BUILDING MATERIALS SCIENCE

UNIT CODE: CON/CU/BUT/CC/01/4

RELATIONSHIP TO OCCUPATIONAL STANDARDS

This unit addresses the unit of competency: Apply Building Materials Science

DURATION OF UNIT: 20 Hours

UNIT DESCRIPTION

This unit describes the competence in applying building materials science. It involves identifying properties of construction materials, using construction materials appropriately, and handling construction materials safely.

SUMMARY OF LEARNING OUTCOMES

- 1. Identify properties of construction materials
- 2. Use construction materials appropriately
- 3. Handle construction materials safely

Learning Outcomes, Content and Suggested Assessment Methods

| Learning outcome | Content | Suggested assessment methods |
|---|---|---|
| Identify properties of construction materials | Physical properties of construction materials Chemical properties of construction materials Mechanical properties of construction materials | Written assignmentsWritten Tests |
| 2. Use construction materials appropriately | Construction methods and processes Appropriate use of construction materials, tools and equipment | Practical projects Practical Tests Oral questioning Observation of work procedures |
| 3. Handle construction materials safely | Identification of construction materials User safety in handling construction materials Construction materials handling and storage | Practical projects Practical Tests Oral questioning Observation of work procedures |

Suggested Methods of Instruction:

- Demonstration by trainer
- Practical work by trainee
- Demonstration videos
- Projects
- Field trips
- Trainee group discussions

Recommended Resources

Tools and equipment

- Hand tools
- Machine tools

Materials and supplies

- Construction materials
- Stationery
- Manufacturer's catalogues

Personal protective equipment (PPEs)

- Safety boots
- Goggles
- Gas masks
- Helmets
- Gloves
- Dust coats
- First aid kit
- Ear muffs
- Dust masks
- Overalls