



TRAINING AND PROJECTS

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Course Title: Select, Use, and Care for Engineering Hand Tools

SAQA ID: 119744

NQF Level: 2

Credits: 8

Course Description:

This course provides learners with the knowledge and skills necessary to select, use, and maintain engineering hand tools effectively and safely. It covers various types of hand tools used in engineering contexts, emphasizing proper selection based on task requirements, safe usage techniques, and appropriate care and maintenance practices. The course also addresses safety regulations and best practices to prevent injuries and ensure optimal tool performance.

Course Objectives:

By the end of this course, learners will be able to:

- Identify various types of engineering hand tools and their specific uses.
- Select the appropriate tool for specific tasks based on material and job requirements.
- Demonstrate safe handling and usage techniques for hand tools.
- Perform routine maintenance and care for hand tools to ensure longevity and efficiency.
- Understand safety regulations and practices related to the use of hand tools in the workplace.

Benefits of Completing this Course:

- Acquire essential skills for selecting and using engineering hand tools safely and effectively.
- Enhance workplace safety by understanding proper tool handling and maintenance practices.
- Improve job performance through the effective use of the right tools for specific tasks.
- Gain confidence in performing engineering tasks and maintenance.
- Receive a recognized qualification that supports career development in engineering and technical fields.

Who Should Attend:

- Engineering and technical students.
- Apprentices and trainees in mechanical or electrical fields.
- Tradespeople who require proficiency in using hand tools.
- Supervisors and managers responsible for tool safety and maintenance in engineering environments.



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Assessment:

Assessment will be based on the learner's ability to:

- Demonstrate knowledge of different types of engineering hand tools and their uses.
- Select and use the correct tools for specific engineering tasks.
- Perform practical demonstrations of safe tool handling and usage.
- Conduct routine maintenance and care for hand tools.
- Participate in discussions and activities related to tool safety and maintenance.

Specific Outcomes and Assessment Criteria:

By successfully completing this SAQA Unit Standard, learners will demonstrate competency in the following:

1. Identify Engineering Hand Tools:

- Recognize various types of hand tools used in engineering, including cutting, gripping, striking, and measuring tools.
- Understand the purpose and function of each type of tool.
- Assessment Criteria: Written test on identifying and describing different engineering hand tools.

2. Select Appropriate Tools:

- Assess task requirements to determine the most suitable tools for specific engineering jobs.
- Explain the factors influencing tool selection, including material type, task complexity, and ergonomic considerations.
- Assessment Criteria: Practical exercise requiring learners to select the appropriate tools for given scenarios.

3. Demonstrate Safe Tool Handling and Usage:

- Follow safe operating procedures when using hand tools.
- Demonstrate correct techniques for handling, operating, and storing tools to minimize the risk of injury.
- Assessment Criteria: Practical demonstration of safe tool usage in simulated engineering tasks.

4. Perform Tool Maintenance and Care:

- Identify and perform routine maintenance tasks for various hand tools, including cleaning, sharpening, and storage.
- Recognize signs of wear or damage and understand when to repair or replace tools.
- Assessment Criteria: Practical assessment on conducting maintenance and care for a selection of hand tools.



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5. Understand Safety Regulations and Best Practices:

- Explain relevant safety regulations and best practices regarding hand tool use in the workplace.
- Promote a culture of safety and awareness among peers when using hand tools.
- Assessment Criteria: Group discussion and written assessment on safety regulations and practices related to hand tool usage.

By completing this course, learners will gain valuable skills in selecting, using, and caring for engineering hand tools, contributing to enhanced safety and efficiency in engineering tasks.