

Carpentry Short Certificate

Program Description: The Carpentry program prepares individuals to apply technical knowledge and skills to layout, cut, fabricate, erect, install, and repair wooden structures and fixtures, using hand and power tools. The program includes instruction in technical mathematics, framing, construction materials and selection, job estimating, blueprint reading, foundations and roughing-in, finish carpentry techniques, and applicable codes and standards.

Admission Requirements: Entering students must have a high school diploma or GED. Applicants who do not meet this requirement should see the campus counselor.

Course Requirements	Credit Hours
CAR111 Roof and Ceiling Systems	3
CAR112 Floors, Walls and Site Prep	3
CAR113 Roof and Ceiling Systems Lab	3
CAR114 Constructions Basics Lab	3
CAR131 Roof and Ceiling Systems	3
CAR132 Interior and Exterior Finish	3
CAR133 Roof and Ceiling Systems Lab	3
CAR202 Special Projects in Carpentry	3
CAR205 Special Projects in Carpentry	3
CAR224 Floor, Wall and Ceiling Specialties	3
Total Credit Hours	29

Short Certificate

Recommended course sequence for part-time evening students beginning fall semester:

Fall Semester

CAR111 Roof and Ceiling Systems	3
CAR112 Floors, Walls and Site Prep	3
CAR113 Roof and Ceiling Systems Lab	3
CAR114 Constructions Basics Lab	3
CAR202 Special Projects in Carpentry	2
Total	14

Spring Semester

CAR131 Roof and Ceiling Systems	3
CAR132 Interior and Exterior Finish	3
CAR133 Roof and Ceiling Systems Lab	3
CAR205 Special Projects in Carpentry	3
CAR224 Floor, Wall and Ceiling Specialties	3
Total	15

CAR111 ROOF AND CEILING SYSTEMS; 3 credits, 3 hours (3-0-0)

COREQUISITE: CAR114 Construction Basic Lab

This course introduces students to the opportunities in and requirements of the construction industry. Topics include economic outlook for construction, employment outlook, job opportunities, training, apprenticeship, entrepreneurship, construction tools, materials, and equipment, job safety and OSHA standards. Upon course completion, students should be able to identify the job market, types of training, knowledge of apprenticeship opportunities, construction tools, materials, equipment, and safety procedures.

CAR112 FLOORS, WALLS AND SITE PREP; 3 credits, 3 hours (3-0-0)

COREQUISITE: CAR113 Floors, Walls and Site Prep Lab

This course introduces the student to site preparation, floor and wall layout, and construction. Topics include methods of site preparation, measurement and leveling tools, framing, layouts, and components of wall and floor framing to include beams, girders, floor joists, sub-flooring, partitions, bracing, headers, sills, doors and corners. Upon course completion, students will be able to identify various types of wall and floor framing systems and their components, identify building lines, setbacks, and demonstrate a working knowledge of leveling applications

CAR113 ROOF AND CEILING SYSTEMS LAB; 3 credits, 9 hours (0-0-9)

COREQUISITE: CAR112 Floors, Walls and Site Prep

In this course the student will engage in applications of site preparation, floor and wall layout, and construction. Emphasis is placed on following job safety procedures, the use of required tools and equipment, performing site preparation, laying out and framing a floor system, and laying out, and erecting walls. Students will use various measurement and leveling tools, identify and install beams, girders, floor joists, sub-flooring, and install various wall components such as partitions, bracing, headers, sills, doors and windows, and corners. Upon course completion, students should be able to follow proper safety procedures, identify building lines and setbacks, ensure proper site preparation, layout and frame a floor, and layout, frame and erect walls.

CAR114 CONSTRUCTIONS BASICS LAB; 3 credits, 9 hours (0-0-9)

COREQUISITE: CAR111 Construction Basics

This course provides practical and safe application of hand, portable power, stationary and pneumatic tools, use of building materials, fasteners and adhesives, and job site safety. Emphasis is placed on the safe use of hand, power, and pneumatic tools, proper selection of lumber, plywood, byproducts, nails, bolts, screws, adhesives, fasteners, construction materials, and job safety. Upon course completion, the student should be able to identify hand, power, stationary, and pneumatic tools and demonstrate their safe use; identify and properly select wood and non-wood building products, and properly use nails, fasteners and adhesives. .

CAR131 ROOF AND CEILING SYSTEMS; 3 credits, 3 hours (3-0-0)

COREQUISITE: CAR133 Roof and Ceiling Systems Lab

This course focuses on framing ceilings and roofs. Emphasis is placed on the various types of ceiling and roofing frames, rafters, trusses, ceiling joists, roof decking, and roofing materials. Upon completion, students should be able to explain how to frame a roof and ceiling, identify proper installation methods of roofing materials, and describe applicable safety rules.

CAR132 INTERIOR AND EXTERIOR FINISH; 3 credits, 7 hours (1-0-6)

PREREQUISITE: Permission of Instructor

This course introduces the student to interior and exterior finishing materials and techniques. Topics include interior trim of windows and doors, ceilings, and wall moldings, exterior sidings, trim work, painting and masonry finishes. Upon completion the students should be able to identify, describe the uses of, and install different types of doors, windows and moldings; identify and install the types of exterior sidings and trim, and describe the different types of paint and their proper application.

CAR133 ROOF AND CEILING SYSTEMS LAB; 3 credits, 9 hours (0-0-9)

COREQUISITE: CAR131 Roof and Ceiling Systems

The course provides students with practical experience in roof and ceiling layout, framing, and installation. Upon completion, the student should be able to layout and frame a roof and ceiling, cut and install rafters, and joists, install trusses, cut and apply roof decking and roofing materials, and apply job site safety rules.

CAR202 SPECIAL PROJECTS IN CARPENTRY; 2 credits, 6 hours (0-0-6)

PREREQUISITE: Permission of Instructor

This course allows the student to plan, execute, and present results of individual projects in carpentry. Emphasis is placed on enhancing skill attainment in the carpentry field. This culminating course allows students to independently apply skills attained in previous courses.

CAR205 SPECIAL PROJECTS IN CARPENTRY; 3 credits, 4 hours (2-1-0)

PREREQUISITE: Permission of Instructor

This course allows the student to plan, execute, and present results of individual projects in carpentry. Emphasis is placed on enhancing skill attainment in the carpentry field. This culminating course allows students to independently apply skills attained in previous courses.

CAR224 FLOOR, WALL AND CEILING SPECIALTIES; 3 credits, 7 hours (1-0-6)

PREREQUISITE: Permission of Instructor

This course focuses on advanced interior applications for floors, walls, and ceilings. Topics may include paneling, hard wood floors, drop ceilings, acoustical ceilings, tray ceilings, and box ceilings. Upon completion the students should have a working knowledge of the specialties covered. This is an advanced course.