

Carpentry/Carpenter CIP Code 46.0201

Introduction – Program of Study

Carpenters are skilled workers who are responsible for the construction of buildings and projects. They are able to study and to interpret blueprint specifications in order to prepare the project site, and to determine the dimensions and materials required. Carpenters are able to use power tools safely, in order to shape and cut materials for the project. These individuals may be required to perform many tasks, such as installing windows, doors, floors, millwork, and cabinetry. The ability to accurately measure and read a tape measure, level, and plumb bob are essential to this profession.

Carpenters are also skilled in the repair and restoration of many existing buildings. They may be responsible for the removal and replacement of damaged or defective building sections. In addition, they should be able to fabricate replacement frameworks, inspect building components to determine damage, and estimate the cost for repair of replacement parts. Carpenters may also work on scaffolding, install roofing materials, hang spouting and downspouts, and install roof vents.

Within buildings, carpenters build or repair cabinets, floors, windows, and doors. Woodworking machines, small hand tools, and all types of power tools can be found in every carpenter's toolbox. Large construction companies may assist carpenters in the purchase of many tools; however, independent carpenters need to be able to finance tools on their own budget.

Generally, carpenters receive training in one of the following methods: developing and demonstrating competencies as a secondary student in a career and technical education program; earning an associate degree in building construction technology; earning an undergraduate or graduate degree in construction management or completing a certified craft training and apprenticeship program.

Carpenters are expected to keep current with any new technology or codes related to the building/construction industries, recognize the various types of materials and methods available to the construction trade, and understand the complex interrelationships among numerous trades and professions within the industry.

Those individuals completing the program may be employed as carpenters, carpenter assistants or apprentices, lead carpenters, finish carpenters, maintenance carpenters, stair builders, production workers, concrete carpenters, house repairers, door installers, cabinet and trim

Revised July 2013

installers, framers, assemblers, and woodworkers.

Building a safe, productive and sustainable workforce of carpentry professionals and helping to address the critical workforce shortage facing the construction industry is vital to the economy. It is extremely important for an individual to develop a strong carpentry/carpenter framework that produces portable credentials through a well-designed educational foundation.

Assumptions of this Program of Study

High quality programs should meet the following standards:

- 1. Promote positive working relationships.
- 2. Implement a curriculum that fosters all areas of skill development
- 3. Use appropriate and effective teaching approaches.
- 4. Provide ongoing assessments of student progress.
- 5. Employ and support qualified teaching staff.
- 6. Establish and maintain relationships and use resources of the community.
- 7. Provide a safe and healthy learning environment.
- 8. Implement strong program organization and supervision policies that result in high quality teaching and learning.
- 9. Integrate academic skills and aptitudes necessary for postsecondary education, gainful employment and a foundation of lifelong learning.

CIP Code

46.0201 Carpentry/Carpenter

The carpentry program is designed to prepare individuals to apply technical knowledge and skills to lay out, fabricate, erect, install and repair structures and fixtures using hand and power tools. This program includes instruction in common systems of framing, construction materials, measuring, estimating, blueprint reading and finish carpentry techniques.

For more information, contact:

The Pennsylvania Department of Education Bureau of Career and Technical Education 333 Market Street, 11th Floor Harrisburg, PA 17126-0333

Phone: 717-346-9735 Fax: 717-783-6672 TTY: 717-783-7445

Revised July 2013