



Course Outline/Description— Carpentry



DIPLOMA PROGRAM

24 weeks – 25.5 semester credit hours (DAY)
52 weeks – 25.5 semester credit hours (EVENING)
Total 720 hours

OBJECTIVE

Carpentry* students learn hands-on new construction skills. They build a house to scale in order to learn framing, drywall, rough and fine finishing, siding, shingled roofing, and door and window installation. Students construct a full size deck and staircase. Training includes blueprint reading, safety practices, and trade mathematics.

EMPLOYMENT OPPORTUNITIES

Graduates are prepared for entry-level employment as carpenters, carpentry assistants, carpentry apprentices, maintenance carpenters, finish carpenters, house repairers, door installers, cabinet and trim installers, lay-out workers, framers, assemblers, and woodworkers.

	COURSE TITLE	CREDIT HOURS
CARP 101	Introduction to Carpentry	0.5
CARP 102	Mathematics for Carpentry	3.0
CARP 103	Carpentry Tools	0.5
CARP 104	Blueprints	1.0
CARP 105	Wood, Wood Fasteners, and Hardware	1.0
CARP 106	Framing	5.5
CARP 107	Rough Finishing	4.5
CARP 108	Fine Finishing	5.0
CARP 109	Decking	2.0
PD 616	Professional Development	2.5

* Students in this program are eligible to receive industry recognized certification from the National Occupational Competency Testing Institute (NOCTI) upon successful completion of certification exams.



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CARP 101 INTRODUCTION TO CARPENTRY

Students are introduced to the various carpentry skills required by this building trade and oriented to trade safety practices, classroom regulations, and carpentry terminology. Students receive an introduction to Green Technology and Energy Efficiency in the trades.

CARP 102 MATHEMATICS FOR CARPENTRY

This mathematics course provides a review of basic mathematics as used in the carpentry field with a focus on measurements, fractions, use of the ruler and measuring tape, and an architect scale.

CARP 103 CARPENTRY TOOLS

Students will learn types and proper use of carpentry tools, such as hand and power tools, hammers, saws, levels, table saws, miter saws, routers, and sanders.

CARP 104 BLUEPRINTS

Students develop an awareness of blueprint terminology. They learn basic blueprint reading, including recognizing distances, placement, and symbols. Students learn to interpret detailed views and prints.

CARP 105 WOOD, WOOD FASTENERS, AND HARDWARE

Students learn about the various types and sizes of lumber. Students develop a working knowledge of the use of fasteners in carpentry. Also covered is the installation of hardware, such as locks, deadbolts, and other accessories.

CARP 106 FRAMING

Students learn layout, setting joists, and both wall and roof framing. Students are taught the difference between various insulation, for example, R values and faced and un-faced insulation. Students observe a blower door evaluation for sealing drafty buildings.

CARP 107 ROUGH FINISHING

Students learn to build stairs and to construct wall sheathing, sub-flooring, vinyl siding, and shingle roofing.

CARP 108 FINE FINISHING

Students learn to install doors, windows, and wood trim and to perform related millwork. They learn to install kitchen cabinets, and counter tops. Students also learn to lay-out and install ceramic tile, acoustic ceilings, and vinyl tile.

CARP 109 DECKING

Students receive instruction in the layout and construction of wood decks.

PD 616 PROFESSIONAL DEVELOPMENT

Students learn the skills employers require for positive work relationships and long-term employment. They include targeted workplace competencies: problem solving and other cognitive skills, oral communication skills, personal qualities, work ethic, and customer service, interpersonal and teamwork skills. Students also learn about the importance of professionalism on the jobsite and employer expectations. Employment Specialists teach students effective Internet, interviewing, and job search skills.