



Australian Government

UEECO0018 Contribute to the commercialisation of products/applications/services

Release: 1

UEECO0018 Contribute to the commercialisation of products/applications/services

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 contribute to the commercialisation of products/applications/services.

It includes identifying and investigating opportunities for commercialisation within the organisation, commercialising a product/application/service and critically assessing the commercialisation process.

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

Pre-requisite Unit

Not applicable

Competency Field

Commercial

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

- 1 Contribute to the identification and investigation of commercialisation opportunities**

PERFORMANCE CRITERIA

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

- 1.1** Commercialisation opportunities are identified and analysed in accordance with workplace procedures and organisational goals

- 1.2 Opportunities are evaluated to determine impact on current business and customer base
 - 1.3 Assessment of external factors, costs, benefits, risks, market opportunities and potential competitors is undertaken to determine the potential viability of opportunities
 - 1.4 Return on investment is determined in accordance with workplace procedures
 - 1.5 Design brief commercialisation opportunities for the product/application/service is developed in a team environment
 - 1.6 Approval for design brief is obtained from relevant person/s
- 2 **Prepare to develop a product/application/service**
 - 2.1 Required outcomes identified in design brief with relevant person/s are confirmed
 - 2.2 Product/application/service is developed in consultation with relevant production personnel
 - 2.3 Development procedure is formulated to meet quality outcomes and manufacturer instructions for tooling, process, materials and equipment in accordance with work health and safety (WHS)/occupational health and safety (OHS) requirements and relevant industry standards
 - 2.4 Approval of development procedure is obtained from relevant person/s
- 3 **Contribute to the development of design**
 - 3.1 Development procedure is confirmed with relevant person/s
 - 3.2 Development of a product/application/service product is coordinated in accordance with the design brief and workplace procedures
 - 3.3 Development results are recorded in accordance with workplace procedures
 - 3.4 Development results and characteristics outside of design and development specifications are analysed and identified

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| | 3.5 | Changes are recommended, as required, to achieve product/application/service quality and production requirements |
| | 3.6 | Approval of changes is obtained from relevant person/s |
| | 3.7 | Product/application/service is revised, as required, to achieve quality and production requirements |
| 4 Document and report development outcomes | 4.1 | Product/application/service development objectives are met |
| | 4.2 | Product/application/service development reporting requirements are completed in accordance with workplace procedures |

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 UEENEER006B Contribute to the commercialisation of products/applications/ services.

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 UEECO0018 Contribute to the commercialisation of products/applications/services

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 includes:

- employing techniques, procedures, information and resources available in the workplace
- analysing and identifying development results and characteristics outside design and development specifications
- applying relevant work health and safety (WHS)/occupational health and safety (WHS/OHS) requirements, including using risk control measures
- assessing external factors to determine the potential viability
- consulting with relevant personnel for product/application/service development
- contributing to the development of design within a team
- contributing to the identification and investigation of commercialisation opportunities
- determining return on investment
- documenting and reporting product/application/service development outcomes
- evaluating opportunities to current business and customer base
- formulating and coordinating development procedures
- identifying design brief outcomes
- preparing to develop a product/application/service
- recommending changes to achieve product/application/service quality and production requirements
- recording development results.

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:

- products/applications/services commercialisation and safe working practices, including:
 - work in a team encompassing:
 - types of teams - managerial, administrative, project-based, commercial and social
 - roles, responsibilities and accountabilities of team members - the role, responsibility and accountability of individuals, teams, organisational management and clients
 - working in a team - identification and utilisation of team member skills and

- knowledge; maximising benefits of team diversity; team planning; team commitment and cooperation; improving/maximising team performance to achieve goals; team monitoring and adjustment; plain English literacy and communication; leading, facilitating, participating, coaching and mentoring
- working with clients - client relations, client liaison and the practice of working with clients
 - conflict resolution – personality analysis tools and strategies for dealing with difficult people
 - intellectual property concepts encompassing:
 - intellectual property and Australian law - the place of intellectual property in Australian law, past cases and outcomes, and necessary considerations
 - the nature of intellectual property - what is intellectual property? what isn't intellectual property? why is intellectual property relevant? what can intellectual property rights do? what can't intellectual property rights do?
 - intellectual property rights - patents, copyright, designs, confidential information and other specialty rights
 - managing intellectual property - identifying intellectual property; deciding what to protect; strategies for managing intellectual property; how intellectual property rights work together; intellectual property versus time, effort and finances; sources of assistance, including publications, intellectual property professionals, lawyers, business advisors and marketing consultants
 - enforcement of intellectual property - the enforcement process, the role of lawyers and resolution
 - the changing face of intellectual property - development of intellectual property right laws; changes to intellectual property right laws; extensions of intellectual property rights into non-traditional areas, including cultural, property arenas and the global marketplace
 - commercialisation concepts encompassing:
 - commercialisation - definition of commercialisation; triggers for commercialisation; past commercialisation successes; past commercialisation failures; triggers for commercialisation; methods for identifying a good product/idea/service/application; sources of assistance in regard to commercialisation, including documents, lawyers, business advisors and marketing consultants
 - the commercialisation process - the concept; does the concept fit with the organisation's goals? is there a market? what is the market? will the product meet the market requirements? can the product be sold? how can the product be sold? can the product be produced? how can the product be produced? can the production be repeated?
 - commercialisation arrangements - sole ventures, joint ventures, licensing and legal aspects of commercialisation
 - commercialisation planning - costing, marketing, production/development, distribution and sales
 - competition - who are the competitors? what are they doing and how quickly? and internal development relevant to competition
 - critical analysis of the commercialisation process for continuous improvement -

- successes, opportunities for improvement, controllable influences, uncontrollable influences and formulation of recommendations
- WHS/OHS principles and fundamentals encompassing:
 - underlying principles of WHS/OHS
 - general aims and objectives of the relevant state or territory legislation relating to WHS/OHS
 - employer and employee responsibilities, rights and obligations
 - major functions of safety committees and representatives
 - powers given to WHS/OHS inspectors
 - housekeeping and potential hazards in relation to improper housekeeping
 - selecting appropriate personal protective equipment (PPE) given hazardous situations
 - the work environment encompassing:
 - typical hazards associated with a range of work environments
 - procedures used to control the risks associated with these hazards
 - principles of risk assessment/management and state the purpose of each
 - hierarchy of WHS/OHS hazard control measures
 - required documentation for risk assessment
 - commonly used workplace safety signs
 - workplace emergencies that pose a threat to health and safety and suitable procedure for an emergency workplace evacuation
 - appropriate fire extinguisher for a given type of fire
 - requirements for the location, mounting and maintenance of portable fire extinguishers
 - basic process of fighting a fire
 - safe premises, buildings and security are important in an industrial setting and the consequences of non-compliance with these
 - standard work procedure is and why they are required in some circumstances
 - manual handling encompassing:
 - typical manual handling injuries and the effect they can have on lifestyle
 - situations that may cause manual handling injuries
 - correct procedures for lifting and carrying to prevent manual handling injuries
 - chemicals in the workplace encompassing:
 - hazardous substances and dangerous goods
 - classification of chemicals as hazardous substances and/or dangerous goods
 - requirements for labelling of chemicals in the workplace
 - safe storage procedures for chemicals
 - purpose of and interpretation of SDS/MSDS
 - working at heights encompassing:
 - dangers associated with working on ladders and scaffolds
 - identification of work area as a height risk and use of appropriate safety equipment to prevent a fall

- selecting an appropriate ladder for a given situation and perform a safety check before use
- precautions that should be taken when ascending and working off a ladder
- precautions that should be taken when working on and around a scaffold and elevated platforms
- confined spaces encompassing:
 - hazards associated with working in a confined space
 - identifying workplace situations that could be classified as a confined space
 - control measures for working in a designated confined space
- physical and psychological hazards encompassing:
 - short and long-term effects of excessive noise and techniques to avoid damage to hearing due to excessive noise
 - effects of vibration on the human body and work practices to protect against vibration
 - effects of thermal stress on the human body and work practices to protect against thermal stress
 - effects of ultraviolet (UV) radiation on the human body and work practices to protect against UV radiation
 - dangers associated with laser operated equipment and tools and suitable protective measures to overcome the danger
 - occupational overuse syndrome, state examples of how it occurs and describe means to overcome it
 - factors that cause stress in the workplace, symptoms of a person suffering from stress and personal stress management techniques
 - detrimental effects and dangers of drug and alcohol use in the workplace
- working safely with electricity encompassing:
 - effects of electric shock on the human body
 - common causes of electrical accidents
 - precautions that can minimise the chance of electric shock (earthing, extra-low voltage (ELV), fuses, circuit breakers and residual current devices (RCDs))
 - protection offered by RCDs
 - need for ensuring the (safe) isolation of an electrical supply
 - appropriate method of removing an electric shock victim from a live electrical situation
- life support - cardiopulmonary resuscitation (CPR) in the workplace encompassing:
 - first aid
 - responsibilities of the first aider
 - priorities of first aid management for any accident or injury
 - procedures required at an accident scene
 - legal and ethical issues, which may impact on the management of care
 - duty of care
 - examination of a casualty for injuries

- effect of cardiopulmonary arrest on the body
- managing simulated conditions of airway obstruction; respiratory arrest and cardiopulmonary arrest
- single and two-person CPR
- signs and symptoms of an altered level of consciousness
- management of simulation of a casualty with an altered level of consciousness
- signs and symptoms of shock
- management of simulation of a casualty in shock
- commercialisation
- design brief
- relevant industry standards
- relevant manufacturer specifications and operating instructions
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace quality, 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 used in industry
- resources that reflect current industry practices in relation to contributing to the commercialisation of products/applications/services
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

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