



## **Mason/Masonry CIP Code 46.0101**

### **Introduction – Program of Study**

Career opportunities abound in masonry. One only has to look around at office buildings, schools, bridges, houses, patios, and fireplaces, to notice that there are many aspects of society where forms of masonry exist. A mason's work is diverse and creates buildings, fences, roads, walkways, and walls using bricks, concrete, blocks, and natural stone. The structures that masons build will continue to be in demand for many years. It has been noted that as many as 70 percent of the buildings in the world are built by masons.

The level of complexity involved in masonry work varies from laying a simple masonry wall to installing an ornate exterior on a high rise building. Whether working with brick, block, tile, terracotta, concrete or stone, and regardless of the level of craftsmanship involved, the skill and precision of the mason can never be replaced by machines.

Brick masons and block masons lay and bind building materials, such as brick, structural tile, concrete block, cinder block, glass block, and terracotta block, and refractory tile with mortar and other substances to construct or repair walls, floors, fireplaces, chimney partitions, arches, sewers, and other structures. Stonemasons build stone structures, such as piers, walls, and abutments. They also lay walks, curbstones, or special industrial masonry for vats, tanks, and floors.

Cement masons and concrete finishers smooth and finish surfaces of poured concrete, such as floors, walks, sidewalks, roads, or curbs using a variety of hand and power tools. They align forms for sidewalks, curbs, or gutters; patch voids; and they use saws to cut expansion joints. Helpers for all the masons perform duties of lesser skills including using, supplying or holding materials or tools, and cleaning work areas and equipment.

Masons who realize the permanence of their work strive for quality. A mason's work is viewed as timeless because new and renovated masonry structures bring lasting beauty, solid economic savings, and an enhancement to communities.

Many masons will find future work in renovations and in green masonry. Green masonry will open opportunities for future masons. A green building is one that utilizes design and construction practices that significantly reduce or eliminate the negative impact of buildings on the environment and the building's occupants. A masonry building's life speaks to its reusability. A mason builds a building with good air quality, uses materials such as sand and rock that are

not in short supply and are easily accessible, renewable and reusable. Green masonry technology will offer job prospects to those masons who understand the use of local masonry materials, the use of masonry as a natural insulating material and have the skill to refurbish an existing building's structure to comply with green restoration practices. A mason will always be in a field of construction full of creative challenges and lasting rewards. Masonry is a skilled trade that takes much time, effort and talent to learn.

Completing a mason/masonry program will prepare career and technical education students for gainful entry level employment as a: brick mason, stone mason, block mason, cement mason, stucco mason, tile and marble setter, stone setter, mason helper, mortar mixer, segmental paver, concrete finisher, patio installer, construction manager, mason restorator, first line supervisor, quality assurance inspector, job estimator, supply store sales representative or independent contractor.

### **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**

#### **46.0101 Mason/Masonry**

This is an instructional program that prepares individuals to apply technical knowledge and skills in the laying and/or setting of brick, concrete block, glass block, hard tile, marble and related materials using trowels, levels, hammers, chisels and other hand tools.

#### **For more information, contact:**

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