



SimBuild™ Carpentry

Alignment to NCCER Standards

(Carpentry Fundamentals - Level 1, 5th Edition, 2013)

NCCER Module ID	Learning Objectives		
27101-13	Orientation to the Trade		
	Identify skills and responsibilities	--	✓
	Importance of safety, ensuring safe work environment	✓	✓
27102-13	Building Materials, Fasteners, and Adhesives		
	Identify types of building materials and their uses	✓	✓
	Safety precautions associated with building materials	✓	✓
	Proper handling and storage of materials	--	✓
	Calculate quantities of lumber, panel, or concrete	✓	✓
	Describe fasteners, anchors, adhesives and explain their uses	✓	✓
27103-13	Hand and Power Tools		
	Identify hand tools commonly used, describe safe use and maintenance	✓	✓
	Identify power tools commonly used, describe safe use and maintenance	✓	✓
27104-13	Introduction to Construction Drawings, Specifications, and Layout		
	Describe the types of drawings included in a set of plans and describe the information found on each type	✓	✓
	Purpose of written specifications	✓	✓
	Identify methods of squaring a building	--	✓
27105-13	Floor Systems		
	Read and interpret specifications and drawings to determine floor system requirements	--	✓
	Identify the types of framing systems	--	✓
	Identify floor system components	✓	✓
	Describe construction methods for floor systems and identify floor system materials	✓	✓
	Estimate amount of material needed for floor assembly	✓	✓
	Identify alternative floor systems	--	✓
27109-13	Introduction to Building Envelope Systems (Windows and Doors)		
	Identify components of the building envelope	✓	✓

SimBuild™ Carpentry

Alignment to NCCER Standards

(Carpentry Fundamentals - Level 1, 5th Edition, 2013)

27110-13	Describe the requirements for proper window installation	✓	✓
	Describe the requirements for proper door installation	✓	✓
	Identify types of locksets used on exterior doors and explain how they are installed	✓	✓
	Basic Stair Layout		
	Identify types of stairways	--	✓
	Identify components associated with stairs	✓	✓
	Identify terms associated with stair framing	✓	✓
	Determine total rise, number and size of risers, and number and size of treads required for stairways	✓	✓
27111-13	Describe the procedure to layout and cut stringers, risers, and treads	✓	✓
	Wall Systems		
	Identify components of a wall system	✓	✓
	Describe the procedure for laying out a wood frame wall	✓	✓
	Describe the correct procedure to assemble, erect, and brace exterior walls for a frame building	✓	✓
	Describe wall framing techniques used in masonry construction	--	✓
	Describe the correct procedure to estimate materials required to frame walls	✓	✓
	Identify alternative wall systems	✓	✓
27112-13	Ceiling Joist and Roof Framing		
	Identify components of ceiling framing	✓	✓
	Identify common types of roofs used in residential construction	✓	✓
	Identify the components and define the terms associated with roof framing	✓	✓
	Describe the methods used to lay out a common rafter	✓	✓
	Describe how to erect a gable roof	✓	✓
	Describe how to frame a basic gable end wall	✓	✓
	Recognize the use of trusses in basic roof framing	✓	✓
	Describe the basics of roof sheathing installation	✓	✓
	Describe how to perform a material take	✓	✓