Introduction to Masonry

Introduction to Masonry is a one-credit course designed to provide students with the basic knowledge and skills of masonry. Emphasis is placed on safety, tools of the trade, measuring, blueprint reading and layout, and masonry wall construction. Upon successful completion of this course, students demonstrate basic block and brick construction techniques.

Career and technical student organizations are integral, cocurricular components of each career and technical education course. These organizations serve as a means to enhance classroom instruction while helping students develop leadership abilities, expand workplace-readiness skills, and broaden opportunities for personal and professional growth.

Safety

Students will:

1. Apply safety rules, regulations, and procedures for masonry construction.

2. Identify rules and regulations related to masonry construction.

Orientation

3. Describe skills needed to work as a mason.

4. Identify tools and equipment used in performing masonry work.

Blueprint and Layout

5. Interpret construction drawings and specifications for masonry construction.

6. Identify components and types of mortar used in masonry construction.
   • Demonstrating various mortar mixing procedures using specified equipment
     Examples: mixing mortar by hand, mixing mortar with a mechanical mixer

7. Describe types of masonry bonds.

8. Describe various techniques used in masonry wall construction.
   Examples: masonry bonds, setup, joints, construction

Jointing

9. Demonstrate basic block and brick construction techniques.

10. Use basic bricklaying procedures, including mixing of mortar, laying a mortar bed for block and brick, and laying bricks with a head joint.
11. Identify composition, reinforcement, and forms used for concrete construction.

**Foundations**

12. Identify various kinds of footings, including continuous, spread, stepped, and pier.

13. Demonstrate site layout and measurements for a slab-on-grade with existing foundation and a slab-on-grade with integral foundation.

14. Demonstrate the finishing of concrete according to specifications for a masonry project.

**Estimation**

15. Determine materials and supplies needed for a masonry project.