



Australian Government

UEEFS2002 Develop foundation skills required for entry to the energy sector

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Modification History

Release	Comments
1	This unit of competency was first released in UEE Electrotechnology Training Package Release 10.0.

Unit outcomes

This unit introduces learners to the core foundation skills required to participate in further training for entry-level work in the energy sector, with a focus on literacy, numeracy, communication, planning and teamwork.

It supports the development of foundation and employability skills, preparing learners for further vocational training, apprenticeships, or employment in the energy sector.

On completion of this unit, learners will be able to demonstrate basic knowledge of routine energy sector documents, communication, conduct, supervision, and apply basic electrical numeracy concepts relevant to entry-level energy sector tasks. They will have the skills to work collaboratively on routine tasks, follow instructions to plan structured project activities, and communicate technical information using energy sector terminology.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Knowledge

On successful completion of this unit, learners will have:

- basic factual knowledge of:
 - terminology, documents, safety messages, warning signs and expectations for conduct, supervision, and communication relevant to entry-level energy sector contexts
- basic technical knowledge of:
 - extra-low voltage (ELV) direct current (d.c.) electrical concepts, including voltage, current, and resistance
 - the relationship between voltage, current, and resistance as described by Ohm's Law
- basic procedural knowledge of:

- safety procedures when working with ELV d.c. components
- how literacy, numeracy, teamwork, planning, communication and collaboration support routine project tasks
- the use of structured documents, digital tools and other appropriate tools to plan, record, organise and present information.

Skills

On successful completion of this unit, learners will have:

- cognitive skills to:
 - interpret and apply routine information
 - follow instructions
 - interpret signage and procedural checklists
 - use basic numeracy to estimate quantities, interpret measurements, calculate basic values and record results in energy-related tasks
- technical and procedural skills to:
 - safely use a limited range of tools, components, materials and documents
 - use digital tools where required
 - select and check ELV components
 - assemble a single path d.c. circuit
 - vary resistance and measure current to observe circuit behaviour
- communication skills to:
 - communicate technical information about project actions and outcomes
 - use appropriate energy sector terminology effectively
- collaboration skills to:
 - participate in project activities with others.

Application of Knowledge & Skills

Learners will apply their knowledge and skills in a structured learning environment. They will use autonomy and limited judgement to:

- plan and manage routine energy sector project tasks
- interpret information and clarify task requirements
- plan task steps and required materials
- safely assemble and test a single path ELV d.c. circuit
- vary resistance to observe changes in current
- record and communicate their actions and project outcomes

- use appropriate digital tools to organise or present project information where required.

Pre-requisite unit(s)

No pre-requisite units

Competency field(s)

Foundational Skills

Unit sector(s)

Electrotechnology

Range of conditions

N/A

Assessment Requirements for UEEFS2002 Develop foundation skills required for entry to the energy sector

Performance Evidence

The individual must demonstrate the ability to:

- clarify the requirements of a course project relevant to a basic ELV d.c. model task
- follow instructions, contribute ideas, and work with peers to plan a basic ELV d.c. model project task
- record task steps, required materials, safety considerations, and basic estimations for quantities, time, and sequence
- interpret instructions, signage, and procedural checklists relevant to the project task
- select ELV components for a single path d.c. circuit and check they are in safe working condition
- apply basic safety procedures, including shutting down and checking circuit isolation in accordance with task requirements, before commencing assembly
- assemble an ELV single path d.c. circuit using pre-selected components
- vary resistance in the circuit, measure the current, and record the effect on current flow
- record actions and results clearly using appropriate project documentation and digital tools
- communicate information while participating in project activities with others, using appropriate energy sector terminology to explain the actions taken and outcomes achieved.

Knowledge Evidence

The individual must demonstrate knowledge of:

- literacy requirements for energy-related project tasks, including:
 - common terminology used in entry-level energy contexts
 - routine project documents such as job sheets, checklists, and task instructions
 - safety messages, warning signs, and basic hazard communication
 - procedural checklists used in planning and execution
 - methods for recording task steps, measurements, and outcomes
 - digital literacy to access, record, and share project information using appropriate tools and technologies
- numeracy requirements for energy sector applications, including:

- fundamental electrical principles relevant to course project work involving ELV systems, including voltage, current, and resistance
 - the relationship between voltage, current, and resistance as described by Ohm's Law, demonstrated in single path d.c. circuit investigations
 - calculation techniques relevant to course project work, including time, quantities, and basic measurements
- effective teamwork for collaborative projects, including:
 - roles and responsibilities in group tasks and shared goal setting
 - respectful participation in group learning, including listening to others and seeking help when needed
- planning and organising course project tasks, including:
 - principles of collaborative planning and task sequencing
 - planning tools such as checklists, task outlines, and materials lists
- effective communication for project activities, including:
 - verbal and non-verbal communication in team or group settings
 - alternative communication methods suited to individual abilities
 - written communication for short reports, descriptions, or observations
 - presenting information using visual, written, or verbal formats
 - appropriate methods for project-related communication
 - visual communication methods such as labelled diagrams or simulated project representations
- awareness of energy sector working environments, including:
 - structured supervision requirements that apply to unlicensed learners when completing ELV d.c. project work
 - expectations for learner conduct, including following instructions and reporting concerns to a supervisor
- appropriate and respectful use of personal devices and digital tools in learning or work settings.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

All practical activities and projects involving electrical components must be limited to ELV d.c. systems as defined by relevant jurisdictional standards, to ensure they can be safely delivered and undertaken by individuals who do not require an electrical licence.

Mandatory Workplace Requirements

There are no mandatory workplace requirements for assessment. Assessment of performance evidence may be in a structured learning environment.

Unit Mapping Information

Previous Code and Title	Equivalence	Comments
	Newly created	This unit has been created to address a skill or task required by industry that is not covered by an existing unit of competency

Links

Companion volumes, including implementation guides, are found on the national training register - <https://training.gov.au/training/details/UEE>.