Course Descriptions

Carpentry Career and Technical Certificate

The Vocational Certificate in Carpentry prepares students for a career in carpentry as a residential or small commercial carpenter, remodeler, trade foreman, project superintendent, or residential contractor. The program emphasizes both hands-on training and theory to acquire carpentry skills, and building knowledge that can lead to being your own boss. This 1200 clock hour program leads to certifications from the National Center for Construction Education and Research (NCCER), and the Pensacola State College Vocational Certificate in Carpentry.

Students learn to design and construct crafted, safe, healthy, comfortable, affordable, resource efficient, durable and resilient houses, based on current building science principles, sustainable design strategies and mainstream green building practices, using appropriate (climate specific) building materials, systems and technologies.

Program Outline

BCV0003C Introduction to Craft Skills

Introduces the student to the proper use and care of hand and power tools, and OSHA compliant shop and jobsite safety practices. Students are provided training to obtain their 2-year CPR, First Aid and AED certification. Emphasis is placed on rigging, handling, and transport techniques to safely load, move, install, store, and care for building materials and jobsite equipment. Learn useful construction math skills to accurately calculate building material quantities, to measure and cut, and layout building structures, components, and other building projects. Reading and interpreting various types of construction drawings, and written specifications, is essential to properly constructing building projects, which is a skill learned only through practice, which this course provides.

BCV0112C Introduction to Carpentry 150 ch

Learn skills necessary to construct, erect, install, and repair residential and small commercial structures, and building projects, made from wood and other materials. Carpentry tasks involve working from construction drawings, performing construction math and geometry calculations, laying out building components, measuring, cutting and assembling structures or building projects. Learn to identify and select appropriate sustainable building materials, methods of construction, and systems and technologies for durable construction for specific climate zones.

BCV0123C Building Layout and Foundations 150 ch

Learn strategies to select appropriate building sites, techniques to properly orient and layout a building, and choose clin1ate specific foundation types and construction. Also learn strategies and techniques to select and install foundations, water management systems, vapor barriers, concrete and block assemblies, and other foundation systems. Learn to perform building site and foundation building material takeoffs, and applying appropriate building codes and perfom1ance guidelines to and construct durable foundations.

Learn to identify, select, and layout wood and metal, framing members, and construct wood and metal framed structures. Advanced framing techniques will be stressed. Learn to identify, select and install air, moisture, vapor and thermal barriers, and code compliant fasteners and connectors. Knowing how to handle, store and care for framing materials are important skills to learn. Students will perfom1 building material takeoffs, and apply appropriate building codes and perfom1 ance guidelines to construct durable wood frame structures and building projects.

BCV0126C Carpentry Exterior Finishes

150 ch

Learn to select appropriate exterior (climate specific) weather resistant barriers and finishes: air barrier materials; drainage plane systems; moisture management systems; cladding types and trim, and techniques to properly install these systems. Learn to identify, select, and install exterior claddings; hardware and trim; windows and doors; flashings; roofing products; decking materials, and stair components. Students will be introduced to renewable energy systems, and installation techniques for fastening these systems to various roofing products, materials, and assemblies. Material take-offs, building code requirements, and third party performance practices are skills learned in this course.

BCV0127C Interior Finish and Trim

300 ch

Learn to select and install thermal barriers, interior finish trim and doors, stair assemblies, paint and sealers, finish flooring, cabinets, door hardware, and plumbing accessories. Learn about testing ductwork and building enclosures for air leakage, and building commissioning. Create pw1ch-out lists and learn how to delegate responsibilities to complete items on the list. Perform building material take-offs, and apply pertinent building codes on a residential building.

Total Clock Hours:

1200