

Standards Alignment: Common Core / Carpentry

Construction Standards	Common Core Standards	Explanation
Module 00101-09 – Basic Safety	RI 11-12.7, RST 11-12.2	Watch safety videos, read related information on safety, and demonstrate safety procedures.
1. Explain the idea of a safety culture and its importance in the construction crafts.	SL 11-12.1.a, SL 11-12.1.c	Read and understand information, discuss as a group, and ask questions to understand safety processes and procedures.
2. Identify causes of accidents and the impact of accident costs.	SL 11-12.1.a, SL 11-12.1.c	
3. Explain the role of OSHA in job-site safety.	SL 11-12.1.a, SL 11-12.1.c	
4. Explain OSHA's General Duty Clause and 1926 CFR Subpart C.	SL 11-12.1.a, SL 11-12.1.c	
5. Recognize hazard recognition and risk assessment techniques.	SL 11-12.1.a, SL 11-12.1.c	
6. Explain fall protection, ladder, stair, and scaffold procedures and requirements.	SL 11-12.1.a, SL 11-12.1.c F-IF 2, F-IF 4, F-BF 1, F-LE 1, F-LE 5	Demonstration. Extension ladder ratio.
7. Identify struck-by hazards and demonstrate safe working procedures and requirements.		
8. Identify caught-in-between hazards and demonstrate safe working procedures and requirements.		
9. Define safe work procedures to use around electrical hazards.	SL 11-12.1.a, SL 11-12.1.c	
10. Demonstrate the use and care of appropriate personal protective equipment (PPE).		
11. Explain the importance of hazard communications (HazCom) and Material Safety Data Sheets (MSDSs).	SL 11-12.1.a, SL 11-12.1.c	

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12. Identify other construction hazards on your job site, including hazardous material exposures, environmental elements, welding and cutting hazards, confined spaces, and fires.	SL 11-12.1.a, SL 11-12.1.c	
13. Demonstrate an understanding of safety through the OSHA 10-hour safety course and assessment.	SL 11-12.1.a, SL 11-12.1.c	
Module 00102-09 – Introduction to Construction Math This module introduces mathematical operations commonly used in construction and explains how the metric system and geometry are used in the trade. Trainees will learn how to add, subtract, multiply, and divide whole numbers, fractions, and decimals, as well as how to convert decimals, fractions, and percentages.		
1. Add, subtract, multiply, and divide whole numbers, with and without a calculator.	N-Q 1, N-Q 2, N-Q 3	“Reason quantitatively and use units to solve problems” —put in a construction context with units.
2. Use a standard ruler, a metric ruler, and a measuring tape to measure.	N-RN 3, N-Q 1, N-Q 2, N-Q 3, F-IF 4, F-BF 1, F-BF 2, F-LE 1, F-LE 5	
3. Add, subtract, multiply, and divide fractions.	N-RN 3	
4. Add, subtract, multiply, and divide decimals, with and without a calculator.	N-RN 3, N-Q 1, N-Q 2, N-Q 3	
5. Convert decimals to percentages and percentages to decimals.	N-RN 3, N-Q 1, N-Q 2, N-Q 3, F-IF 4, F-BF 1, F-BF 2, F-LE 1	
6. Convert fractions to decimals and decimals to fractions.	N-RN 3, N-Q 1, N-Q 2, N-Q 3, F-IF 4, F-BF 1, F-BF 2, F-LE 1	
7. Explain what the metric system is and how it is important in the construction trade.	N-RN 3, N-Q 1, N-Q 2, N-Q 3, F-IF 4, F-BF 1, F-BF 2, F-LE 1	
8. Recognize and use metric units of length, weight, volume, and temperature.	N-RN 3, N-Q 1, N-Q 2, N-Q 3, F-IF 4, F-BF 1, F-BF 2, F-LE 1	
9. Recognize some of the basic shapes used in the construction industry and apply basic geometry to measure them.	G-CO 5, G-SRT 2, G-SRT 3, G-SRT 5, G-SRT 8, G-GMD 1, G-GMD 3, G-GMD 4, G-MG 1	

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Module 00103-09 – Introduction to Hand Tools This module explains how to inspect and properly use hand tools. Trainees will learn how to identify and take care of basic hand tools.		Some math concepts from above can be reinforced and expanded in teaching the use of some tools.
1. Recognize and identify some of the basic hand tools and their proper uses in the construction trade.	SL 11-12.5, SL 11-12.1.a, RI 11-12.7, RST 11-12.2	Pull evidence from the text. Reading and research.
2. Visually inspect hand tools to determine if they are safe to use.		
3. Safely use hand tools.	RI 11-12.7, RST 11-12.2	
Module 00104-09 – Introduction to Power Tools This module introduces power tools commonly used in the construction trade. Trainees will learn how to safely use and properly maintain a variety of power tools.		
1. Identify power tools commonly used in the construction trades.	SL 11-12.5, SL 11-12.1.a, RI 11-12.7, RST 11-12.2	
2. Use power tools safely.		
3. Explain how to maintain power tools properly.	SL 11-12.1.a	
Module 00105-09 – Introduction to Construction Drawings This module discusses blueprint terms, components, and symbols. Trainees will learn how to interpret blueprints, recognize classifications of drawings, and use drawing dimensions.		
1. Recognize and identify basic construction drawing terms, components, and symbols.	RST 11-12.4, L 11-12.6, G-MG 1-3	
2. Relate information on construction drawings to actual locations on the print.	SL 11-12.5, G-CO 2, G-CO 3, G-CO 5, G-CO 6, G-SRT 2, G-SRT 5, G-SRT 8, G-GMD 4, G-MG 1, G-MG 2, G-MG 3	
3. Recognize different classifications of construction drawings.	RST 11-12.2, L 11-12.6, N-Q 1, N-Q 2, N-Q 3, G-CO 5, G-SRT 2	
4. Interpret and use drawing dimensions.	SL 11-12.1.a, G-CO 5, G-CO 12, G-GMD 4, G-MG 1, G-MG 2, G-MG 3	

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<p>Module 00106-09 – Basic Rigging This module introduces the uses of slings and common rigging hardware. Trainees will learn basic inspection techniques, hitch configurations, and load-handling safety practices, as well as how to use American National Standards Institute hand signals.</p>		Read about the information and describe/discuss in class each competencies.
1. Identify and describe the use of slings and common rigging hardware.	RST 11-12.2	
2. Describe basic inspection techniques and rejection criteria used for slings and hardware.	SL 11-12.1.a, S-ID 9, S-IC 6, S-MD 7	
3. Describe basic hitch configurations and their proper connections.	SL 11-12.1.a	
4. Describe basic load-handling safety practices.	SL 11-12.1.a, S-ID 9, S-IC 6, S-MD 7	
5. Demonstrate proper use of American National Standards Institute (ANSI) hand signals.	SL 11-12.1.a	
<p>Module 00107-09 – Basic Communication Skills This module reviews basic communication skills. Trainees will learn how to interpret information in written and verbal form and how to communicate effectively using written and verbal skills.</p>		
1. Interpret information and instructions presented in both verbal and written form.	SL 11-12.4, WHST 11-12.8, W 11-12.8, S-ID 9, S-IC 6, S-MD 7	Conduct research on steps and procedures in order to plan project sheets for the week.
2. Communicate effectively in on-the-job situations using verbal and written skills.	SL 11-12.4, WHST 11-12.8, L 11-12.6, W 11-12.8	Use proper construction terminology for the task at hand.

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<p>Module 00108-09 – Basic Employability Skills This module discusses basic employability skills. Trainees will learn how to effectively use critical thinking, computer, and relationship skills in the construction industry. This module will also increase trainee awareness of such workplace issues as sexual harassment, stress, and substance abuse.</p>		
<p>1. Explain the role of an employee in the construction industry.</p>	SL 11-12.4, W 11-12.9, S 11-12.9	
<p>2. Demonstrate critical thinking skills and the ability to solve problems using those skills.</p>	SL 11-12.1.c, S-ID 9, S-IC 6, S-MD 7	
<p>3. Demonstrate knowledge of computer systems and explain common uses for computers in the construction industry.</p>		
<p>4. Define effective relationship skills.</p>	SL 11-12.1.b	
<p>5. Recognize workplace issues such as sexual harassment, stress, and substance abuse.</p>	RST 11-12.2	
<p>Module 00109-09 – Introduction to Materials Handling</p>		
<p>1. Define a load.</p>	SL 11-12.4	
<p>2. Establish a pre-task plan prior to moving a load.</p>	SL 11-12.4, N-Q 1, N-Q 2, N-Q 3, A-REI 1	
<p>3. Use proper materials-handling techniques.</p>		
<p>4. Choose appropriate materials-handling equipment for the task.</p>	S-MD 7	
<p>5. Recognize hazards and follow safety procedures required for materials handling.</p>	RST 11-12.3, S-IC 6	

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Module 27101-06 – Orientation to the Trade This module introduces the carpentry trainee to the carpentry trade, including the apprenticeship process and the opportunities within the trade.		
2. Identify the aptitudes, behaviors, and skills needed to be a successful carpenter.	RST 11-12.2	
3. Identify the training opportunities within the carpentry trade.	W 11-12.9, RST 11-12.2, S-ID 9, S-IC 6, S-MD 7	Research and write a paper on the career in construction the individual is interested in.
4. Identify the career and entrepreneurial opportunities within the carpentry trade.	RST 11-12.2	
5. Identify the responsibilities of a person working in the construction industry.	W 11-12.9, RST 11-12.2	
6. State the personal characteristics of a professional.	RST 11-12.2	
7. Explain the importance of safety in the construction industry.	SL 11-12.1.a, SL 11-12.1.c	
Module 27102-06 – Building Materials, Fasteners, and Adhesives This module introduces the carpentry trainee to wood building materials, fasteners, and adhesives.		
1. Identify various types of building materials and their uses.	RST 11-12.3, L 11-12.6, S-ID 9, S-IC 6	Read about how to do it in text, use a job sheet to identify the procedures and samples.
2. State the uses of various types of hardwoods and softwoods.	SL 11-12.5, RST 11-12.3, S-ID 9, S-IC 6	
3. Identify the different grades and markings of wood building materials.	RST 11-12.2	
4. Identify the safety precautions associated with building materials.	RST 11-12.2	
5. Describe the proper method of storing and handling building materials.	RST 11-12.3	

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6. State the uses of various types of engineered lumber.	RST 11-12.3	
7. Calculate the quantities of lumber and wood products using industry-standard methods.	WHST 11-12.6, N-Q 1, N-Q 2, N-Q 3, N-VM 7, A-REI 1, F-IF 4	Research products and produce material list.
8. Describe the fasteners, anchors, and adhesives used in construction work and explain their uses.	RST 11-12.3, L 11-12.6	
Module 27103-06 – Hand and Power Tools This module expands upon the hand and power tool information provided in the Core Curriculum and introduces the carpentry trainee to additional tools used in the carpentry trade.		
1. Identify the hand tools commonly used by carpenters and describe their uses.	RST 11-12.3, L 11-12.6	
2. Use hand tools in a safe and appropriate manner.	S-ID 9, S-IC 6	
3. State the general safety rules for operating all power tools, regardless of type.	RST 11-12.2, SL 11-12.1.a, S-ID 9, S-IC 6	
4. State the general rules for properly maintaining all power tools, regardless of type.	RST 11-12.2, SL 11-12.1.a, S-ID 9, S-IC 6	
5. Identify the portable power tools commonly used by carpenters and describe their uses.	RST 11-12.3	
6. Use portable power tools in a safe and appropriate manner.	S-ID 9, S-IC 6	

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<p>Module 27104-06 – Reading Plans and Elevations This module reviews and builds on the construction drawing (blueprint) material introduced in the Core Curriculum. It also introduces new information and techniques relevant to the carpentry trade for reading construction drawings and specifications.</p>		
1. Describe the types of drawings usually included in a set of plans and list the information found on each type.	RST 11-12.3	
2. Identify the different types of lines used on construction drawings.	SL 11-12.1.c, RST 11-12.2, L 11-12.6, N-Q 1, N-Q 2, N-Q 3	
3. Identify selected architectural symbols commonly used to represent materials on plans.	SL 11-12.1.c, RST 11-12.2, G-CO 6, G-SRT 2, G-GMD 4	
4. Identify selected electrical, mechanical, and plumbing symbols commonly used on plans.	RST 11-12.3	
5. Identify selected abbreviations commonly used on plans.	RST 11-12.3, L 11-12.6	
6. Read and interpret plans, elevations, schedules, sections, and details contained in basic construction drawings.	RST 11-12.3, G-CO 5, G-SRT 2	
7. State the purpose of written specifications.	S-IC 6	
8. Identify and describe the parts of a specification.	RST 11-12.3, L 11-12.6	
9. Demonstrate or describe how to perform a quantity takeoff for materials.	N-Q 1, N-Q 2, N-Q 3, N-VM 7, A-SSE 1, A-SSE 2, A-SSE 3, A-CED 1, A-CED 4, A-REI 1, A-REI 2, A-REI 3, F-BF 1, F-LE 1b	

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<p>Module 27105-06 – Floor Systems This module introduces the carpentry trainee to residential floor systems. It covers the materials and general methods used to construct floor systems, with emphasis placed on the platform method of floor framing.</p>		
1. Identify the different types of framing systems.	RST 11-12.2, L 11-12.6	
2. Read and interpret drawings and specifications to determine floor system requirements.	RST 11-12.2	
3. Identify floor and sill framing and support members.	RST 11-12.2, L 11-12.6	
4. Name the methods used to fasten sills to the foundation.	RST 11-12.2	
5. Given specific floor load and span data, select the proper girder/beam size from a list of available girders/beams.	RST 11-12.2, F-IF 4	
6. List and recognize different types of floor joists.	RST 11-12.3	
7. Given specific floor load and span data, select the proper joist size from a list of available joists.	RST 11-12.3, F-IF 4	
8. List and recognize different types of bridging.	RST 11-12.3	
9. List and recognize different types of flooring materials.	RST 11-12.3	
10. Explain the purposes of subflooring and underlayment.	RST 11-12.3	
11. Match selected fasteners used in floor framing to their correct uses.	RST 11-12.3	
12. Estimate the amount of material needed to frame a floor assembly.	RST 11-12.3, A-CED 4, A-REI 1, S-ID 6c, S-ID 7	
13. Demonstrate the ability to: <ul style="list-style-type: none"> • Lay out and construct a floor assembly • Install bridging • Install joists for a cantilever floor • Install a subfloor using butt-joint plywood/OSB panels • Install a single floor system using tongue-and-groove plywood/OSB panels 	G-CO 2, 4, 12, G-SRT 2, G-GMD 4, G-MG 3	

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Module 27106-06 – Wall and Ceiling Framing This module introduces the carpentry trainee to the materials and general procedures used in wall and ceiling framing.		
1. Identify the components of a wall and ceiling layout.	RST 11-12.2, N-Q 1, N-Q 2, N-Q 3, G-CO 12	
2. Describe the procedure for laying out a wood frame wall, including plates, corner posts, door and window openings, partition Ts, bracing, and firestops.	G-CO 2, G-CO 4, G-CO12, G-SRT 2, G-GMD 4, G-MG 3	
3. Describe the correct procedure for assembling and erecting an exterior wall.	RST 11-12.3	
4. Identify the common materials and methods used for installing sheathing on walls.	RST 11-12.3	
5. Lay out, assemble, erect, and brace exterior walls for a frame building.	RST 11-12.3, G-CO 2, G-CO 4, G-CO 12, G-SRT 2, G-GMD 4, G-MG 3	
6. Describe wall framing techniques used in masonry construction.	RST 11-12.3, RST 11-12.3	
7. Explain the use of metal studs in wall framing.	RST 11-12.3	
8. Describe the correct procedure for laying out ceiling joists.	RST 11-12.3, G-CO 2, G-CO 4, G-CO 12, G-SRT 2, G-GMD 4, G-MG 3	
9. Cut and install ceiling joists on a wood frame building.		
10. Estimate the materials required to frame walls and ceilings.	WHST 11-12.6, A-CED 4, A-REI 1, S-ID 6c, S-ID 7	
Module 27107-06 – Roof Framing This module introduces the carpentry trainee to the methods and procedures used in roof framing.		
1. Understand the terms associated with roof framing.	RST 11-12.2	
2. Identify the roof framing members used in gable and hip roofs.	RST 11-12.2, G-CO.12, G-CO 5, G-CO 6, G-SRT 2, G-SRT 3, G-SRT 8, G-GPE 5, G-GPE 7, G-GMD 4, G-MG 1, G-MG 2, G-MG 3	

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3. Identify the methods used to calculate the length of a rafter.	RST 11-12.3, F-IF 4, F-BF 1, F-BF 2, F-BF 3, F-LE 1, F-LE 5, F-TF 7, G-CO 3, G-CO 4, G-CO 5, G-CO 6, G-CO 7, G-CO 8, G-CO 3-8.12, G-SRT 1, G-SRT 2, G-SRT 3, G-SRT 4, G-SRT 5, G-SRT 6, G-SRT 7, G-SRT 8, G-SRT 9, G-SRT 10, G-SRT 11, G-GPE 5, G-GPE 6, G-GPE 7, G-GMD 4, G-MG 1, G-MG 2, G-ME 3	
4. Identify the various types of trusses used in roof framing.	RST 11-12.3	
5. Use a rafter framing square, speed square, and calculator in laying out a roof.	F-IF 4, F-BF 1, F-BF 3, F-LE 1, F-LE 5, F-TF 7, G-CO 3-8, G-CO 3-8.12, G-SRT 1, G-SRT 2, G-SRT 3, G-SRT 4, G-SRT 5, G-SRT 6, G-SRT 7, G-SRT 8, G-SRT 9, G-SRT 10, G-SRT 11, G-GPE 5, G-GPE 6, G-GPE 7, G-GMD 4, G-MG 1, G-MG 2, G-MG 3	
6. Identify various types of sheathing used in roof construction.	RST 11-12.3	
7. Frame a gable roof with vent openings.	RST 11-12.3, N-Q 1, N-Q 2, N-Q 3, G-CO 3-8, G-CO 3-8.12, G-SRT 8, G-GPE 6, G-MG 3, F-IF 3, F-BF 1a, F-LE 1	
8. Frame a roof opening.	RST 11-12.3, N-Q 1, N-Q 2, N-Q 3, G-CO 12, G-SRT 8, G-GPE 6, G-MG 3	
9. Erect a gable roof using trusses.	RST 11-12.3	
10. Estimate the materials used in framing and sheathing a roof.	WHST 11-12.6, A-CED 4, A-REI 1, S-ID 6c, S-ID 7	

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<p>Module 27108-06 – Introduction To Concrete, Reinforcing Materials, And Forms</p> <p>This module introduces the carpentry trainee to various cements and other materials that, when mixed together, form various types of concrete. Concrete volume estimates and concrete forms are also covered. In addition, reinforcement materials such as reinforcement bars, bar supports, and welded-wire fabric are discussed.</p>		
1. Identify the properties of cement.	RST 11-12.2	
2. Describe the composition of concrete.	RST 11-12.2, S-IC 6	
3. Perform volume estimates for concrete quantity requirements.	G-GMD 3, G-GMD 4, G-MG 1, G-MG 2, G-MG 3	
4. Identify types of concrete reinforcement materials and describe their uses.	RST 11-12.2, L 11-12.6	
5. Identify various types of footings and explain their uses.	RST 11-12.2	
6. Identify the parts of various types of forms.	RST 11-12.2, L 11-12.6	
7. Explain the safety procedures associated with the construction and use of concrete forms.	S-IC 6	Show industry collected data helps in the development of safety procedures.
8. Erect, plumb, and brace a simple concrete form with reinforcement.	N-Q 1, N-Q 3, G-CO 12, G-GMD 4, G-MG 1, G-MG 3	

Construction Standards	Common Core Standards	Explanation
Module 27109-06 – Windows and Exterior Doors This module introduces the carpentry trainee to methods and procedures used in the selection and installation of residential windows and exterior doors.		
1. Identify various types of fixed, sliding, and swinging windows.	RST 11-12.3	
2. Identify the parts of a window installation.	RST 11-12.3	
3. State the requirements for a proper window installation.	RST 11-12.3, N-Q 1, N-Q 2, N-Q 3	
4. Install a pre-hung window.	RST 11-12.3, N-Q 1, N-Q 2, N-Q 3	
5. Identify the common types of exterior doors and explain how they are constructed.	RST 11-12.3	
6. Identify the parts of a door installation.	RST 11-12.3	
7. Identify the types of thresholds used with exterior doors.	RST 11-12.3	
8. Install a pre-hung exterior door.	RST 11-12.3 ,N-Q 1, N-Q 2, N-Q 3	
9. Identify the various types of locksets used on exterior doors and explain how they are installed.	RST 11-12.3	
10. Install a lockset.	RST 11-12.3, N-Q 3	

Construction Standards	Common Core Standards	Explanation
Module 27110-06 – Basic Stair Layout This module introduces the Carpentry trainee to the materials and methods used to construct interior and exterior wooden stairs.	RST 11-12.3	
1. Identify the various types of stairs.	RST 11-12.3, L 11-12.6	
2. Identify the various parts of stairs.	RST 11-12.3	
3. Identify the materials used in the construction of stairs.	RST 11-12.3, L 11-12.6, N-Q 1, N-Q 2	
4. Interpret construction drawings of stairs.	RST 11-12.3, G-GMD 4	
5. Calculate the total rise, number and size of risers, and number and size of treads required for a stairway.	WHST 11-12.6, N-Q 1, N-Q 2, N-Q 3, F-IF 1, F-IF 4, F-BF 1, F-BF 3, F-LE 1, F-LE 5, G-CO 4, G-CO 5, G-CO 6, G-CO 7, G-CO 12, G-SRT 2, G-SRT 8, G-GPE 6, G-GPE 7, G-GMD 4, G-MG 1, G-MG 2, G-MG 3, A-CED 1, A-REI 1	
6. Lay out and cut stringers, risers, and treads.	RST 11-12.3, N-Q 1, N-Q 2, N-Q 3, G-CO 12, G-GMD 4, G-MG 1, G-MG 3	
7. Build a small stair unit with a temporary handrail.	RST 11-12.3, N-Q 1-3	

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<p>Module 27201-07 – Commercial Drawings This module describes the types and uses of drawings prepared for commercial structures. It provides information about the format and content of commercial drawings and their use in conveying specific construction requirements. It describes the standard format for specifications.</p>		
1. Recognize the difference between commercial and residential construction drawings.	RST 11-12.3, N-Q 1	
2. Identify the basic keys, abbreviations, and other references contained in a set of commercial drawings.	RST 11-12.3, N-Q 1	
3. Accurately read a set of commercial drawings.	RST 11-12.3, N-Q 1, G-GMD 4, G-MG 1, G-MG 3	
4. Identify and document specific items from a door and window schedule.	RST 11-12.3	
5. Explain basic construction details and concepts employed in commercial construction.	RST 11-12.3, G-GMD 4, G-MG 1, G-MG 3	
6. Calculate the floor area of each room in a floor plan.	WHST 11-12.6, N-Q 1, N-Q 2, N-Q 3, G-GPE 7, G-GMD 4, G-MG 1, G-MG 3	

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<p>Module 27202-07 – Roofing Applications This module covers the common materials used in residential and light commercial roofing, along with the safety practices and application methods for these materials. It includes shingles, roll roofing, shakes, tiles, and metal and membrane roofs. As well as the selection and installation of roof vents.</p>	RST 11-12.3	
1. Identify the materials and methods used in roofing.		
2. Explain the safety requirements for roof jobs.		
3. Install fiberglass shingles on gable and hip roofs.		
4. Close up a valley using fiberglass shingles.		
5. Explain how to make various roof projections watertight when using fiberglass shingles.		
6. Complete the proper cuts and install the main and hip ridge caps using fiberglass shingles.	N-Q 1, N-Q 2, N-Q 3, G-CO 12	
7. Lay out, cut, and install a cricket or saddle.	N-Q 1, N-Q 2, N-Q 3, F-IF 4, F-BF 1, F-BF 3, F-LE 1, F-LE 5, F-TF 7, G-CO 3, G-CO 4, G-CO 5, G-CO 6, G-CO 7, G-CO 8, G-CO 12, G-SRT 1, G-SRT 2, G-SRT 3, G-SRT 4, G-SRT 5, G-SRT 6, G-SRT 7, G-SRT 8, G-SRT 9, G-SRT 10, G-SRT 11, G-GPE 5-7, G-GMD 4, G-MG 1, G-MG 3	
8. Install wood shingles and shakes on roofs.		
9. Describe how to close up a valley using wood shingles and shakes.		
10. Explain how to make roof projections watertight when using wood shakes and shingles.		
11. Complete the cuts and install the main and hip ridge caps using wood shakes/shingles.	N-Q 1, N-Q 2, N-Q 3, G-CO 12	
12. Demonstrate the techniques for installing other selected types of roofing materials.	N-Q 1, N-Q 2, N-Q 3, G-CO 12	

Construction Standards	Common Core Standards	Explanation
<p>Module 27203-07 – Thermal and Moisture Protection This module covers the selection and installation of various types of insulating materials in walls, floors, and attics. It also covers the uses and installation practices for vapor barriers and weather-proofing materials.</p>		
1. Describe the requirements for insulation.	RST 11-12.3	
2. Describe the characteristics of various types of insulation material.	RST 11-12.3	
3. Calculate the required amounts of insulation for a structure.	WHST 11-12.6,N-Q 1, N-Q 2, N-Q 3, G-GMD 3, G-GMD 4, G-MG 1, G-MG 2, G-MG 3	
4. Install selected insulation materials.	RST 11-12.3	
5. Describe the requirements for moisture control and ventilation.	RST 11-12.3	
6. Install selected vapor barriers.	RST 11-12.3	
7. Describe various methods of waterproofing.	RST 11-12.3	
8. Describe air infiltration control requirements.	RST 11-12.3	
9. Install selected building wraps.	RST 11-12.3	

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Module 27204-07 – Exterior Finishing This module covers the various types of exterior siding used in residential construction and their installation procedures, including wood, metal, vinyl, and cement board siding.	RST 11-12.3	
1. Describe the purpose of wall insulation and flashing.		
2. Install selected common cornices.		
3. Demonstrate lap and panel siding estimating methods.	N-Q 1, N-Q 2, N-Q 3, G-GMD 4, G-MG 1, G-MG 2, G-MG 3	
4. Describe the types and applications of common wood siding.		
5. Describe fiber-cement siding and its uses.		
6. Describe the types and styles of vinyl and metal siding.		
7. Describe the types and applications of stucco and masonry veneer finishes.		
8. Describe the types and applications of special exterior finish systems.		
9. Install three types of siding commonly used in your area.		

Construction Standards	Common Core Standards	Explanation
<p>Module 27206-07 – Drywall Installation This module describes the various types of gypsum drywall, their uses, and the fastening devices and methods used to install them. It also contains detailed instructions for installing drywall on walls and ceilings, using nails, drywall screws, and adhesives. It also covers fire- and sound-rated walls.</p>		
1. Identify the different types of drywall and their uses.	RST 11-12.3, F-IF 4	
2. Select the type and thickness of drywall required for specific installations.	RST 11-12.3, F-IF 4	
3. Select fasteners for drywall installation.	RST 11-12.3, F-IF 4	
4. Explain the fastener schedules for different types of drywall installations.	RST 11-12.3, F-IF 4	
5. Perform single-layer and multi-layer drywall installations using different types of fastening systems, including: <ul style="list-style-type: none"> • Nails • Drywall screws • Adhesives 		
6. Install gypsum drywall on steel studs.	RST 11-12.3	
7. Explain how soundproofing is achieved in drywall installations.	RST 11-12.3	
8. Estimate material quantities for a drywall installation.	RST 11-12.3, N-Q 1, N-Q 2, N-Q 3, G-GMD 4, G-MG 1, G-MG 2, G-MG 3	

Construction Standards	Common Core Standards	Explanation
Module 27207-07 – Drywall Finishing This module covers the materials, tools, and methods used to finish and patch gypsum drywall. It includes coverage of both automatic and manual taping and finishing methods.	RST 11-12.3	
1. State the differences between the six levels of finish established by industry standards and distinguish a finish level by observation.	S-IC 6, S-MD 7	
2. Identify the hand tools used in drywall finishing and demonstrate the ability to use these tools.		
3. Identify the automatic tools used in drywall finishing.		
4. Identify the materials used in drywall finishing and state the purpose and use of each type of material, including: <ul style="list-style-type: none"> • Compounds • Joint reinforcing tapes • Trim material • Textures and coatings 	L 11-12.6	
5. Properly finish drywall using hand tools.		
6. Recognize various types of problems that occur in drywall finishes; identify the causes and correct methods for solving each type of problem.	S-ID 9, S-IC 6	
7. Patch damaged drywall.		Will it crack later?

Construction Standards	Common Core Standards	Explanation
<p>Module 27208-07 – Doors and Door Hardware This module covers the installation of metal doors and related hardware in steel-framed, wood-framed, and masonry walls, along with their related hardware, such as locksets and door closers. It also covers the installation of wooden doors, folding doors, and pocket doors.</p>	RST 11-12.3	
<p>1. Identify various types of door jambs and frames and demonstrate the installation procedures for placing selected door jambs and frames in different types of interior partitions.</p>	N-Q 1, N-Q 3	
<p>2. Identify different types of interior doors.</p>	L 11-12.6	
<p>3. Identify different types of interior door hardware and demonstrate the installation procedures for selected types.</p>		
<p>4. Demonstrate the correct and safe use of the hand and power tools described in this module.</p>		
<p>5. List and identify specific items included on a typical door schedule.</p>		
<p>6. Demonstrate the procedure for placing and hanging a selected door.</p>	N-Q 1, N-Q 3	

Construction Standards	Common Core Standards	Explanation
Module 27210-07 – Window, Door, Floor, and Ceiling Trim This module covers the different types of trim used in finish work. It focuses on the proper methods for selecting, cutting, and fastening trim to provide a professional finished appearance.		
1. Identify the different types of standard moldings and describe their uses.	RST 11-12.3	
2. Make square and miter cuts using a miter box or power miter saw.	RST 11-12.3	
3. Make coped joint cuts using a coping saw.	RST 11-12.3	
4. Select and properly use fasteners to install trim.	RST 11-12.3, F-IF 4	
5. Install interior trim, including: <ul style="list-style-type: none"> • Door trim • Window trim • Base trim • Ceiling trim 	RST 11-12.3	
6. Estimate the quantities of different trim materials required for selected rooms.	WHST 11-12.6, N-Q 1, N-Q 2, N-Q 3, G-GPE 7, G-GMD 4, G-MG 1-3	
Module 27211-07 – Cabinet Installation This module provides detailed instructions for the selection and installation of base and wall cabinets and countertops.	RST 11-12.3	
1. State the classes and sizes of typical base and wall kitchen cabinets.		
2. Identify the cabinet components and hardware and describe their purposes.		
3. Lay out factory-made cabinets, countertops, and backsplashes.	N-Q 1, N-Q 2, N-Q 3, G-CO 12, G-GMD 4, G-MG 1, 3	
4. Explain the installation of an island base.	S-MD 7	Will the anchorage hold up over time as people lean on the island?

Codes for Common Core English Language Arts and Literacy are:

L = Language

RI = Reading for Informational Text

RST = Reading for Literacy in Science and Technical Subjects

SL = Speaking and Listening

W = Writing

WHST = Writing for Literacy in History/Social Studies,
Science, and Technical Subjects

Codes for Common Core Mathematics are:

A-SSE = Algebra: Seeing Structure in Expressions

A-CED = Algebra: Creating Equations

A-REI = Algebra: Reasoning with Equations and Inequalities

F-IF = Functions: Interpreting Functions

F-BF = Functions: Building Functions

F-LE = Functions: Linear, Quadratic, and Exponential Models

G-CO = Geometry: Congruence

G-SRT = Similarity, right Triangles, and Trigonometry

G-GMD = Geometry: Geometric Measurement and Dimension

G-MG = Geometry: Modeling with Geometry

N-RN = Number and Quantity: The Real Number System

N-Q = Number and Quantity: Quantities

N-VM = Number and Quantity: Vector and Matrix Quantities

S-ID = Statistics and Probability: Interpreting Categorical and
Quantitative Data

S-IC = Statistics and Probability: Making Inferences and Justifying
Conclusions

S-MD = Statistics and Probability: Using Probability to Make
Decisions