

TEXTILE DYEING

UNIT CODE: ENG/CU/TXP/CR/02/5/A

Relationship to Occupational Standards

This unit addresses the unit of competency: **Produce dyed textiles**

Duration of Unit: 140 hours

Unit description

This unit describes the competencies required by a textile processing craft person to produce dyed textiles. It involves competencies required to obtain textile for dyeing, prepare dyeing recipe, set up dyeing machine, carry out dyeing, carry out washing off and document dyeing process.

Summary of Learning Outcomes

1. Obtain textile for dyeing
2. Prepare dyeing recipe
3. Set up dyeing machine
4. Carry out dyeing
5. Carry out washing off
6. Document dyeing process

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Obtain Textile for Dyeing	<ul style="list-style-type: none">• Textile characteristics for dyeing• Textile dye affinity• Types of fabric and yarns• Sampling methods	<ul style="list-style-type: none">• Practical• Observation• Written tests• Oral• Individual assignments• Group assignments
2. Prepare Dyeing Recipe	<ul style="list-style-type: none">• Classification of dyes• Dye preparation process• Dye standards• Dye and pigment characteristics• Chemistry of dyeing• Principles of dyeing• Color scheme	<ul style="list-style-type: none">• Observation• Written tests• Oral• Practical• Individual assignments• Group assignments

3. Set Up Dyeing Machine	<ul style="list-style-type: none"> • Types of dyeing machines • Components of a dyeing machine • Dyeing machine control parameters • Machine safety 	<ul style="list-style-type: none"> • Practical • Oral • Observation • Written tests • Individual assignments • Group assignments
4. Carry Out Dyeing	<ul style="list-style-type: none"> • Objectives of dyeing • Dyeing mechanism • Machine safety • Dyeing faults • Dyeing precautions • Dyeing parameters 	<ul style="list-style-type: none"> • Practical • Oral • Observation • Written tests • Individual assignments • Group assignments
5. Carry out washing Off	<ul style="list-style-type: none"> • Importance of washing • Content of a washing bath • Washing parameters • Washing faults 	<ul style="list-style-type: none"> • Practical • Oral • Observation • Written tests • Individual assignments • Group assignments
6. Document Dyeing Process	<ul style="list-style-type: none"> • Documentation tools and equipment • Technical report writing for maintenance • Filing and data storage 	<ul style="list-style-type: none"> • Practical • Oral • Observation • Written tests • Individual assignments • Group assignments

Suggested Methods of Instruction

- Demonstration by trainer
- Practical work by trainee(s)
- Dyeing exercises by trainee
- Industrial visits to textile dyeing plants
- Power point presentation

Recommended Resources

- Fabric
- Yarn
- PPE
- Dyes and chemicals
- Dyeing machine
- Washing chemicals
- Thermometer
- Pantone shade card
- Documentation tool and equipment
- Stationeries
- Overhead projector/ Black or white board
- Computer and its accessories
- Weighing balance

easytvvet.com