



Australian Government

UEEEL0058 Plan large electrical projects

Release: 1

UEEEL0058 Plan large electrical projects

Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Application

This unit involves the skills and knowledge required to plan large electrical projects.

It includes preparing and developing project plans for approval. It also includes establishing budgets and critical path analysis; developing workflow strategies; and documenting, presenting and negotiating budgets and timelines.

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

Pre-requisite Unit

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

Competency Field

Electrical

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to plan project

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1 Work health and safety (WHS)/occupational health and safety (OHS) processes and workplace procedures for a given work area are identified, obtained and applied
- 1.2 Project planning techniques are reviewed and adopted in accordance with workplace procedures

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|---|------------|--|
| | 1.3 | Scope of the project is identified from design brief specification and/or relevant documentation and from discussions with relevant person/s |
| 2 Develop project plan proposal | 2.1 | Estimated plant, material, labour and related costs are sought from relevant person/s in accordance with workplace procedures |
| | 2.2 | Project budget is established from estimated plant, material, labour and related costs in accordance with workplace procedures |
| | 2.3 | Critical path analysis is applied to develop workflow strategies |
| | 2.4 | Sources and availability of materials and resources needed for the project are identified in accordance with workplace procedures |
| | 2.5 | Risk management strategies are sought and obtained for incorporating in the project plan |
| | 2.6 | Project plan is reviewed against all inputs and adjusted to rectify any anomalies |
| | 2.7 | Project plan proposal is documented in accordance with workplace procedures |
| 3 Obtain approval for project plan | 3.1 | Project plan is presented and discussed with relevant person/s |
| | 3.2 | Alterations to the project plan resulting from the presentation/discussion are negotiated with relevant person/s in accordance with workplace procedures |
| | 3.3 | Final project plan is documented and approval obtained from relevant person/s |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEENEEG170A Plan large electrical projects.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>

Assessment Requirements for UEEEL0058 Plan large electrical projects

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- determining the project requirements accurately
- establishing a project budget
- developing effective workflow strategies
- documenting project plan proposal
- negotiating alterations to the proposed project plan successfully
- obtaining approval of the final plan
- dealing with unplanned events
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including using risk control measures
- identifying project scope and requirements, including plant, material, labour and related costs.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- electrical project planning and analysing progress, including:
 - project planning encompassing:
 - purpose of project planning
 - defining project parameters encompassing:
 - project scope
 - project stakeholders and clients
 - project phases and the relationship between phases
 - time requirements and limitations
 - resource requirements and limitations
 - quality requirements and limitations
 - time-management concepts and standard practices
 - financial management encompassing:

- financial management concepts
- standard practices for managing project finances
- project budgets
- costs
- variations and estimations
- invoicing against project phases/deliverables
- acquittals
- quality management concepts and practices
- human resource management concepts and practices within a project
- communication management concepts and practices within a project
- risk management and contingencies encompassing:
 - risk management concepts
 - internal risks
 - external risks
 - contingencies
 - standard practices for managing risk within a project
 - risk minimisation
 - risk removal
- procurement management concepts and practices
- physical resource management concepts and practices relating to equipment, technology, information and facilities
- contracts encompassing:
 - contract format
 - contract content
 - interpreting contract clauses
 - legal obligations of contract parties
 - working to contract specifications
 - documentation accompanying contracts, such as schedules
- performance assessment and continuous improvement
- engineering ethics principles
- customer/client relations encompassing:
 - importance of customer/client relations
 - interpersonal skills that enhance customer/client relationships
 - dispute resolution
 - customer/client relations strategies
- electrical industry sector customs and practices encompassing:
 - equipment procurement, cost-benefit analysis and performance testing
 - typical approaches to planning and management
 - successful planning techniques
 - best practice management methods and styles

- documents needed to plan a project
- factors influencing sequence and restraints of project activities
- critical path analysis covering graphical representation methods and methods of representing time/rates
- critical path and project analysis encompassing:
 - purpose of critical path analysis
 - essential data
 - relational sequence of work activities
 - graphical representation methods
 - methods of representing time/rates
 - monitoring methods
- relevant manufacturer specifications and operating instructions
- relevant plant, material, labour and related costs to project
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace instructions, policies and procedures.

Assessment Conditions

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

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated suitable workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, facilities and equipment and currently used in industry
- resources that reflect current industry practices in relation to planning electrical projects
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

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