

**Arkansas Department of Career Education
Model Framework**

Course Title: Construction Fundamentals

Career Cluster: Architecture & Construction

Secondary – Skilled and Technical Sciences	
Course Number	494480
CIP Number	46
Grade Level	9-12
Prerequisite	None
Course Type	Core
Teacher Certification	570
CTSO	SKILLS
Facility Requirements	http://arkansasfacilities.arkansas.gov/facilities/academic-facilities-manual
Industry Certifications	http://www.nccer.org Certificate in Core Curriculum

Course Description

This instructional program prepares individuals to apply technical knowledge and skills in the building, inspecting, and maintaining of structures and related properties. Successful completion will allow student to earn NCCER credential in CORE curriculum.

Program Purpose/Structure

This course is based on the NCCER Core Curriculum.

Laboratory Activities

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Special Notes

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Career and Technical Student Organization (CTSO)

SkillsUSA

**Arkansas Department of Career Education
Student Performance Standards**

Course Title: Construction Fundamentals
Course Number: 494480
Course Credit: 1

Construction Fundamentals Indicators: At the completion of the course the student will be able to . .

- 1.0 Demonstrate appropriate safety procedures in a construction lab
 - 1.1 Follow safe work practices and procedures in accordance with OSHA standards
 - 1.2 Recognize hazards and follow safety procedures required for materials handling
- 2.0 Understand and utilize contextual math procedures
 - 2.1 Examine the theories behind some basic mathematical procedures and apply the procedures to related tasks
- 3.0 Learn how to safely use industry tools
 - 3.1 Demonstrate how to safely use and maintain common and/or specialized hand tools
 - 3.2 Demonstrate how to safely use and maintain common and/or specialized power tools
- 4.0 Construction industry orientation and employment
 - 4.1 Review the history of carpentry, describe apprenticeship program, identify career opportunities, and explain the responsibilities and characteristics of a worker
 - 4.2 Review the history of plumbing, identify career opportunities, and explain the responsibilities and characteristics of a worker
 - 4.3 Review the history of electrical profession, and determine the responsibilities and characteristics of a worker
- 5.0 Construction drawings and uses in the industry
 - 5.1 Recognize basic terms for construction drawings, components, and symbols as well as explain the different types of drawings, and interpret and use drawing dimensions
- 6.0 Employability Skills needed for the construction industry
 - 6.1 Examine the basic soft skills of the industry trade which include reading, writing, listening, and speaking
 - 6.2 Determine interpersonal skills needed for success in the construction industry

Standard 1.0 Demonstrate appropriate Safety Procedures in a Construction Lab			
Performance Indicator 1.1 Follow safe work practices and procedures in accordance with OSHA standards.	Recommended Application/Activity Reference NCCER 00101-09	CCSS Standards	CCTC Standards
1.1.1 Explain the idea of a safety culture and its importance in the construction crafts Explain the role of OSHA in job-site safety. Explain OSHA's General Duty Clause and 1926 CFR Subpart C.	<ul style="list-style-type: none"> Demonstrate, define, and identify the safety culture in the construction craft. Write an essay on the importance of job safety in the construction craft field, including subpart C. 	W11-12.3	AC3
1.1.2 Identify causes of accidents and the impact of accident costs. Recognize hazard recognition and risk assessment techniques.	<ul style="list-style-type: none"> Expose students to visual safety programs. Have students inspect worksite/shop to find safety hazards. Have students create a plan to correct the hazard 	R11-12.3	AC3
1.1.3 Explain fall protection, ladder, stair and scaffold procedures and requirements.	<ul style="list-style-type: none"> Engaging students with visual learning activity. Set up an extension ladder properly Demonstrate three-point contact on a ladder Erect and dismantle scaffolding 	R11-12.1	AC3
1.1.4 Identify struck-by hazards and demonstrate safe working procedures and requirements. Identify caught-in-between hazards and demonstrate safe working procedures and requirements.	<ul style="list-style-type: none"> Engaging students with visual learning activity Research an accident caused by struck-by or caught-in-between hazards and present to class. 		AC3
1.1.5 Define safe work procedures to use around electrical hazards.	<ul style="list-style-type: none"> Explain the difference between barrier and barricade Demonstrate how to properly use lock-out, tag-out 		AC3
1.1.6 Demonstrate the use and care of appropriate personal protective equipment (PPE).	<ul style="list-style-type: none"> Properly don and remove PPE Proper maintenance "safety goggles, hard hat, and personal fall protection" 	SL11-12.1b	AC3
1.1.7 Explain the importance of hazard communications (HazCom) and Safety Data Sheets (SDSs).	<ul style="list-style-type: none"> Match SDS sheets to products in the shop area Write a SDS sheet for a chemical 	R11-12.1	AC3
1.1.8 Identify other construction	<ul style="list-style-type: none"> Create and complete a checklist of all hazards on the job site/shop 	R11-12.1	AC3

<p>hazards on your job site, including hazardous material exposures, environmental elements, welding and cutting hazards, confined spaces, and fires.</p>	<ul style="list-style-type: none"> • Describe fire preventing and firefighting techniques • Demonstrate use of fire extinguisher 		
<p>Performance Indicator 1.2 Recognize hazards and follow safety procedures required for materials handling.</p>	<p align="center">Recommended Application/Activity Reference NCCER 00109-09</p>	<p align="center">CCSS Standards</p>	<p align="center">CCTC Standards</p>
<p>1.2.1 Define a load. Establish a pre-task plan prior to moving a load.</p>	<ul style="list-style-type: none"> • Verify a shipment off invoice • Create a staging area for material • Explain how to purchase material, transport it, and unload material 	<p>SL11-12.1b</p>	<p>AC1</p>
<p>1.2.2 Use proper materials-handling techniques.</p>	<ul style="list-style-type: none"> • Demonstrate proper lifting procedures • Proper equipment used • Proper storage and stacking of materials 	<p>Click here to enter text.</p>	<p>AC1</p>

Standard 2.0 Understand and utilize Contextual Math procedures			
Performance Indicator 2.1 Examine the theories behind some basic mathematical procedures and apply the procedures to related tasks.	Recommended Application/Activity Reference NCCER 00102-09	CCSS Standards	CCTC Standards
2.1.1 Add, subtract, multiply, and divide whole numbers, with and without a calculator. Add, subtract, multiply, and divide fractions. Add, subtract, multiply, and divide decimals, with and without a calculator.	<ul style="list-style-type: none"> • Calculate a material list for constructing a project • Calculate a weekly payroll • Calculate a profit/loss statement on a project 	R11-12.9	AC1
2.1.2 Use a standard ruler, a metric ruler, and a measuring tape to measure.	<ul style="list-style-type: none"> • Measure series of objects using standard and metric measuring devices • Construct a project 	R11-12.9	AC1
2.1.3 Convert decimals to percentages and percentages to decimals. Convert fractions to decimals and decimals to fractions.	<ul style="list-style-type: none"> • Demonstrate different techniques verbally/ hands-on for conversations • Develop a series of study problems related to industry 	R11-12.9	AC1
2.1.4 Explain what the metric system is and how it is important in the construction trade.	<ul style="list-style-type: none"> • Expose students to global construction measurement system • Develop a series of study problems related to the global industry 	R11-12.9	AC1
2.1.5 Recognize and use metric units of length, weight, volume, and temperature.	<ul style="list-style-type: none"> • Convert standard unit measures to metric units using a standard measure tape, beaker, and scales • Develop a series of study problems 	R11-12.9	AC1
2.1.6 Recognize some of the basic shapes used in the construction industry and apply basic geometry to measure them.	<ul style="list-style-type: none"> • Hands on activities either building or constructing a general structure • Design stairs, trusses, and rafters 	R11-12.9	AC1

Standard 3.0 Learn how to safely use Industry Tools			
Performance Indicator 3.1 Demonstrate how to safely use and maintain common and/or specialized hand tools.	Recommended Application/Activity Reference NCCER 00103-09	CCSS Standards	CCTC Standards
3.1.1 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	<ul style="list-style-type: none"> • Demonstrate, practice and properly use of hand tools • Create a research paper and report on the history of hand tools in the industry • Students inspect hand tools 	SL11-12.1b	AC1
Performance Indicator 3.2 Demonstrate how to safely use and maintain common and/or specialized power tools.	Recommended Application/Activity Reference NCCER 00104-09	CCSS Standards	CCTC Standards
3.2.1 Identify power tools commonly used in the construction trades. Use power tools safely. Explain how to maintain power tools properly	<ul style="list-style-type: none"> • Demonstrate, practice and properly use of power tools • Demonstrate proper use of power tools • Write a summary of how to use a power tool properly • Show how to store and clean power tools properly 	SL11-12.1b	AC1

Standard 4.0 Construction Industry Orientation and employment			
Performance Indicator 4.1 Review the history of carpentry, describe apprenticeship program, identify career opportunities, and explain the responsibilities and characteristics of a worker.	Recommended Application/Activity Reference NCCER 27101-06	CCSS Standards	CCTC Standards
4.1.1 Describe the history of the carpentry trade.	<ul style="list-style-type: none"> Create a timeline for carpentry from 1800's to present 	SL11-12.1b	AC4
4.1.2 Identify the aptitudes, behaviors, and skills needed to be a successful carpenter. Identify the training opportunities within the carpentry trade.	<ul style="list-style-type: none"> SkillsUSA Professional Development Program Level 1. Describe the progression of training and the levels competency that can be achieved 		AC4
4.1.3 Identify the career and entrepreneurial opportunities within the carpentry trade. Identify the various responsibilities of people working in the construction industry	<ul style="list-style-type: none"> Breakdown the job opportunities in the construction field Research the pay, education, and diversity of the jobs in the construction industry 	SL11-12.3	AC4
4.1.4 State the personal characteristics of a professional.	<ul style="list-style-type: none"> Write a report on professionalism SkillsUSA Professional Development Program Level 1 	W11-12.3	AC4
Performance Indicator 4.2 Review the history of plumbing, identify career opportunities, and explain the responsibilities and characteristics of a worker.	Recommended Application/Activity	CCSS Standards	CCTC Standards
4.2.1 Describe the history of the plumbing profession. Identify the stages of progress within the plumbing profession and its positive impact on society.	<ul style="list-style-type: none"> Click here to enter text.Create a timeline for plumbing industry from 1800's to present Explain the impact on how plumbing has created a safe and healthier environment 	SL11-12.1b□	AC7

<p>4.2.2 Identify the various responsibilities of people working in the plumbing industry.</p>	<ul style="list-style-type: none"> • Breakdown the job opportunities in the plumbing field. • Students research the pay, education, and diversity of the jobs in the plumbing industry 	<p>SL11-12.1b□</p>	<p>AC7</p>
<p>4.2.3 State the personal characteristics of a professional.</p>	<ul style="list-style-type: none"> • Write a report on professionalism • SkillsUSA Professional Development Program Level 1 	<p>SL11-12.1b□</p>	<p>AC7</p>
<p>Performance Indicator 4.3 Review the history of electrical profession, and determine the responsibilities and characteristics of a worker.</p>	<p style="text-align: center;">Recommended Application/Activity</p>	<p style="text-align: center;">CCSS Standards</p>	<p style="text-align: center;">CCTC Standards</p>
<p>4.3.1 Describe various career paths/opportunities one might follow in the electrical trade. Describe the apprenticeship/training process for electricians.</p>	<ul style="list-style-type: none"> • Breakdown the job opportunities in the electrical fields. • Research the pay, education, and diversity of the jobs in the electrical industry 	<p>SL11-12.1b□</p>	<p>AC7</p>
<p>4.3.2 State the tasks typically performed by an electrician.</p>	<ul style="list-style-type: none"> • Describe the various phases of the electrical project • Visual aide 	<p>SL11-12.1b□</p>	<p>AC7</p>
<p>4.3.3 Explain the responsibilities and aptitudes of an electrician.</p>	<ul style="list-style-type: none"> • SkillsUSA Professional Development Program Level 1. Describe the progression of training and the levels competency that can be achieved 	<p>SL11-12.1b□</p>	<p>AC7</p>

Standard 5.0 Construction Drawings and uses in the industry			
Performance Indicator 5.1 Recognize basic terms for construction drawings, components, and symbols as well as explain the different types of drawings, and interpret and use drawing dimensions.	Recommended Application/Activity Reference NCCER 00105-09	CCSS Standards	CCTC Standards
5.1.1 Recognize and identify basic construction drawing terms, components, and symbols.	<ul style="list-style-type: none"> • Draw a blue print • Write specifications 	W11-12.5 W11-12.6	AC6
5.1.2 Relate information on construction drawings to actual locations on the print. Recognize different classifications of construction drawings. Interpret and use drawing dimensions.	<ul style="list-style-type: none"> • Draw a blue print. Have students locate detail information by using section cuts, pages, and specifications 	L11-12.4a	AC6

Standard 6.0 Employability Skills needed for the construction industry			
Performance Indicator 6.1 Examine the basic soft skills of the industry trade which include reading, writing, listening, and speaking.	Recommended Application/Activity Reference NCCER 00108-09	CCSS Standards	CCTC Standards
6.1.1 Interpret information and instructions presented in both verbal and written form.	<ul style="list-style-type: none"> Professional Development Program workbook level 1. Instructor fill out a work related form and have students interpret Perform a giving task from oral instruction 	SL11-12.1	AC7
6.1.2 Communicate effectively in on-the-job situations using verbal and written skills.	<ul style="list-style-type: none"> Professional Development Program workbook level 1 Write resumes and do mock job interviews 	W11-12.5 W11-12.6	AC7
6.1.3 Communicate effectively on the job using electronic communication devices.	<ul style="list-style-type: none"> Build a resume on computer and email to the instructor Create a memo and email to the instructor 	SL11-12.1 W11-12.6	AC7
Performance Indicator 6.2 Determine interpersonal skills needed for success in the construction industry.	Recommended Application/Activity Reference NCCER 00107-09	CCSS Standards	CCTC Standards
6.2.1 Explain the role of an employee in the construction industry.	<ul style="list-style-type: none"> Recognize terminology Explain what companies are looking for in an employee 	R11-12.1	AC7
6.2.2 Demonstrate critical thinking skills and the ability to solve problems using those skills.	<ul style="list-style-type: none"> Professional Development Program workbook level 1. Create a scenario for students to solve step by step 	R11-12.7	AC7
6.2.3 Demonstrate knowledge of computer systems and explain common uses for computers in the construction	<ul style="list-style-type: none"> Design a project using auto cad or other drawing software Design a presentation 	R11-12.3 SL11-12.5	AC7
6.2.4 Define effective relationship skills.	<ul style="list-style-type: none"> Complete Professional Development Program workbook level 1 working in groups 	SL11-12.1a	AC7
6.2.5 Recognize workplace issues such as sexual harassment, stress, and substance abuse.	<ul style="list-style-type: none"> Professional Development Program workbook level 1. 	SL11-12.3	AC7

Common Core State Standards Grades 9-12

ELA Speaking and Listening Standards Grades 11-12

1. Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively. **SL11-12.1**
 - a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. **SL11-12.1a**
 - b. Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed. **SL11-12.1b**
 - c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. **SL11-12.1c**
 - d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task. **SL11-12.1d**
2. Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. **SL11-12.2**
3. Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used. **SL11-12.3**
4. Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks. **SL11-12.4**
5. Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. **SL11-12.5**

ELA Language Grades 11-12

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11–12 reading and content, choosing flexibly from a range of strategies. **L11-12.4**
 - a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase. **L11-12.4a**

- b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive, conception, conceivable). **L11-12.4b**
 - c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage. **L11-12.4c**
 - d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary) **L11-12.4d**
6. Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. **L11-12.6**

Reading Standards for Literacy in Science and Technical Subjects Grades 11-12

- 1. Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. **R11-12.1**
- 2. Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. **R11-12.2**
- 3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text. **R11-12.3**
- 4. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics. **R11-12.4**
- 5. Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas. **R11-12.5**
- 6. Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved. **R11-12.6**
- 7. Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem. **R11-12.7**
- 8. Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information. **R11-12.8**
- 9. Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible. **R11-12.9**
- 10. By the end of grade 12, read and comprehend science/technical texts in the grades 11–CCR text complexity band independently and proficiently. **R11-12.10**

Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects Grades 11-12

1. Write arguments focused on discipline-specific content. **W11-12.1**
 - a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence. **W11-12.1a**
 - b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases. **W11-12.1b**
 - c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. **W11-12.1c**
 - d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. **W11-12.1d**
 - e. Provide a concluding statement or section that follows from or supports the argument presented. **W11-12.1e**
2. Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. **W11-12.2**
 - a. Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. **W11-12.2a**
 - b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. **W11-12.2b**
 - c. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. **W11-12.2c**
 - d. Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers. **W11-12.2d**
 - e. Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic). **W11-12.2e**
3. Write precise enough descriptions of the step-by-step procedures they use in their investigations or technical work that others can replicate them and (possibly) reach the same results. **W11-12.3**
4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. **W11-12.4**
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. **W11-12.5**

6. Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information. **W11-12.6**
7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. **W11-12.7**
8. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. **W11-12.8**
9. Draw evidence from informational texts to support analysis, reflection, and research. **W11-12.9**
10. Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. **W11-12.10**

Common Career and Technical Core Standards

Architecture and Construction Career Cluster

Architecture and Construction Career Cluster Standards

1. Use vocabulary, symbols, and formulas common to architecture and construction. **AC1**
2. Use architecture and construction skills to create and manage a project. **AC2**
3. Comply with regulations and applicable codes to establish and manage a legal and safe workplace/jobsite. **AC3**
4. Evaluate the nature and scope of the Architecture and Construction Career Cluster and the role architecture and construction play in society and the economy. **AC4**
5. Describe the roles, responsibilities, and relationships found in the architecture and construction trades and professions, including labor/management relationships. **AC5**
6. Read, interpret, and use technical drawings, documents, and specifications to plan a project. **AC6**
7. Describe career opportunities and means to achieve those opportunities in each of the Architecture and Construction Career Pathways. **AC7**

Construction Career Pathway (AC-CST)

1. Describe contractual relationships between all parties involved in the building process. **AC-CST1**
2. Describe the approval procedures required for the successful completion of a construction project. **AC-CST2**
3. Implement testing and inspection procedures to ensure successful completion of the construction project. **AC-CST3**
4. Apply scheduling practices to ensure the successful completion of a construction project. **AC-CST4**
5. Apply practices and procedures required to maintain jobsite safety. **AC-CST5**
6. Manage relationships with internal and external parties to successfully complete construction projects. **AC-CST6**

7. Compare and contrast the building systems and components required for a construction project. **AC-CST7**
8. Demonstrate the construction crafts required for each phase of a construction project. **AC-CST8**
9. Safely use and maintain appropriate tools, machinery, equipment, and resources to accomplish construction project goals. **AC-CST9**

Common Career and Technical Core Career Ready Practices (CCTC CRP)

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|--|---|
| <ol style="list-style-type: none">1. Act as a responsible and contributing citizen and employee. CRP12. Apply appropriate academic and technical skills. CRP23. Attend to personal health and financial well-being. CRP34. Communicate clearly, effectively, and with reason. CRP45. Consider the environmental, social and economic impacts of decisions. CRP56. Demonstrate creativity and innovation. CRP6 | <ol style="list-style-type: none">7. Employ valid and reliable research strategies. CRP78. Utilize critical thinking to make sense of problems and persevere in solving them. CRP89. Model integrity, ethical leadership, and effective management. CRP910. Plan education and career path aligned to personal goals. CRP1011. Use technology to enhance productivity. CRP1112. Work productively in teams while using cultural/global competence. CRP12 |
|--|---|