

CARPENTRY (RESIDENTIAL)

TECHNICAL LIMITED ENROLLMENT

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Growth in the construction industry has been increasing, thus demand is high for skilled carpenters in the state and throughout the nation.

Carpentry students who complete this program may either apply for membership in apprentice training programs to complete journeyman carpentry requirements or go to work directly for building contractors. The future prospects for self-employment are considered good for those who wish to become building contractors upon attainment of necessary skills

The carpentry trade is well suited to those who enjoy working outdoors and working with their hands, applying creative ingenuity to building. Pride in good workmanship and safe, dependable work habits are also important factors for success in this field.

Students learn the safe and proper use and care of hand tools, power hand tools and power equipment used in the carpentry trade. They receive instruction in the methods and principles of building construction, carpentry math, blueprint reading, drawing house plans, energy efficient building, building materials, cabinetry, concrete forming, and other related areas such as drywall, roofing, etc.

Enrollment: A class of 16 students is enrolled once each year in late August. Refer to the Admission section of this catalog beginning on page 10 for application procedures and requirements. Also refer to the limited enrollment program information on page 13.

Required placement scores:

ACT Math - 15 or higher

Reading - 14 or higher

COMPASS Math - (pre-algebra) 31 or higher

Reading - 64 or higher

Students who do not meet the above requirements should arrange an interview with a carpentry instructor.

Background in these areas helpful:

- Building trades courses
- Basic math
- Basic blue print drawing
- Basic residential drafting

Industry Standards:

Awareness of the following carpentry industry standards may help students determine if they are suited to this career:

- Must have the ability to perform close accurate work, communicate effectively with others, present information in a clear concise manner, and follow verbal and written instructions.
- Requires good hand and finger dexterity.
- Requires continuous walking, frequent standing, bending, stooping, climbing ladders and stairs, kneeling, lifting and carrying up to 50 pounds, and carrying long or oversized loads.
- Frequently requires working over your head.
- Requires continuous use of hand and power tools.
- Frequently exposed to noise, dirt, dust, fumes, extreme heat and cold and vibration,

SEMESTER I

CREDITS

Blueprint Reading (CARP 110)	2
Core Curriculum (CARP 102)	2
Site Layout and Foundation Construction (CARP 115).....	3
Principles of Framing (CARP 120).....	3
Framing I (CARP 125).....	6
Exterior Finish (CARP 130)	2
Total credits.....	18

SEMESTER II

CREDITS

Framing II (CARP 135)	4
Principles of Interior Finish (CARP 140)	3
Interior Finish (CARP 145).....	6
Cabinetmaking (CARP 150)	3
House Design and Code Requirements (CARP 155).....	2
Total credits.....	18

Students receive a program certificate upon successful completion of the program. Additional course work may lead to a program diploma or an Associate in Applied Science degree.

CERTIFICATE PROGRAM STUDENTS

Students are encouraged to enroll in two classes of general education studies. Suggested classes for general education:

- CSCI 101 Intro to computers
 - PSYC 100 Human Relations in Organizations
- See page 52 for general education requirements.

DIPLOMA PROGRAM AND ASSOCIATE IN APPLIED SCIENCE STUDENTS

- Recommended Elective Course:**
 Introduction to the Green Environment
 (CARP 112) 3
 See pages 51-52 for general education requirements.

BUILDING CONSTRUCTION TECHNOLOGY (BCT)

BCT 141 Principles of Commercial Structures 2 credits

Students will be given exposure to various commercial structural systems used locally. Classroom presentations and construction site visits will emphasize design and construction practices.

BCT 142 Commercial Structures 6 credits

The course is designed to give students exposure to and experience in the roles of commercial carpenters. There will be demonstrations by those in the field and observations of projects under construction. Techniques will be applied through an actual commercial construction project.

BCT 151 Principles of Commercial Interior Finish 3 credits

The course will provide instruction in the principles of commercial interior finish. Training will combine classroom presentations, demonstrations, videos, and safe operating procedures.

BCT 152 Commercial Interior Finish 6 credits

The course will give students exposure to the principles of and skills necessary to entry level positions as a commercial interior carpenter. Labs will include demonstrations by skilled craftsmen and hands-on activities.

CARPENTRY (CARP)

CARP 102 Core Curriculum Fall 2 credits

Core curriculum from The National Center for Construction Education and Research (NCCER), consists of eight modules which are: “Basic Safety,” “Construction Math,” “Hand Tools” “Power Tools,” “Blueprints,” “Basic Rigging,” “Communication Skills,” and “Employability Skills.” This course is a prerequisite for all NCCER “Craft Level Training,” (regardless of the craft).

CARP 110 Blueprint Reading Fall 2 credits

Designed to provide the basic understanding of standard residential blueprints including plot plans, foundation plans, floor plans, elevations, details of mechanical and electrical plans, and a basic understanding of residential building codes.

CARP 112 Introduction to the Green Environment Fall 3 credits

This course is designed to introduce students to an understanding of the green mind-set. Discussions will cover the impact of building on the green environment within the context of market realities.

CARP 115 Site Layout and Foundation Construction Fall 3 credits

Students will receive training and hands-on experience in preparation of a building site and foundation construction. Instruction will include laying out building lines, establishing batter boards, concrete footings and foundations, and studying alternate foundation systems.

CARP 120 Principles of Framing Fall 3 credits

This is a comprehensive course which concerns instruction and study on the techniques and practices required for successful employment as a framing carpenter. Areas covered will include layout of floors and walls, engineering truss systems, joist and rafter systems, and stairway construction.

CARP 125 Framing I Fall 6 credits

This lab will increase the student’s knowledge, skills, and proficiency in framing by applying the techniques learned in 120-Principles of Framing. Activities will center around the actual construction of a house.

CARP 130 Exterior Finish Fall 2 credits

This course deals with the basics of residential exterior finish. Instruction will include units on fascia and soffit construction, windows and exterior door installation, and siding and roofing.

CARP 135	Framing II	Spring	4 credits
This course is designed to increase students knowledge and skill in residential construction. Activities will center around specialty exterior and interior framing during the construction of an actual house.			
CARP 140	Principles of Interior Finish	Spring	3 credits
This course provides an understanding of materials and processes used in interior finishing. Instruction will include units in drywall, interior doors, interior trim, floor underlayment and applying finishes.			
CARP 145	Interior Finish	Spring	6 credits
This lab will increase the student's knowledge, skills and proficiency in interior finishing by applying techniques learned in 140-Principles of Interior Finish. Activities will center around the construction of an actual house.			
CARP 150	Cabinetmaking	Spring	3 credits
Instruction in the design and layout of kitchens, cabinets, vanities, countertops, and built-in closets. Students will increase their knowledge, skill, and proficiency through actual construction of cabinets.			
CARP 155	House Design and Code Requirements	Spring	2 credits
Students will study home design and code requirements. Interior, exterior and environmental factors affecting the design of homes will be considered and explored.			
CARP 160	Concrete Systems Technology		3 credits
This course is designed to give students a basic knowledge of and skill in concrete technology. Training will include presentations by and visits to offices, plants and laboratories of concrete construction professionals, as well as applied practices.			
CARP 175	Construction Equipment		4 credits
The course will provide instruction in the principles and use of commercial construction equipment. Training will combine classroom presentations, demonstrations, videos, and safe operating procedures. Safety will be emphasized.			
CARP 294	Independent Study		1-3 credits
Independent or directed study of special topics in carpentry. Department chairperson approval required.			
CARP 299	Special Topics		1-3 credits
Variable instructional topics in the field of carpentry. Repeatable as long as content varies. Consent of department chairperson.			
CARP 195-295	Service Learning		1-3 credits
Maximum of six semester hours. Service learning may be accomplished by one of three methods: Joining a club that has a public service component, doing volunteer work at a non-profit organization, or taking a course that links public service with its curriculum.			
CARP 197-297	Cooperative Education/Internship		1-3 credits
Repeatable up to six semester hours. Students get on-the-job experience under qualified supervision in carpentry occupations. Work hours are arranged by the employer, adviser, and student. Student progress is checked by oral and written reports from the employer. Student adviser conferences are held to discuss progress and/or problems. All co-op experiences are graded on a satisfactory/unsatisfactory basis. Consent of department chairperson.			