety**	• What does safety look like in building and construction trades? • What is the role and responsibility of workers in in maintaining a safe work environment? • Why is a safe work site valued by the Construction Industry? • What is OSHA? • What purpose does OSHA serve in ensuring that workers are safe on a construction site? • What is the function of the EPA? • What is MSDS?	• Understand the importance of health, safety, and environmental management systems in organizations • Read and understand manufacturer's materials safety data sheets • Identify and interpret universal signs and symbols to ensure safety at job sites • Describe the importance of compliance with safety standards and explain how it effects overall production in an organization • Compliance with all organizational safety policies and procedures	• Student research on industry safety standards and the economic impacts of job-related accidents/injuries • Completion of 10-Hour OSHA Safety Training • OSHA 10 Exam • NCCER Basic Safety Module Assessment	**Career Ready Practice** CRP 2, 7, 11 **Cluster Standards** AC 3 **Pathway Standards** AC-CST 5 AC-DES 2 AC-MO 1 **Industry Standards**	**Literacy** RST.9-10.1,4,7, 10 **ELA** RI.9-10.4 **Math** S-ID.1,2,3,4,5,6 **Science**
Week 5 **Safety Projects:**	• What are some common construction/building site hazards/dangers to workers? • How can you identify safety hazards in different construction-related situations? • What steps should you take in assessing and correcting unsafe working conditions? • How can good communication skills facilitate worker safety?	• Identify types and sources of workplace hazards common to various construction settings • Identify universal signs/symbols related to safety precautions • Apply safety principles to correct identified hazards in a variety of construction-related settings • Communicate potential or actual safety concerns to peers and supervisors	• Identification of workplace hazards in various settings and safety measures to prevent accidents & injuries • Statistics on the cost of accidents to businesses • Research projects: Construction-related lost time accidents and associated costs to companies, including penalties, sanctions by OSHA • Safety posters,	**Career Ready Practice** CRP 1, 2, 4, 12 **Cluster Standards** AC 3 **Pathway Standards** AC-CST 5, AC-DES 2 AC-MO 1 **Industry Standards**	**Literacy** RI 1 9-10.4,7 RST.9-10.4,7 WHST.9-10.7,8,9 **ELA** SL.9-10.1,2,4,5 **Math** S-ID.1, 2 ,3 ,4, 5, 6 **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 Literacy, Math, Science
			brochures, and/or displays • Student designed Project rubric will be used to assess project result in compliance with OSHA regulations		
Weeks 6-7 **Communication Skills – Skills for Success Module**	• Why are written and verbal communication skills important at the construction work place? • What types of written and verbal communication are commonly used at worksites? • What are differences in communication between co-workers and between supervisors and workers? • What strategies could you use to improve your communication skills, especially when under stress at the job?	• Communicate in the language of the construction industry • Develop effective verbal communication skills for successful employment • Write personal and technical communications • Recognize the significance of effective communication skills as they relate to successful interpersonal, working relationships • Analyze personal communication style and explore strategies to improve/enhance skills	• Situational role plays • Case scenarios • Guest speaker from HR • Student research on communication and customer service skills • NCCER Module Assessment	**Career Ready Practice** CRP 1, 4 **Cluster Standards** AC 1 **Pathway Standards** AC-CST 5 **Industry Standards**	**Literacy** WHST.9-10.7 **ELA** RI.9-10.1,4 SL.9-10.1 **Math** **Science**
Weeks 8-9 **Employability Skills**	• What are “employability skills”? • What are the key personal characteristics of successful employees? • What does responsibility look like as it relates to employability? • What does teamwork mean at a job site? • What are the key elements of professionalism? • Why is the ability to solve problems important in employment? • How can you best prepare for a job interview?	• Identify roles, responsibilities and personal characteristics by researching workplace/jobsite information • Demonstrate responsibility, teamwork, respect and professionalism in the classroom and shop • Work with peers and supervisors to problem solve and collectively accomplish tasks	• Field trip to construction company • Guest speakers for interview preparation • Student mock interviews with individuals from industry • NCCER Module Assessment • precedents	**Career Ready Practice** CRP 1, 4, 7, 9, 11 **Cluster Standards** AC 1, 5 **Pathway Standards** AC-CST 1, 6 AC-DES 2, 5 AC-MO 2 **Industry Standards**	**Literacy** WHST. 9-10.7 **ELA** SL.9-10.2 **Math** **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 Literacy, Math, Science
Weeks 10-13 **Construction Math**	• Why is knowledge of basic Algebra and Geometry important in building and construction trades? • How do math skills relate to specific building and construction projects? • How can solid math skills increase opportunities for career advancement and higher wages?	• Applying basic measurement functions • Use basic math functions to complete jobsite/ workplace tasks • Apply formulas to determine ratios, fractions, and proportion measures • Determine correct math application for specific construction-related scenarios • Use appropriate formulas to determine percentages /decimals • Use mathematical formulas to determine area and volume of various structures	• Measurement worksheets and applications – square feet, cubic feet, etc. • Solving math problems in specific scenarios requiring the selection and application of appropriate formulas • NCCER Module Assessment	**Career Ready Practice** CRP 2	**Literacy** RST.9-10.7
				Cluster Standards AC 1	**ELA**
				Pathway Standards AC-DES 8	**Math** G-CO.1,5 G-SRT.6,8 G-GPE.5,7 G-MG.1,3
				Industry Standards	**Science**
Week 14 **Construction Math Project:** **Roofing Estimates & Concrete Pad Estimates**	• What skills do you need to calculate materials for a roofing project? • What sequence of steps are necessary to calculate the material needed for a roof system? • Why is it important to communicate using the language and terminology of the construction industry? • What is the job description for roofers? • What are the working conditions, job opportunities and average wages for roofers?	• Identification and application of concepts/ processes used in calculating materials estimates • Estimate resources & materials required for a specific project or problem • Communications: Use oral and written communication skills in creating, expressing and interpreting information and ideas, including technical terms and information	• Using trade-related vocabulary, students will type a project description • Students will compete with each other for the most accurate and cost effective roofing estimate that meets client wants and needs • Students will research education, wages and responsibilities of roofers in construction jobs • Guest speakers will share roofing job descriptions, hourly wages and education requirements	**Career Ready Practice** CRP 2, 4, 6	**Literacy** RST.9-10.2,4 WHST.9-10.1,2
				Cluster Standards AC 1, 2	**ELA** SL.9-10.1
				Pathway Standards AC-DES 2, 8	**Math** G-CO.1,5 G-SRT.6,8 G-GPE.5,7 G-MG.1,3
				Industry Standards	**Science**
Weeks 15-17 **Hand Tools and**	• What are the basic hand tools used in building and construction trades?	• Interpret industry standards for hand tool safety • Identify and describe the	• Students will identify and select appropriate tools for assigned tasks	**Career Ready Practice** CRP 2, 11, 12	**Literacy** RST.9-10.1,2,4

Time Frame Unit of study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS Literacy, Math, Science
Safety	• What is the function of each tool? • What are the correct techniques to successfully utilize each respective tool? • What safety considerations apply to the use of the respective hand tools? • What is PPE and how does it relate to hand tool use?	function of hand tools • Understand the importance of selecting the "right tool(s)" for specific tasks • Use basic hand tools in in compliance with all safety standards • Understand the importance of tool maintenance and safety • Analyze and describe the effects of unsafe tool applications for workers	• Students will apply skills on selected tools, complying with all prescribed safety regulations • Guest speaker from the industry • NCCER Module Assessment	**Cluster Standards** AC 1 **Pathway Standards** AC-CST 8, 9 AC-MO 2, 4, 5 **Industry Standards**	**ELA** RI.9-10.4 **Math** G-MG.3 S-ID.1,2,3,4,5,6 **Science**
Weeks 18-19 **Hand Tool Project**	• How can you use basic hand tools to solve a problem? • How do you select the appropriate tools for specific projects or jobs? • Why is safety in hand tool use important?	• Selection of and justification for using specific tools to solve a problem or complete a task/project • Demonstration of safe tool use to complete tasks	• Lab practical on tool identification • Students will type a technical description of the project/problem • Student and teacher designed projects; rubric evaluation	**Career Ready Practice** CRP 2, 4, 5, 6, 8, 11 **Cluster Standards** AC 1 **Pathway Standards** AC-CST 8, 9 AC-MO 2, 4, 5 **Industry Standards**	**Literacy** RST.9-10.1,2,4 WHST.9-10.1,2 **ELA** RI.9-10.4 W.9-10.2,4,6 **Math** G-MG 3 S-ID.1,2,3,4,5,6 **Science**
Weeks 20-22 **Power Tools and Safety**	• What are the basic power tools used in building and construction trades? • What is the function of each respective power tool? • What safety rules apply to each of the power tools? • What PPE should be used for power tools? • How can you identify potential safety issues in the use of power tools?	• Use and maintain appropriate tools, machinery, equipment, and resources to accomplish project goals • Apply safety protocols as prescribed for each covered power tool • Analyze potential safety issues and make recommendations for their prevention	• Lab practical on tool identification • Quiz on power tools and safety requirements • Shop observations of power tool use • NCCER Module Assessment	**Career Ready Practice** CRP 2, 11, 12 **Cluster Standards** AC 1 **Pathway Standards** AC-CST 8, 9 AC-MO 2, 4, 5 **Industry Standards**	**Literacy** RST.9-10.1,2,4 **ELA** RI.9-10.4 **Math** G-MG.3 S-ID.1,2,3,4,5,6 **Science**
Weeks 23-24	• How can you use basic	• Student developed	• Technical writing	**Career Ready Practice**	**Literacy** WHST.9-10.4,6,

Time Frame Unit of study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS Literacy, Math, Science
Power Tool Projects	power tools to solve a problem? • How do you identify the correct power tool for a job? • Why are safety checks and PPE so important when working with power tools?	description of problems/ projects to be completed, using the vocabulary of the industry • Selection and demonstration of proper tool use for project completion in compliance with all safety rules	assignment describing the selected project • Student and teacher designed projects-rubric evaluated • Lab practical in tool identification and use	CRP 2, 11, 12 **Cluster Standards** AC 1 **Pathway Standards** AC-CST 8, 9 AC-MO 2, 4, 5 **Industry Standards**	7,8 RST.9-10.1-4 **ELA** W.9-10.2,4,6 **Math** G-MG.3 S-ID.1,2,3,4,5,6
Weeks 25-27 **Construction Drawings**	• What are construction drawings? • How are project building requirements communicated? • How do industry standards effect construction drawings? • Why must plans follow industry standards while they are being created?	• Read, interpret, and use technical drawings, documents, and specifications to plan a project • Recognize how specifications and standards are arranged for proper access	• Guest Speaker: Architect • Field trip to King & King • Individual student drawings • NCCER Module Assessment	**Career Ready Practice** CRP 2, 4 **Cluster Standards** AC 1, 6 **Pathway Standards** AC-DES 2, 6, 7 **Industry Standards**	**Literacy** RST.9-10.1,3,4 **ELA** **Math** G-CO.9,12,13 G-SRT.1 G-MG.3 N-Q.3 **Science**
Weeks 28-29 **Construction Drawing Project:**	• Why is the ability to read and interpret building plans a necessary skill for the construction worker? • What are some commonly used software applications in construction/architectural drawings? • How do basic skills in Computer-Aided Design (CAD) assist you in better understanding the process of creating suitable building plans?	• Use architect's plan, manufacturer's illustrations and other materials to communicate specific data and visualize proposed work • Understand and apply computer software to develop building/ construction plans	• Building plans submitted and assessed for adherence to building plan standards • Student created building plans using Autodesk Revit Architecture software	**Career Ready Practice** CRP 2, 4, 11 **Cluster Standards** AC 1, 6 **Pathway Standards** AC-DES 2, 6, 7 **Industry Standards**	**Literacy** RST.9-10.1,2,3, 4,7 **ELA** RI.9-10.4 **Math** G-SRT.6,8 G-CO.2,6 G-GPE.6,7 **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 Literacy, Math, Science
Weeks 30-31 **Basic Construction Equipment Rigging**	• What is construction equipment rigging? • How is it used in the industry? • Why is it important to discern how to safely move large, heavy loads? • What role does verbal and written communication play in working with peers and customers?	• Apply principles of physics as they relate to worksite/jobsite situations in working with materials and load applications • Apply basic concepts of statics and loads to planning • Develop technical writing skills in the language of the profession • Articulate the appropriate equipment for a specific construction problem/job	• Student worksheets • Guest speaker/lecturer from JPW • Construction site field trip • Lab projects: Select and demonstrate the use of appropriate rigging equipment for specific job • Analyze & articulate basic rigging concepts & processes to peers and supervisors • NCCER Module Assessment	**Career Ready Practice** CRP 2, 4, 8, 11 **Cluster Standards** AC 1 **Pathway Standards** AC-CST 5, 8, 9 **Industry Standards**	**Literacy** WHST.9-10.5 **ELA** SL.9-10.1,4 Math N-Q.1,2,3 G-CO.9 G-MG.1,2,3 **Science**
Week 32 **Construction Materials Processing and Handling**	• What is meant by “materials processing and handling”? • Why is pre-task planning important for safe materials processing and handling? • What factors should be considered in determining correct materials handling?	• Identify the physical properties present when using common construction materials in order to handle the materials safely, effectively and efficiently • Apply concepts of material handling based on physical properties	• Assignments identifying materials and determining physical properties of each • Assign appropriate processing and handling, based on physical properties • NCCER Module Assessment	**Career Ready Practice** CRP 2, 4, 8 **Cluster Standards** AC 1, 2, 3 **Pathway Standards** AC-CST 5 **Industry Standards**	**Literacy** WHST.9-10.8,9 **ELA** **Math** G-GMD.4 **Science**
Week 33 **Materials rigging and handling project:**	• How can mechanical advantage be used to move a heavy load? • What are 5 considerations involved in pre-task planning? • How would you determine the best lifting or moving aid for a specific material?	• Employ critical thinking skills independently and in teams to solve problems and make decisions (e.g., analyze, synthesize and evaluate)	• Students will design and develop a tool that will provide mechanical advantage in moving a load-rubric evaluated	**Career Ready Practice** CRP 2, 4, 8 **Cluster Standards** AC 1, 2, 3 **Pathway Standards** AC-CST 5 **Industry Standards**	**Literacy** WHST.9-10.9 **ELA** **Math** G-GMG.1, 2, 3 **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 Literacy, Math, Science
Week 34 **Communication and Employability skills Project:** **Resume and cover letter development. Email correspondence with an Industry Partner**	• What kinds of information should be included in a resume? • What should a professional resume look like? • What is included in a cover letter and how is it used? • What are the key elements to include in a professional email? • How do you conduct research about possible career opportunities?	• Identify appropriate responsibilities and personal characteristics by researching workplace/jobsite information • Identify the essential elements of the resume and cover letter • Interpreting the job application	• Student developed resumes and cover letters for employment • Industry partner to provide feedback on student resumes and cover letters • Industry partner as speaker on employer expectations	**Career Ready Practice** CRP 1, 4, 7, 9, 11 **Cluster Standards** AC 1, 5 **Pathway Standards** AC-CST 1, 6 AC-DES 2, 5 AC-MO 2 **Industry Standards**	**Literacy** WHST. 9-10.4 **ELA** SL.9-10.2,3 **Math** **Science**
Weeks 35-40 **NCCER Core Assessment Review** **NCCER Core Assessment**	• What career pathways are available for entry-level construction workers? • How does professional certification improve a worker's employability? • How does professional certification better prepare the student for additional training through an apprenticeship or post-secondary education?	• Identify training, education and certification requirements for occupational choice • Participate in career-related training and/or degree programs • Pass certification exams to qualify for licensure and/or certification in chosen occupational area	• NCCER Construction Core: Introductory Craft Skills Assessment (Students have the opportunity to retake the NCCER Construction Core the following year if they are unsuccessful the first year)	**Career Ready Practice** CRP 4, 7, 10 **Cluster Standards** AC 1, 4, 5, 7 **Pathway Standards** AC-CST 8, 9 **Industry Standards**	**Literacy** RI.9-10.10 WHST.9-10.7 **ELA** **Math** **Science**

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Syracuse City School District
Career & Technical Education Programs
Course Syllabus
CNT 200: Construction Trades Technology 200

Construction Trades Program Overview:

At the completion of this program, students will understand and be able to apply the trade skills necessary for entry-level employment, apprenticeships and post-secondary education. Units of study include safety training, framing, roofing, door and window installation, hand and power tool use, concrete, masonry and bricklaying, blueprint reading, plumbing, electrical, and construction equipment and rigging. The program includes theory and authentic hands-on, project-based activities. Students will earn a math and ELA credit upon successful program completion. Students will also have the opportunity to earn the National Center for Construction Education and Research (NCCER) Construction Core and OSHA 10 certifications, recognized throughout the construction industry as indicators that the applicant is "job ready."

Course Description

Construction Trades 200 builds on the knowledge and skills learned in Construction Trades 100. Students will learn the basic skills necessary to work in concrete, masonry and carpentry. Tools and materials for the three skill areas will be learned and practiced in a project based learning environment to gain hands on experience. Learning to form and pour concrete sidewalks, block and stone retaining walls, and building a small utility shed are examples of the practical work that will be accomplished in Construction Trades 200.

Course Objectives

1. Differentiate types of concrete and their components and identify appropriate uses for each type.
2. Select appropriate tools and equipment for completing concrete and masonry projects.
3. Understand and apply carpentry skills to the construction of floor, wall and roof systems.
4. Apply math formulas to estimate materials needed or procedures to construct sound building systems.
5. Use construction plans to read important information about a building site.
6. Safely secure and move materials through the use of Construction rigging procedures.
7. Communicate with others on the job site and be able to demonstrate the characteristics necessary for employment.

District Requirements

- Students qualify for Occupational Safety and Health Administration (OSHA) 10-hour course at the successful completion of the Construction 100 Safety module.
- Students qualify to take the NCCER Core exam after Construction 100 at the end of 9th grade.

- Students will receive the CTE Endorsement upon successful completion of the Construction Technology program and achieving a passing score on the NCCER Core Technical Assessment.

Integrated Academics

N/A

Student Equipment and Supplies

- **School will provide**: All necessary lab materials and classroom equipment
- **Student will provide**: A notebook for taking and saving notes; pen/pencils.

Textbook

- NCCER Core Curriculum: Introductory Craft Skills (Pearson) 4th edition
- NCCER Tools for Success: Critical Skills for the Construction Industry (Pearson) 3rd edition

Grading

30%	Unit & Classwork
30%	End of Unit Assessment
20%	Project Work
20%	End of Course Practical

Additional Course Policies

Students are required to follow all classroom professionalism and safety procedures. Please review class policies.

Academic Calendar

Quarter	Units of Study
1	• Safety requirements in concrete work tools and equipment. • Site layout. • Construction Math measurement and materials estimates. • Construction related health, safety and environmental management.
2	• Concrete layouts, footings and foundations. • Forming and placing concrete. • Foundation systems and structural design.
3	• Construction drawings. • Architectural software applications. • Shed construction. • Resumes, cover letters, and personal profiles.
4	• Intermediate Carpentry building skills: • Planning, laying out, and construction of wall systems. • Planning, laying out, and construction of roof systems.

Syracuse City School District
Career and Technical Education Program
Scope and Sequence
CNT: 200 Construction Technology Trades 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 Literacy, Math, Science
Weeks 1-2 **Introduction to Concrete Tools & Equipment & Safety in Concrete Work**	• What are the specific safety concerns that you should be aware of while working with concrete? • What is MSDS? • What sort of Personal Protection Equipment (PPE) is vital to have when working with Concrete? • How should you care for and maintain concrete hand tools when you have finished using them?	• Identify concrete tools and utilize in compliance with safety standards • Read and interpret manufacturer product safety data • Identify common concrete equipment and determine the appropriate equipment for each application at a construction site • Implement personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments	• Group projects: Student developed safety posters, based on manufacturer's instructions, product MSDS and OSHA regulations • Campus-based project: Identify and use tools for projects and appropriately care for and maintain the tool inventory at the end of the project • Module Assessment	**Career Ready Practice** CRP 1, 2, 5, 12 **Cluster Standards** AC 1, 3 **Pathway Standards** AC-CST 5 AC-MO 1 **Industry Standards**	**Literacy Standards** RO.9-10.1,4 RST.9-10.1,4 WHST.9-10.2,8,9 **ELA** SL.9-10.1 **Math Standards** **Science Standards**
Weeks 3-5 **Introduction to Concrete Construction and Finishes**	• What is Portland cement and how is it made? • What are the aggregates that are used to make concrete? • What are two advantages where using additives in concrete improves the quality of the material? • How do climate and soil conditions effect concrete construction?	• Distinguish/differentiate types of concrete and their components • Discuss the value of additives in concrete applications • Apply mathematical formulas to determine areas and volumes of various structures • Select tools, machinery, equipment, and resources that match	• Student research and group presentations on concrete products and their uses and on concrete finishes • Application of related construction vocabulary • Concrete projects • Module assessments	**Career Ready Practice** CRP 1, 2, 4, 12 **Cluster Standards** AC 1, 3 **Pathway Standards** AC-CST 5, 8, 9 AC-DES 8 AC-MO 1	**Literacy Standards** RST.9-10.1,4 WHST.9-10.2 **ELA** RI.9-10.4,7 SL.9-10.1,4 **Math Standards** G-GMD.1,3

	• What does steel reinforcement bar do to the strength of concrete in a building system?	requirements of the job • Apply the principles of reinforcement bar in concrete jobs • Use data and measurements to solve a problem • Apply scientific methods in problem identification, qualitative and quantitative analysis, data gathering, direct and indirect observation and predictions		**Industry Standards**	**Science Standards**
Weeks 6-10 **Site Layouts**	• What is the function of foundations? • Why is it vital that the footings and foundation of a structure be absolutely level and square?	• Interpret drawings used in project planning • Discuss the purpose of foundations in project layouts • Analyze the effects of footings and foundations that are not level and square • Identify governmental regulations and national, state and/or local building codes that apply to a given workplace/jobsite	• Research local, state and national regulatory bodies that govern building codes • Document the components and procedures required for specific project approvals • Apply math measurement, square footage, volume • Campus-based projects • Module Assessment	**Career Ready Practice** CRP 2, 12	**Literacy Standards** RST.9-10.1,3,4 WHST.9-10.2,4,6
				Cluster Standards AC 1, 6	**ELA** RI.9-10.1
				Pathway Standards AC-CST 1, 2, 3, 5, 8	**Math Standards** G-MG.1,3 G-GMD.4 G-GPE.5,6 G-CO.1,11,12
				Industry Standards	**Science Standards**
Weeks 11-15 **Forming Concrete**	• What are the key differences between pre-cast and cast-in-place concrete? • Why is form work typically built by carpenters and not masons?	• Distinguish the differences between pre-cast and cast-in-place concrete • Describe the advantages & disadvantages of each type • Estimate resources/ materials required for a specific project or problem	• Student Assignment: Detailed project description for a specific job, using the language of the trade • Student job estimate assignment • Campus-based projects • Field trip to concrete fabricator • Campus-based project • Module assessment	**Career Ready Practice** CRP 2, 12	**Literacy Standards** RST.9-10.3,9 WHST.9-10.2,4
				Cluster Standards AC 1, 2, 3, 5, 6	**ELA** SL.9-10.3
				Pathway Standards AC-CST 5, 6, 9 AC-DES 2, 8	**Math Standards** G-MG.3 G-C.3, 5 G-CO.1,11,12
				Industry Standards	**Science Standards**
Weeks 16-20	• How do you calculate the number of "yards" of	• Use algebraic formulas to determine areas and	• Application of math to specific jobs/projects	**Career Ready Practice** CRP 2, 8, 12	**Literacy Standards** RST.9-10.1,3

Placing Concrete	concrete that are required to complete a job? • What are the tools and materials used to successfully pour concrete? • Why is it so important that concrete be aeriated as it is being poured?	volumes of various structures • Perform calculations for determining the number of "yards" of concrete for a specific job • Select tools, machinery, equipment, and resources that match requirements of the job	• Correct application of math formulas for project development • Campus-based project • Module assessment	**Cluster Standards** AC 1, 2, 3, **Pathway Standards** AC-CST 5, 6, 9 AC-DES 2, 8 **Industry Standards**	**ELA** **Math Standards** G-MG.2 G-CO.11 **Science Standards**
Weeks 21-24 **Introduction to Masonry**	• What are the major concrete masonry units (CMU) used in construction? • What is the purpose of the foundation system in structural design and construction? • Why is the "Leaning Tower of Pisa leaning?	• Examine building systems and components to evaluate their usefulness to a project • Incorporate appropriate building systems into a construction project	• Student research on industrial structures, i.e., bridges, buildings that have failed and analyze the causes and compare structures that have sustained over the years • Campus-based project • Module assessment	**Career Ready Practice** CRP 2, 8 **Cluster Standards** AC 1, 2, 3 **Pathway Standards** AC-CST 5, 8, 9 AC-DES 8 AC-MO 1 **Industry Standards**	**Literacy Standards** RST.9-10.1,4 WHST.9-10.1,2,4,6 **ELA** RI.9-10.1,4 **Math Standards** G-MG.2,3 G-C.3,5 **Science Standards**
Weeks 25-30 **Introduction to Carpentry Floor Systems**	• What is the purpose of the wood framed floor system in building construction? • What are the key components of a floor system? • How does the carpenter determine the sizes of lumber he/she should use in the construction of a floor system?	• Identify building systems needed to complete a construction project • Read, interpret, and use technical drawings, documents, and specifications to plan a project • Identify governmental regulations and national, state and/or local building codes that apply to a given workplace/jobsite	• Student Presentations: • Project planning assignment, including a project description, building systems, materials estimate, labor estimate, approval procedures, and timeline for project completion • Correct application of floor system vocabulary • Correct application of math formulas for projects • Student floor system applications • Module assessment and campus based project	**Career Ready Practice** CRP 1, 2, 8 **Cluster Standards** AC 1, 3 **Pathway Standards** AC-CST 5, 8, 9 AC-DES 8 AC-MO 1 **Industry Standards**	**Literacy Standards** RST.9-10.1,3,10 WHST.9-10.4,7 **ELA** RI.9-10.1 SL.9-10.1,3,4 **Math Standards** G-MG.3 G-CO.1 **Science Standards**
Weeks 31-33 **Wall Systems**	• How is the wall system integral to an energy efficient building envelope? • What do headers do and	• Identify building systems needed to complete a construction project • Read, interpret, and use technical drawings,	• Application of knowledge and skills in the use of technical drawings • Wall system measurements and	**Career Ready Practice** CRP 2, 8, 11, 12 **Cluster Standards** AC 1, 3	**Literacy Standards** RI.9-10.1,10 RST.9-10.1,3,4

	why are they so important? • What does 16” on center mean and why is it important to carefully lay out walls with framing studs 16 inches on center?	documents, and specifications to plan a project • Identify governmental regulations and national, state and/or local building codes that apply to a given workplace/jobsite	construction • Campus based project • Module Assessment	**Pathway Standards** AC-CST 5, 8, 9 AC-DES 8 AC-MO 1	**Math Standards** G-MG.3 G-GMD.4 G-GPE.6 G-CO.1
				Industry Standards	**Science Standards**
Weeks 34-38 **Roof Systems**	• Why are weather and climate key factors in determining sound roof systems? • What is the difference between a roof rafter and roof truss design in roofing systems? • What does pitch mean in roof design?	• Identify building systems needed to complete a construction project • Read, interpret, and use technical drawings, documents, and specifications to plan a project • Apply related vocabulary • Identify governmental regulations and national, state and/or local building codes that apply	• Group research on assigned roof systems in various climates and the rational for different systems, including materials used, construction processes and governmental regulations/building codes • Math applications for materials, squares, pitch • Student constructed roof • Module Assessment	**Career Ready Practice** CRP 1, 2, 5, 8, 12	**Literacy Standards** RST.9-10.1,4 WHST.9-10.2
				Cluster Standards AC 1, 3	**ELA** RI.9-10.1 SL.9-10.1
				Pathway Standards AC-CST 5, 8, 9 AC-DES 8 AC-MO 1	**Math Standards** G-GPE.5 G-MG.3 G-CO.1,7,8,10
				Industry Standards	**Science Standards**
Weeks 39-40 **Construction 200 Final Practical Assessment**	• How could applying the design process be useful in solving a particular building need?	• Complete required training, education, and certification to prepare for employment in a particular career field • Create and implement project plans considering available resources and requirements of a project or problem in order to accomplish realistic planning in design and construction situations	• Individual research projects on chosen career paths • Student completed resumes, cover letters and applications • End of course Practical Assessments	**Career Ready Practice** CRP 2, 8, 10	**Literacy Standards** RST.9-10.1,4 WHST.9-10.2,4,6
				Cluster Standards AC 7	**ELA** RI.9-10.1,4
				Pathway Standards AC-CST 5, 8, 9 AC-DES 4, 8	**Math Standards**
				Industry Standards	**Science Standards**

Return to TOC

Syracuse City School District
Career & Technical Education Programs
Course Syllabus
CNT 300: Construction Trades Technology 300

Construction Trades Program Overview:

At the completion of this program, students will understand and be able to apply the trade skills necessary for entry-level employment, apprenticeships and post-secondary education. Units of study include safety training, framing, roofing, door and window installation, hand and power tool use, concrete, masonry and bricklaying, blueprint reading, plumbing, electrical, and construction equipment and rigging. The program includes theory and authentic hands-on, project-based activities. Students will earn a math and ELA credit upon successful program completion. Students will also have the opportunity to earn the National Center for Construction Education and Research (NCCER) Construction Core and OSHA 10 certifications, recognized throughout the construction industry as indicators that the applicant is "job ready."

Course Description:

Construction 300 continues to expand knowledge and skills learned in the 100 and 200 levels. Students in this course will learn skills necessary to work safely in plumbing, electrical, building envelope, and green building. Tools and materials for the four skill areas will be learned in a project-based learning environment. Examples of project work include learning to plumb a bathroom, wiring a room with lights and receptacles, designing and creating an energy efficient wall system, experimenting with alternative energy models, including energy conservation.

Course Objectives:

By the end of Construction 300 students will be able to:

1. Demonstrate skill with plumbing tools, equipment and materials in the application basic plumbing activities.
2. Understand and apply skills in electrical theory to perform basic electrical activities in residential construction.
3. Apply the concepts of building envelope systems and weatherization techniques.
4. Apply concepts of green building and alternative energy practices to construction projects.
5. Use math formulas for accurate measurements and performing estimates for construction projects.
6. Perform all work activities in compliance with OSHA safety regulations.
7. Apply effective communication and relationship management skills with supervisors, peers and customers as necessary for sustained employment in the construction field.

Integrated Academics:

At the completion of Construction Trades 300, students will receive one integrated math credit.

Equipment and Supplies:

School will provide: Tools and resources needed to complete all units and exams.
Student will provide: A notebook for note taking; pen/pencils, attire suitable for construction work.

Textbook:

- NCCER Construction Technology Trainee Guide (Pearson/Prentice Hall) 3rd edition
- NCCER Your Role in the Green Environment (Pearson) 1st edition

Grading:

- Attendance/participation 10%
- Unit Classwork: 20%
- End of Unit Assessment: 20%
- Project Work: 30%
- Final Exam 20%

Academic Calendar:

Quarter	Units of Study
1	• Careers in plumbing • Plumbing theory, safety and practice • Plumbing tools and materials • Plumbing skills application
2	• Careers in electrical trades • Electrical trade theory, safety and practice • Electrical tools and materials • Basic skills in wiring and electrical component installation
3	• Careers in green building and building envelope system design • Components of efficient building envelope systems • Calculating energy efficiency • Introduction to Green building design • Sustainable design practices • LEED Certification
4	• Introduction to basic equipment rigging • Device design and constructions for gaining a mechanical advantage • Materials handling and processing

Syracuse City School District
Career and Technical Education Program
Scope and Sequence
CNT300: Construction Trades Technology 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 Literacy, Math, Science
Weeks 1-2 **Introduction to the Plumbing Profession**	• What are the career opportunities in the plumbing profession? • What are the names of associations in the plumbing profession? • What education and training is required for plumbers? • Do you need a certification or license? • What personal attributes are important for success in the trade? • What is the working environment like for plumbers? • What might the career ladder look like in the trade?	• Articulate the education and training levels for the trade • Discuss the skills and personal attributes necessary for success in the profession • Offer the rationale for licensing/certification in the trade • Determine the pros and cons of a career in the trade • Assess their personal attributes and compare/contrast to those required of the profession • Discuss potential levels in the profession's career ladder	• Individual research on the profession and construct short papers on their findings, including regulatory bodies, and professional affiliations • Group presentations on selected plumbing topics, including graphic representations • Effective use of trade related vocabulary	**Career Ready Practice** CRP 1, 4, 7, 12 **Cluster Standards** AC 1, 4, 7 **Pathway Standards** **Industry Standards**	**Literacy** RST.11-12.1,4 WHST.11.12.2 **ELA** RI.11-12.4,7 W.11-12.1,2,4,6 SL.11-12.1,4 **Math** **Science**
Weeks 3-5 **Plumbing Safety**	• What specific safety concerns should you be aware of when installing plumbing? • What are the building codes for plumbing? • What are the key reasons for plumbing codes? • Why is adhering to building codes important when "roughing in plumbing"? • Who enforces the	• Implement personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments • Discuss the reason for standardized plumbing codes and describe the penalties to contractors for noncompliance • Cite reasons for accidents and discuss why they	• Analyze the rationale behind plumbing safety considerations • Interpret safety signs and hazard symbols • Research economic impact of lost time accidents • Compliance with all safety rules, including PPE • Project work • Unit Assessment	**Career Ready Practice** CRP 2, 4, 5 **Cluster Standards** AC 1, 3 **Pathway Standards** AC-CST 5, 9	**Literacy** RST.11-12.4,5,7 WHST.11.12.2 **ELA** RI.11-12.4,7 SL.11-12.1,4 **Math** GMD.A.2,3 **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 Literacy, Math, Science
	plumbing codes? • What is lockout/tagout? • What is meant by confined space safety? • What are common accidents and reasons for them? • What are the costs to employers, employees and society for plumbing accidents?	often occur • Discuss who bears the costs of accidents at each level: Contractors, their employees, society • Create and apply a jobsite safety program to ensure compliance with safe practices and procedures		**Industry Standards**	
Weeks 6-7 **Tools of the Plumbing Trade**	• What is the vocabulary used in the plumbing field? • What are the common hand tools are used in plumbing? • What are the common power tools used in the profession?	• Use and maintain appropriate tools, machinery, equipment, and resources to accomplish project goals • Implement tool use in compliance with all safety regulations	• Word walls, bulletin boards • Demonstrate effective use of hand and power tools to complete a task or project • Assigned project work • Unit Assessment	**Career Ready Practice** CRP 1, 2, 5 **Cluster Standards** AC 1, 3 **Pathway Standards** AC-CST 5, 9 **Industry Standards**	**Literacy** RST.11-12.1,4 WHST.11-12.6 **ELA** RI.11-12.4 **Math** **Science**
Weeks 8-9 **Plastic Pipe and Fittings**	• When should plastic pipe be used in plumbing application? • What are the different types of plastic pipes and fittings? • How should you measure and cut plastic pipe? • Do plumbing codes apply to plastic pipe use? • How strong does a plastic pipe need to be? • How can two sections of plastic pipe be joined? • What are the advantages and disadvantages of using plastic pipe over metal (Copper, galvanized and caste Iron)?	• Determine the appropriate type of plastic pipes and fittings for a given situation • Discuss the inherent properties of ABS, PVC, CPVE, PE, PEX and PB piping • Accurately measure and cut plastic pipe for a specific task • Distinguish advantages and disadvantages of plastic vs metal pipes	• Accurately apply plumbing vocabulary to describe and complete tasks • Given a specific project, distinguish the appropriate type of pipe for the application • Apply appropriate math formulas for calculating measurements • Assigned projects • Unit Assessment	**Career Ready Practice** CRP 2, 8 **Cluster Standards** AC 1, 2, 3 **Pathway Standards** AC-CST 3, 7, 8 **Industry Standards**	**Literacy** RST.11-12.1,4 WHST.11.12.2,4, 7,9 **ELA** SL.11-12.1,4 **Math** MG.A.3 **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 Literacy, Math, Science
Weeks 10-12 **Copper Pipe and Fittings**	• What properties of copper make it a suitable material for plumbing pipes and fittings? • How are valves used in copper pipe systems? • What method is used for cutting copper pipe? • How is copper pipe joined? • Why has the composition of solder changed over the years? • How is insulation used with copper pipes? • What codes apply to the use of copper pipes?	• Discuss the inherent properties of copper pipe • Demonstrate safe use of copper pipe in completing tasks • Measure cut and join copper pipe in assigned projects • Discuss the composition of solder as it relates to joining copper pipes • Determine when to insulate copper piping in various settings/situations • Use MSDS (Material Safety Data Sheets) information for the management, use and disposal of materials	• Field trip to plumbers union • Accurate use of trade-related vocabulary • Interpretation of selected products MSDS sheets • Evaluation of assigned projects • Unit Assessment	**Career Ready Practice** CRP 2, 4, 8 **Cluster Standards** AC 1, 2, 3 **Pathway Standards** AC-CST 5, 9 **Industry Standards**	**Literacy** RST.11-12.1,3,4,9 WHST.11.12.2 **ELA** SL.11-12.1,3 **Math** MG.A.3 **Science**
Weeks 13-14 **Orientation to the Electrical Trade**	• What are the career paths for electrical workers? • What are the career specific requirements to become a qualified electrician? • What is the IBEW? • What sort of working environment do electricians typically work in?	• Explore career to develop an understanding of available employment opportunities • Examine how the roles and responsibilities among the trades/professions work in conjunction to complete a project/job • Discuss various work environments for electrical workers	• Field visit to IBEW • Panel Discussion with selected electricians on employment expectations • Unit Assessment	**Career Ready Practice** CRP 1, 4, 10 **Cluster Standards** AC 1, 7 **Pathway Standards** AC-CST 5 **Industry Standards**	**Literacy** RST.11-12.7,9 WHST.11.12.2 **ELA** SL.11-12.1,3,4,6,7 **Math** **Science**
Weeks 15-17 **Electrical Safety**	• What are the specific safety considerations to be aware of before and during the installation of electrical systems at a construction site? • Who determines safety standards for electricians?	• Describe OSHA's role in electrical worker safety • Discuss standard electrical precautions and hazards found at a job site • Develop and apply a jobsite safety program to ensure safe practices and	• Compliance with all safety precautions in assigned projects • Interpret standard safety and hazard symbols related to electrical workers • Unit Assessment	**Career Ready Practice** CRP 1, 2, 4, 12 **Cluster Standards** AC-CST 5, 9	**Literacy** RST.11-12.1,3,4, 6,7,9 WHST.11.12.1,2, 4,6,7 **ELA** SL.11-12.1,4

Time Frame Unit of study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS Literacy, Math, Science
		procedures		**Pathway Standards**	**Math**
				Industry Standards	**Science**
Weeks 18-20 **Intro to Electrical Circuits**	• What is Ohm's law? • What is resistance? • How is math used in electric power equations? • What are series circuits? • What is a branch circuit? • What is a GFCI? • Why is it important to know what the load on a circuit will be before you design and install the circuit?	• Understand and apply Ohm's law concepts to assigned tasks • Apply appropriate math formulas in solve electrical problems • Identify different types of circuits in electrical applications • Accurately calculate load in the design and installation of a circuit	• Effective communication of information to solve an electrical problem • Evaluation of assigned labs • Unit Assessment	**Career Ready Practice** CRP 2	**Literacy** RST.11-12.1,2,3,4 WHST.11.12.2,4,9
				Cluster Standards AC 1, 3, 6	**ELA** SL.11-12.1,4
				Pathway Standards	**Math** A-CED.A.4
				Industry Standards	**Science**
Weeks 21 & 22 **Electrical Theory**	• How is Ohm's law applied to the practice of installing electrical systems? • What is voltage? • What does NEC stand for? • What are NEC tables and how do electricians use them?	• Analyze the way electrical installations are impacted by Ohm's Law • Discuss the rationale for the development and use of NEC codes • Apply NEC codes using prescribed procedures	• Guest lecturer from IBEW • Evaluation of student work sheets, quizzes and homework assignments • Project work • Unit Assessment	**Career Ready Practice** CRP 2, 4, 10	**Literacy** RST.11-12.1,3,4 WHST.11.12. 2,4, 6
					ELA SL.11-12.1
				Cluster Standards AC 1, 2, 5, 7	**Math** CED.A.1
				Pathway Standards AC-CST 5	**Science**
Weeks 23 & 24 **Electrical Project**	• If there were a need for the installation of a residential electrical system, how would you approach meeting this need?	• Employ critical thinking skills independently and in teams to solve problems and make decisions (e.g., analyze, synthesize and evaluate)	• Communicate methods used in solving an electrical problem • Students/teacher design rubric for	**Career Ready Practice** CRP 2, 4, 6, 8	**Literacy** RST.11-12.3,4 WHST.11.12.2
					ELA SL.11-12.1

Time Frame Unit of study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS Literacy, Math, Science
	• What considerations might be important in your decisions?	• Identify building systems needed to complete a construction project • Plan and implement selected electrical projects	project assessment • Teacher and peer evaluated projects	**Cluster Standards** AC 1, 2, 3, 4, 6	**Math** GMD.B.4
				Pathway Standards AC-CST 1, 2, 4, 8, 9	**Science**
				Industry Standards	
Weeks 25-28 **Introduction to Building Envelope Systems**	• What does "building envelope" mean? • What factors are considered in improving a building's energy efficiency? • How might you substantiate each of these factors – what is the rationale behind determining these factors? • What sequence of steps should be taken to determine a building's energy efficiency?	• Communicate the concepts of "building envelope verbally and in writing • Apply the skills and concepts used in energy audits • Describe audit process and results to consumers • Apply principles of sealing, heat loss, and insulating materials to energy efficiency	• Student shadows to weatherization companies • Lab practice applying weatherization techniques to improve energy efficiency • Unit Assessment	**Career Ready Practice** CRP 2, 4, 8	**Literacy** RST.11-12.2,4 WHST.11.12.2
					ELA SL.11-12.1
				Cluster Standards AC 1, 4	**Math** GMD.A.2,3
				Pathway Standards AC-CST 3, 8	**Science**
				Industry Standards	
Weeks 29-34 **Your Role in the Green Environment**	• What does the phrase "green environment" represent to you? • What does sustainability mean? • What are alternative energy sources? • How are buildings rated in terms of "green"? • What does LEED stand for? • How does conservation and "building small" factor into the green	• Discuss the benefits of renewable energy sources • Describe standards for green building design and construction • Discuss advantages /disadvantages of alternative energy sources • Define LEED and cite the process for LEED certification	• Group projects and presentations on alternative energy and sustainability • Field trip to SUNY ESF • Field trip to Architectural firm and green building contractors • Lab projects • Unit Assessment	**Career Ready Practice** CRP 1, 2, 5, 8, 12	**Literacy** RST.11-12.2,4
					ELA SL.11-12.1,4
				Cluster Standards AC 1, 3, 4,	**Math** MG.A.3
				Pathway Standards AC-CST 1, 7 AC-DES 1, 3, 4, 8	**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 Literacy, Math, Science
	environment?			**Industry Standards**	
Weeks 35-40 **Capstone project**	• What sorts of organizational systems should you employ when starting a large project? • How could you encourage effective team work in your group while completing your capstone project? • In what ways you can convey your knowledge and learning of building construction beyond your project?	• Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice • Employ critical thinking skills independently and in teams to solve problems and make decisions (e.g., analyze, synthesize and evaluate). • Employ planning and time management skills and tools to enhance results and complete work tasks.	• Students/teacher design rubric for Capstone Project assessment.	**Career Ready Practice** CRP 1, 2, 4, 8, 9, 11, 12	**Literacy** RST.11-12.1,2,4 **ELA** SL.11-12.1,4
				Cluster Standards AC 1, 2, 3, 4, 5, 6	**Math** MG.A.3
				Pathway Standards AC-CST 1, 2, 3, 4, 5, 6 AC-DES 1, 2, 3, 4, 6, 7	**Science**
				Industry Standards	

Return to TOC

Syracuse City School District
Career & Technical Education Programs
Course Syllabus
CNT 400: Construction Trades Technology 400

Construction Trades Program Overview:

At the completion of this program, students will understand and be able to apply the trade skills necessary for entry-level employment, apprenticeships and post-secondary education. Units of study include safety training, framing, roofing, door and window installation, hand and power tool use, concrete, masonry and bricklaying, blueprint reading, plumbing, electrical, and construction equipment and rigging. The program includes theory and authentic hands-on, project-based activities. Students will earn a math and ELA credit upon successful program completion. Students will also have the opportunity to earn the National Center for Construction Education and Research (NCCER) Construction Core and OSHA 10 certifications, recognized throughout the construction industry as indicators that the applicant is "job ready."

Course Description:

Construction 400 takes student knowledge and skills to greater depths by providing opportunities for additional project-based activities and work-based learning experiences. Students will practice work safety in all aspects of the construction trades while enhancing skills. Level 400 also integrates job readiness practices, including effective verbal and written communication, critical thinking and problem solving, resume, cover letter, job interview and follow up activities.

Course Objectives:

By the end of Construction 400 students will be able to:

1. Demonstrate practices and behaviors consistent with employer expectations.
2. Apply effective communication and relationship management skills with supervisors, peers and customers as necessary for sustained employment in the construction field.
3. Communicate with employers and worksite supervisors in the technical language of the profession.
4. Complete all project-based activities in compliance with local building codes and regulations.
5. Perform all work activities in compliance with OSHA safety regulations.
6. Understand how various construction-related career areas interconnect during the various phases of building projects.
7. Apply the concepts of building envelope systems and weatherization techniques.
8. Apply concepts of green building and alternative energy practices to construction projects.
9. Use math formulas for accurate measurements and performing estimates for construction projects.

Integrated Academics:

At the completion of Construction Trades 300, students will receive one integrated math credit

Equipment and Supplies:

School will provide: Tools and resources needed to complete all units and exams.
Student will provide: A notebook for note taking; pen/pencils, attire suitable for construction work.

Textbook:

- NCCER Construction Technology Trainee Guide (Pearson/Prentice Hall) 3rd edition
- NCCER Your Role in the Green Environment (Pearson) 1st edition

Grading:

- Attendance/participation 10%
- Unit Classwork: 20%
- End of Unit Assessment: 20%
- Project Work: 30%
- Final Exam 20%

Academic Calendar:

Quarter	Units of Study
1	• Careers in plumbing • Plumbing theory, safety and practice • Plumbing tools and materials • Plumbing skills application
2	• Careers in electrical trades • Electrical trade theory, safety and practice • Electrical tools and materials • Basic skills in wiring and electrical component installation
3	• Careers in green building and building envelope system design • Components of efficient building envelope systems • Calculating energy efficiency • Introduction to Green building design • Sustainable design practices • LEED Certification
4	• Introduction to basic equipment rigging • Device design and constructions for gaining a mechanical advantage • Materials handling and processing

Syracuse City School District

Career and Technical Education Program

Scope and Sequence

CNT 400: Construction Trades Level 400

Time Frame Unit of study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS Literacy, Math, Science
Weeks 1-4 **Classroom/Shop/ Internship Expectations & Safety Review (including OSHA) Building Codes and Standards** **Review of Orientation to the Trade** **Site Layout- Differential Leveling**	• What career opportunities can you expect in carpentry/construction? • How should you prepare for a career interview? • How important is worker safety in construction trades? • What equipment and methods are used in differential leveling?	• Identify career opportunities and training levels for carpentry and construction workers • Apply principles and methods in differential site leveling accurately operate equipment • Discuss responsibilities of surveyors, field engineers and carpenters in differential leveling	• Group research on career opportunities • Guest speakers on career areas, work environments, employer expectations and required education- interactive • Differential leveling projects • Use Monster.com to develop career interview questions • Student scheduled career interview • Typed interview reports for presentation to Construction 100 students	**Career Ready Practice** CRP1,2,7,9,10 **Cluster Standards** AC1,2,4,5,6,7 **Pathway Standards** AC-CST1,2,4,5,6,8,9 **Industry Standards**	**Literacy** RST.11-12.T2,4 WHS.11-12.T2,5 **ELA** R.11-12.4 W.11-12.2,6 SL.11-12.1,2 **Math** G-MG.1,3 G-GMD.4 G-GPE.5,6 G-CO.1,11,12 **Science**
Weeks 5-6 **Foundations and Slab-on-Grade**	• How are safety, tools and forms different in this application? • Where are these applications used? • What safety and building code regulations should be considered	• Identify and describe tools and methods in foundation and slab-on-grade projects • Distinguish appropriate type based on site layout • Identify related codes and safety regulations in a construction project	• Rubric graded projects	**Career Ready Practice** CRP1,3,4 **Cluster Standards** AC1,2,5,6 **Pathway Standards** AC-CST9 **Industry Standards**	**Literacy** RST11.11-12.4 **ELA** R.11-12.4 SL.11-12.1,2 **Math** G-MG.2 G-CO.11 **Science**
Weeks 7-10 **Resume and Cover Letter Development**	• What kinds of information should be included in a résumé? • What is the function of a	• Identify appropriate responsibilities and personal characteristics by researching	• Student developed resumes and cover letters for employment (Industry partner to provide	**Career Ready Practice** CRP 1,2,4,7,8,9,10, 11	**Literacy** WHST.11-12.2

Time Frame Unit of study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	Related Standards	CCLS Literacy, Math, Science
Researching and Interpreting Job Postings **Email Correspondence with an Industry Partner** **Building Projects Applying Blueprints**	cover letter and what are its key elements? • How should a professional email correspondence look? • Can you apply what you've learned about construction drawings to a project?	workplace/jobsite information • Identify the essential elements of the resume and cover letter • Understand the job application • Design and construct a project based on student developed drawings	feedback on student resumes and cover letters) Rubric Rated • Industry speakers • Completed shop projects	**Cluster Standards** AC1,5	**ELA** R.11-12.4 W.11-12.2,6 SL.11-12.1,2
				Pathway Standards AC-CST1,6 AC-DES 2,5 AC-MO 2	**Math** G-CO.9,12,13 G-SRT.1 G-MG.3 N-Q.3
				Industry Standards	**Science**
Weeks 11-14 **Communicating Technical Skills to Site Supervisors and Coworkers** **Floor Installation and Finishing Project** **Stair Layout Projects**	• What does communication with site supervisors and coworkers sound like/look like? • When should you ask for help at your internship or job? • How will you decide which floor finish to use at a construction job?	• Exchange verbal and written information using technical language • Communicate with site supervisors and peers applying technical and career ready practice skills • Select appropriate floor finishes in multi-room settings	• Roleplays in effective verbal communication methods • Writing assignments in employer communication-rubric graded • Detailed estimates • Shop projects	**Career Ready Practice** CRP 1,2,4,7,9,10,11, 12	**Literacy** RST11.11-12.4 WHST.11-12.2,3
					ELA R.11-12.4 W.11-12.2,6 SL.11-12.1,2
				Cluster Standards AC1,5,6	**Math** G-MG.3 G-CO.1
				Pathway Standards AC-CST1,5,9 AC-DES2,3,6	**Science**
				Industry Standards	
Weeks 18-20 **Wall Systems and Application Projects**	• What have you learned about wall framing, including window and door openings? • How should the walls be supported? • What information will you need before you complete your materials estimate? • How do you keep the	• Apply construction concepts to wall framing project • Follow procedures for door and window openings • Select and utilize materials, tools and methods for wall construction, including bracing and corner	• Completed materials list • Submission of materials estimate for wall project • Completed group wall projects	**Career Ready Practice** CRP 1,2,4,6,7,8,9, 10,11,12	**Literacy** RST.11-12.4 WHST.11-12.2
				Cluster Standards AC1.2.3.6	**ELA** R.11-12.4 W.11-12.2,6 SL.11-12.1,2
				Pathway Standards AC-CST1,5,9 AC-DES2,3,6	**Math** G-MG.3 G-GMD.4 G-GPE.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 Literacy, Math, Science
	walls square?	construction			G-CO.1
				Industry Standards	**Science**
Weeks 21-24 **Drywall Installation and Finishing** **Job Readiness Practices**	• What information is needed to install and finish drywall? • Where is drywall used and how many different types of gypsum are used? • Why are technical skills and soft skills (Career Ready Practices) both important in construction trades?	• Identify and explain drywall types and uses, fasteners and installation methods • Select materials/tools and finish installed drywall • Cite examples for the 12 Career Ready Practices • Apply effective communication skills with employers and peers	• Accurately measure, cut, and install drywall • Practice finish techniques • Research job listings for class discussions • Read, write and speak in the language of the profession	**Career Ready Practice** CRP 1,2,4,5,7,9,10, 11	**Literacy** RST11.11-12.4 WHST.11-12.2,3
				Cluster Standards AC1,2,3,6	**ELA** R.11-12.4 W.11-12.2,6 SL.11-12.1,2
				Pathway Standards AC-CST5,6,9 AC-DES2,3,6	**Math** G-MG.3 G-GMD.4 G-GPE.6 G-CO.1
				Industry Standards	**Science**
Weeks 25-27 **Internships** **Completing Job Applications** **Roof Framing and Applications Projects**	• How does climate effect the type of roofing materials? • How will you determine which methods and materials should be used for a specific job? • How do you determine roof pitch?	• Plan and construct a roof • Use correct tools, materials and procedures for selected jobs • Calculate correct pitch	• Pitch calculation • Materials estimate • Group project-roofing application	**Career Ready Practice** CRP 1-12	**Literacy** RST.11-12.2,4 WHST.11-12.2,3
				Cluster Standards AC1-5,7	**ELA** R.11-12.4 W.11-12.2,6 SL.11-12.1,2
				Pathway Standards AC-CST4,5,9	**Math** G-CO.1,5 G-SRT.6,8 G-GPE.5,7 G-MG.1,3
				Industry Standards	**Science**
Weeks 28-30	• What questions should	• Successfully participate in	• Develop appropriate	**Career Ready**	**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 Literacy, Math, Science
Mock Employment Interviews **Exterior Finishing Applications** **Internships**	you expect in a job interview? • How should you follow up after a job interview? • Why is the correct exterior finish an important part of a construction project? • What are the local building codes?	a professional interview • Accept interview feedback and adjust communication, etc., as needed • Define and apply moisture barriers and insulation • Install a variety of sidings • Determine type and install flashing material • Compare and contrast siding applications, including characteristics, advantages and disadvantages	questions and participate in interview with advisory committee members • Research and written summaries on siding applications • Completed installation of exterior applications	**Practice** CRP 1,2,3,4,5,6,7,8, 9,11,12	RST.11-12.2,4 WHST.11-12.2,3
				Cluster Standards AC1-5,7	**ELA** R.11-12.4 W.11-12.2,6 SL.11-12.1,2
				Pathway Standards AC-CST4,5,9 AC-DES2,3,8	**Math** G-MG.3
				Industry Standards	**Science**
Weeks 31-32 **Legal and Ethical Practices in the Trades** **Final Project Research and Proposals** **Internships End**	• Can you predict what will occur as a result of illegal/unethical practices? • How will the projects be selected and what should they include? • How will they be graded? • What resources will you need to complete an independent project and presentation?	• Research construction projects • Select appropriate resources for project completion • Meet timelines for project activities • Develop proposal for independent student project	• Position paper arguing or defending a legal or ethical situation • Article critique on current legal/ethical scenarios • Submit first proposal draft • Progress checks	**Career Ready Practice** CRP 1-12	**Literacy** RST.11-12.2,4 WHST.11-12.2,3
				Cluster Standards AC1,2,5,7	**ELA** R.11-12.4 W.11-12.2,6 SL.11-12.1,2
				Pathway Standards AC-CST4,5,9 AC-DES1,9	**Math**
				Industry Standards	**Science**
Week 33 **Project Proposal Resubmissions**	• What changes need to be made for resubmission?	• Understand proposal feedback and edit as required • Submit final proposals by predetermined deadline	• Final proposals for independent student projects	**Career Ready Practice** CRP 1,2,3,4,5,6,8,9, 11,12	**Literacy** RST.11-12.2,4 WHST.11-12.2,3
				Cluster Standards AC1	**ELA** R.11-12.4 W.11-12.6
				Pathway Standards AC-CST4,9	**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 Literacy, Math, Science
				Industry Standards	**Science**
Weeks 34-38 **Individual Student Project Work** **Finalize Portfolios**	• What are the best resources for your independent project? • What help will you need organizing and completing your project?	• Plan, organize and develop independent projects • Locate resources to support project work • Organize portfolio documents for presentation to a professional panel	• Project and portfolio progress checks	**Career Ready Practice** CRP 1,2,4,5,6,7,8,9, 11	**Literacy** RST.11-12.2,4 WHST.11-12.2,3
					ELA R.11-12.4 W.11-12.6
				Cluster Standards AC1	**Math**
				Pathway Standards AC-CST4,9	**Science**
Weeks 39-40 **Final Project Presentations to Professional Panel**	• How can you develop an informative presentation? • What key elements make up effective speeches? • What do you need to know about your target audience and why is it important?	• Develop independent project presentations • Present to a professional audience	• Practice speeches • Progress checks • Present to peers and professional panel	**Career Ready Practice** CRP 1,2,4,6,7,8,9,11	**Literacy** RST.11-12.2,4 WHST.11-12.2,3
					ELA R.11-12.4 W.11-12.6
				Cluster Standards AC1	**Math**
				Pathway Standards AC-CST4,9	**Science**
				Industry Standards	

Return to TOC

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

Return to TOC

Certification Status

The instructor's NYSED teacher certification application has been submitted. CTE Programs will provide regular updates on this status.

Return to TOC

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

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

National Craft Assessment and Certification Program
S P E C I F I C A T I O N S

CORE V2
ICS00_02
October 2013

Focus Statement
This assessment covers all of the competencies and objectives of NCCER's Core Curriculum: Introductory Craft Skills.

Overview

- Two-hour closed-book examination
- May use a basic function, non-printing calculator
- No extra papers, books, notes or study materials are allowed
- The minimum passing score is 75

Study Materials
All NCCER written assessments are referenced to NCCER's curriculum listed in the content. You may order modules from Pearson (800.922.0579) or from NCCER's Online Catalog at www.nccer.org

Assessment Development
All questions are developed and approved by subject matter experts under the direction of NCCER and Prov™, NCCER's testing partner.

Credentials
NCCER will send appropriate credentials to the assessment center for successful completions.

Training Prescription Reports
Each candidate will have access to individual results of the written assessment from Prov's website at www.provexam.com.

National Registry
Assessment results will be maintained in NCCER's National Registry and become a portable record of the candidate's training and assessment achievements.

Written Assessment Contents:

Content Domain	Number of Questions
Safety *[00101-09, 00109-09]*	10
Math *[00102-09]*	7
Tools *[00103-09, 00104-09]*	9
Construction Drawings *[00105-09]*	4
Rigging *[00106-09]*	4
Critical Skills *[00107-09, 00108-09]*	16
Total Number of Questions	**50**

National Craft Assessment and Certification Program

S P E C I F I C A T I O N S

Learning Objectives related to Assessment:

	Safety
Registry ID Number:	**Module Title Objectives:**
00101-09	**Basic Safety**
	Explain the idea of a safety culture and its importance in the construction crafts.
	Identify causes of accidents and the impact of accident costs.
	Explain the role of OSHA in job-site safety.
	Explain OSHA's General Duty Clause and 1926 CFR Subpart C.
	Recognize hazard recognition and risk assessment techniques.
	Explain fall protection, ladder, stair, and scaffold procedures and requirements.
	Identify struck-by hazards and demonstrate safe working procedures and requirements.
	Identify caught-in-between hazards and demonstrate safe working procedures and requirements.
	Define safe work procedures to use around electrical hazards.
	Demonstrate the use and care of appropriate personal protective equipment (PPE).
	Explain the importance of hazard communications (HazCom) and Material Data Safety Sheets (MSDSs).
	Identify other construction hazards on your job site, including hazards material exposures, environmental elements, welding and cutting hazards, confined spaces, and fires.
00109-09	**Introduction to Materials Handling**
	Define a load.
	Establish a pre-task plan prior to moving a load.
	Choose appropriate materials-handling equipment for the task.
	Recognize hazards and follow safety procedures required for materials handling.
	Math
Registry ID Number:	**Module Title Objectives:**
00102-09	**Introduction to Construction Math**
	Add, subtract, multiply, and divide whole numbers, with and without a calculator.
	Use a standards ruler, a metric ruler, and a measuring tape to measure.
	Add, subtract, multiply, and divide fractions.
	Add, subtract, multiply, and divide decimals, with and without a calculator.
	Convert decimals to percentages and percentages to decimals.
	Convert fractions to decimals and decimals to fractions.
	Explain what a metric system is and how it is important in the construction trade.
	Recognize and use metric units of length, weight, volume, and temperature.
	Recognize some of the basic shapes used in the construction industry and apply basic geometry to measure them.
	Tools
Registry	**Module Title Objectives:**

ID Number:	
00103-09	**Introduction to Hand Tools**
	Recognize and identify some of the basic hand tools and their proper uses in the construction trade.
	Visually inspect hand tools to determine if they are safe to use.
	Safely use hand tools.
00104-09	**Introduction to Power Tools**
	Identify power tools commonly used in the construction trades.
	Use power tools safely.
	Explain how to maintain power tools properly.
	Construction Drawings
Registry ID Number:	**Module Title Objectives:**
00105-09	**Introduction to Construction Drawings**
	Recognize and identify basic construction drawing terms, components, and symbols.
	Relate information on construction drawings to actual locations on the print.
	Recognize different classifications of construction drawings.
	Interpret and use drawing dimensions.
	Rigging
Registry ID Number:	**Module Title Objectives:**
00106-09	**Basic Rigging**
	Identify and describe the use of slings and common rigging hardware.
	Describe basic inspection techniques and rejection criteria used for slings and hardware.
	Describe basic hitch configurations and their proper connections.
	Describe basic load-handling safety practices.
	Demonstrate proper use of American Society of Mechanical Engineers (ASME) hand signals.
	Critical Skills
Registry ID Number:	**Module Title Objectives:**
00107-09	**Basic Communication Skills**
	Interpret information and instructions presented in both verbal and written form.
	Communicate effectively in on-the-job situations using verbal and written skills.
	Communicate effectively on the job using electronic communication devices.
00108-09	**Basic Employability Skills**
	Explain the role of an employee in the construction industry.
	Demonstrate critical thinking skills and the ability to solve problems using those skills.
	Demonstrate knowledge of computer systems and explain common uses for computers in the construction industry.
	Define effective relationship skills.
	Recognize workplace issues such as sexual harassment, stress, and substance abuse.

NOCTI CTE®

Measuring What Matters in

Job Ready Assessment Blueprint

Building Construction Occupations

Test Code: 4011 / Version: 01

General Assessment Information

Blueprint Contents

Test Type: The Building Construction Occupations 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 Michigan, Montana, New York, Oklahoma, Pennsylvania, and Tennessee.

CIP Code

46.0415- Building Construction Technology

Learning that works for America CTE™

Career Cluster 2- Architecture and Construction

O*NET™ in*it

47-2031.01- Construction Carpenters

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!

PBA Pennsylvania Builders Association

The Pennsylvania Builder's Association utilizes this assessment to assist in determining competencies for granting skill certificates to students graduating from Pennsylvania secondary trade programs that have been endorsed by the Pennsylvania Builder's Association (PBA)

PBA's services include support to workforce training and education by linking industry employers with educators to grow the workforce of tomorrow. PBA serves Pennsylvania communities and consumers through its steadfast efforts to protect homeownership rights and advocate for affordable housing options. PBA is affilliated with the National Association of Home Builders.

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

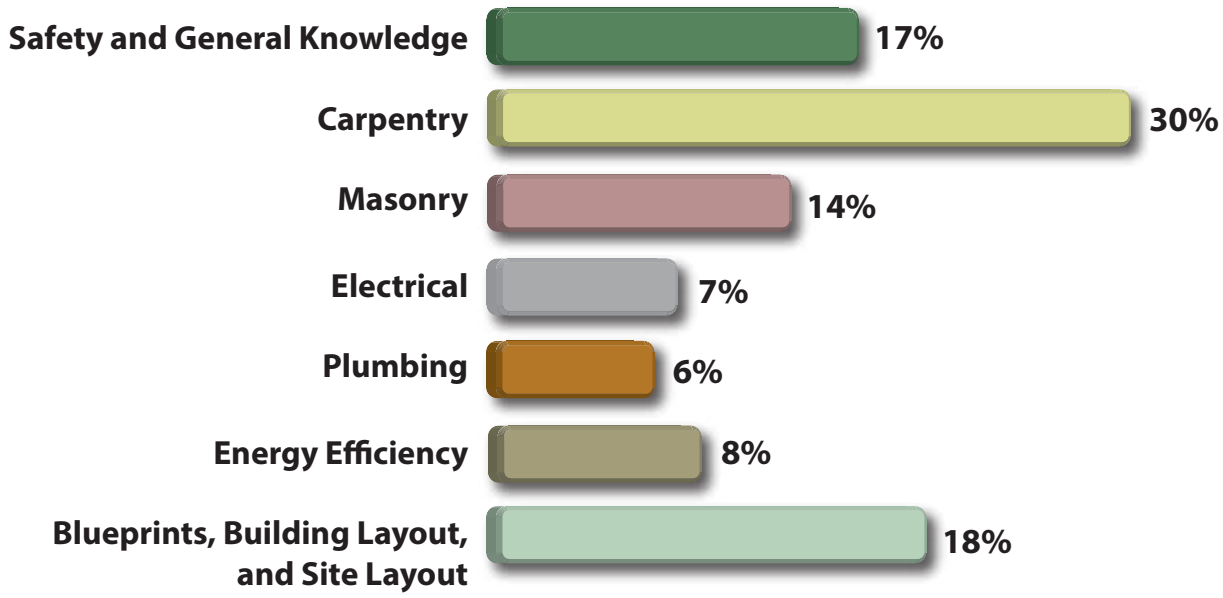
In the lower division baccalaureate/associate degree category, 1 semester hour in Construction.

Written Assessment

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

Administration Time: 3 hours
Number of Questions: 151
Number of Sessions: This assessment may be administered in one, two, or three sessions.

Areas Covered



Specific Standards and Competencies Included in this Assessment

Safety and General Knowledge

- Recognize and adhere to worksite safety rules (housekeeping and health related)
- Utilize appropriate personal protective equipment (PPE)
- Demonstrate understanding of ladder and scaffold safety
- Recognize and adhere to governmental regulations (e.g., OSHA, SDS)
- Demonstrate safe and appropriate use of hand tools
- Demonstrate safe and appropriate use of power tools

Carpentry

- Identify carpentry materials
- Describe, lay out, and construct wood floor framing
- Calculate, lay out, and construct stairs
- Identify, lay out, and construct wood wall framing
- Describe, calculate, and construct ceiling and roof framing
- Identify and install roofing materials (e.g., shingles, fasteners, flashings)
- Differentiate various styles of roofs
- Identify, estimate, and install exterior windows and doors
- Identify, measure, calculate, and apply exterior finishes (e.g., sidings, trims)
- Describe and install interior finishes (e.g., drywall, doors, trims)

Masonry

- Identify, calculate quantities, and install footings and foundations
- Identify, calculate quantities, and install brick and block
- Identify, calculate quantities, and install various types of tile
- Identify, calculate quantities, place/pour, and finish concrete applications (e.g., sidewalks, steps)

(Continued on the following page)

Specific Standards and Competencies (continued)

Electrical

- Identify, estimate, and install rough electrical (including wire and cable)
- Identify, calculate quantities, and install finish electrical

Plumbing

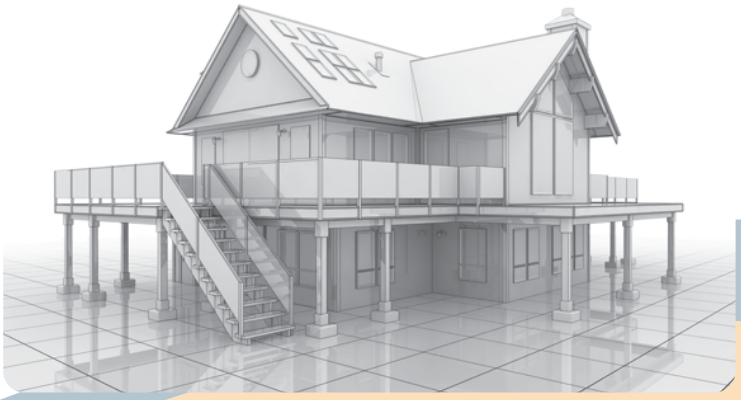
- Identify, estimate, design, and install rough plumbing (e.g., PVC, ABS, copper, PEX)
- Identify, calculate quantities, and install finish plumbing fixtures

Energy Efficiency

- Identify, estimate, and install insulation and interpret R-values
- Recognize various ventilation applications
- Identify "green" construction technology (e.g., lighting, Energy Star®)

Blueprints, Building Layout, and Site Layout

- Recognize blueprint terms, symbols, and abbreviations
- Interpret blueprints and calculate quantities
- Demonstrate use of architect's scale
- Lay out buildings using various calculations, squaring, and leveling methods



Sample Questions

According to OSHA regulations, when working on a multilevel construction site, workers should wear _____ at all times.

A. face shields
B. hearing protection
C. knee pads
D. hard hats

To protect an outside drywall corner, it may be reinforced with a corner

A. board
B. lath
C. bead
D. rite

How many courses of concrete block are needed for a wall 8 feet high?

A. 12
B. 14
C. 16
D. 17

The allowable number of conductors within an electrical box is determined by the _____ of the box.

A. volume
B. area
C. length
D. depth

The purpose of a trap is to

A. discharge sewer gas from the building
B. prevent sewer gas from entering the building
C. prevent excess pressure from building up in the system
D. trap solid waste material

(Continued on the following page)

Sample Questions (continued)

A _____ is a pre-cut length of rolled fiberglass insulation.

A. filler
B. batt
C. cricket
D. standard

The height of the window header is found in the

A. site section
B. plot plan
C. wall section
D. mechanical plan

The leading cause of fatalities in the construction industry is

A. falls
B. lacerations
C. electrical shock
D. structure fires

What unit of measure is used for a heating device size, such as a furnace?

A. BTU - British thermal unit
B. BHU - British heat unit
C. ATU - American thermal unit
D. AHU - American heat unit

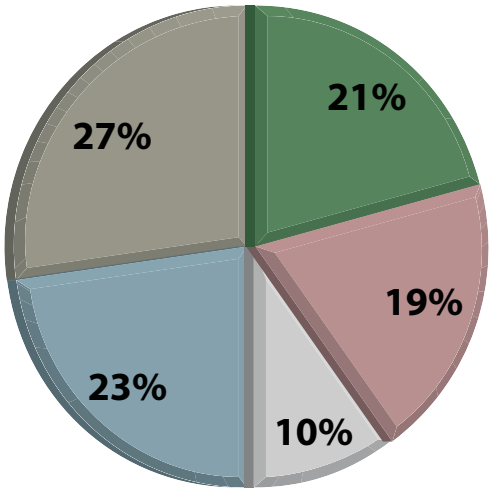
Roof trusses are typically spaced _____ on center.

A.10 inches
B. 15 inches
C. 20 inches
D. 24 inches

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: 2 hours and 25 minutes
Number of Jobs: 5



Areas Covered:

21% Solder Pipe
Participant will correctly cut, ream, clean, flux, and solder copper tubing into a complete, finished product.

19% Lay Out Rafter
Participant will position the rafter crown, create the correct rafter line length and overhang length, place and cut the bird's mouth correctly, and cut the tail plumb and ridge plumb correctly.

10% Calculate and Cut a Stud
Participant will cut the stud to the correct length and shape.

23% Rough and Finish Electrical
Participant will correctly set boxes, choose and install cables, pre-wire boxes, choose, wire, and install switch properly, split and wire the receptacle correctly.

27% 8-Inch Block Wall Construction
Participant will construct the block course correctly, with correct wall height, length and straightness, as well as a correct wall plumb and level and full, finished joints.

Sample Job

8-Inch Block Wall Construction

Maximum Time: 45 minutes

Participant Activity: The participant is to construct a block wall 47-5/8-inches long by 24-inches high, strike all joints using a convex jointer, and finish wall with a clean appearance.

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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Return to TOC

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

MORRISVILLE
STATE COLLEGE

Residential Construction A.O.S.
RESC 130 Light Framing (3 credits)
Articulation Agreement Between
SUNY Morrisville
And
William Nottingham High School
Construction Trades Technology Program

STATE UNIVERSITY OF NEW YORK • COLLEGE OF AGRICULTURE AND TECHNOLOGY
P.O. BOX 901 • MORRISVILLE, NEW YORK • 13408-0901

ADMISSIONS OFFICE
PHONE: 315-684-6046
FAX: 315-684-6427

MORRISVILLE STATE COLLEGE

General Student Agreement

The following agreement has been developed to meet the needs of students who are pursuing educational programs in the secondary schools listed below and are continuing their education at SUNY Morrisville.

The purpose of this articulation agreement is to provide a continuing articulation program that builds on past learning experiences and eliminates the unnecessary duplication of instruction. Specific articulation provisions are listed with each course.

Specific Articulation Provisions

In order to receive RESC 130 credit at SUNY Morrisville, the responsible instructor (or designee) from William Nottingham High School agrees to:

1. Provide a letter of recommendation verifying the student's proficiency
2. Submit the student's transcripts and CTE Program Student Record if applicable.
3. Provide Morrisville State College with a copy of their curriculum outline in Construction Trades Technology upon initial agreement and renewal agreements.
4. To notify Morrisville State College in writing of any changes to the attached curriculum

SUNY Morrisville will grant credit whenever the student officially matriculates into the Residential Construction degree program and meets the following criteria:

- Students must have a cumulative average of a C or better in the William Nottingham High School Construction Trades Technology Program and must have obtained CTE endorsement.
- Students will be granted three (3) credits of RESC 130 upon earning 12 credits with a cumulative GPA of at least a 2.0.
- Students will be required to participate in an assessment test facilitated by SUNY Morrisville faculty in order to show mastery of RESC 130 course material.
- Upon acceptance at Morrisville State College, the student should contact his or her high school counseling department to facilitate the granting of credit.
- This agreement will be reviewed and renewed every five (5) years.
- This agreement will be in effect upon signing by both parties and may be revised upon mutual agreement of both parties.

ADMISSIONS OFFICE
PHONE: 315-684-6046
FAX: 315-684-6427

MORRISVILLE STATE COLLEGE

X _____

Date: 6/8/18

Dr. Barry Spriggs
Provost
Morrisville State College

X _____

Date: 6/29/18

Jaime Alicea
Superintendent
Syracuse City School District

X _____

Date: 6/1/18

Dr. Christopher Nyberg
Dean-School of Agriculture and Natural Resources
Morrisville State College

Linda D. Mulvey

Linda D. Mulvey - Chief Academic Officer

6/27/18

Date:

Note: The course outline can be viewed in the articulation drive with the electronic copy of this signed agreement

Construction_Tech_100_400.pdf

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

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."

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 #
INSURED	INSURER A :	
	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

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

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

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

Syracuse City School District

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

CTE Internship Ready to Work Assessment

(Form #3)

Teacher | Employer | Student

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

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

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

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… _____

Employer

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

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NOTICE OF NON-DISCRIMINATION

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:

Assistant Superintendent for Student Support Services, Civil Rights Compliance Officer
Syracuse City School District
725 Harrison Street • Syracuse, NY 13210
(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

EMPLOYABILITY PROFILE

ConstructionTechnology

Industry-Based Skill Standards

Proficiency Definitions

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

	9th	10th	11th	12th
Shop Safety				
Demonstrates sound safety practices in the shop and worksite environments including tool safety, ladder safety, personal protective apparel, and construction site safety				
Hand and Power Tools				
Demonstrates proper selection and use of both hand and hand-held power tools used in the construction industry. Cleans, maintains, and properly stores all tools				
Stationary Woodworking Equipment				
Demonstrates safe operation of stationary equipment such as table saws, band saws, drill presses, jointers, shapers, sanding machines, and lathes				
Blue Print Reading				
Can read and interpret blue prints and scaled drawings, detail drawings, and plot drawings to obtain information about construction plans and details				
Ladders and Scaffolding Safety				
Demonstrates safe use of ladders, scaffoldings, pump jackes, and other rigging commonly found on a residential construction work site				
Masonry and Concrete				
Demonstrates understanding of masonry building techniques such as block, brick, and veneer using appropriate tools and techniques. Can form, pour, and finish flat concrete projects				
Floor Framing				
Demonstrtes the ability to cut and assemble floor framing according to building plans using wood framing techniques. Installs load bearing pilasters, beams, and frames openings				
Wall and Ceiling Framing				
Demonstratesw the ability to layout, assemble, erect, and brace wall and ceiling framing according to building plans. Constructs headers to carry loads over openings				
Basic Residential Wiring				
Reads and interprets electical building drawings to install outlets, junction boxes, ceiling boxes, and switch boxes in correct locations. Pulls and secures wiring to code specification				

	9th	10th	11th	12th
Roof Framing				
Demonstrates the ability to lauout common and hip rafters, install trusses, and install sheathing and appropriate finishing techniques to gables and fachia				
Interior Wall and Ceiling Finishing				
Demonstrates the ability to install drywall and other wall finishing materials using appropriate equipment and techniques. Finishes and prepares wall and ceilings for paint				
Stair Construction				
Demonstrates the ability to layout and construct stairs and stair stringers using basic layout techniques. Installs and finishes stairs to building specs using blueprint information				
Windows and Exterior Doors				
Demonstrates the ability to install windows and doors using appropriate techniques and weatherization principals. Can remove and replace original with replacement units				
Interior Doors and Trim				
Installs interior doors and trim surfaces using approporate tools and techniques according to building plans and detail drawings. Uses both hand and air tools to complete installations				
Kitchen Cabinet Installation				
Installs and finishes pre-made cabinetry in kitchens and baths using appropriate installation techniques and tools. Builds countertops using laminate and installs according to plans				
Exterior Wall Finish				
Demonstrates the ability to install exterior wall finishes according to material specifications such as wood siding, vinyl siding, stucco, and various composite materials per building plans				
OSHA 10 Certification				
Completes OSHA Training on site safety, ladder safety, rigging, and material handling to earn the OSHA 10 industry certification				
Career Development Portfolio				
Has developed a career development portfolio using appropriate writing skills to create cover letter, resumes, samples of work, and career plan to be used in the job seeking process				

Industry Certifications / Credential / Endorsement	yes	no
OSHA 10 Certification		

Articulated College Credit or Advanced Standing	credits
Total	

EMPLOYABILITY PROFILE
Construction Technology

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 ☐

Special Recognitions or Scholarships _____

Student Leadership Organization _____