Australian Government

UEERS0020 Apply rail signalling principles

Release: 1

UEERS0020 Apply rail signalling principles

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 interpret and apply rail signalling principles.

It includes identifying signalling equipment, explaining signalling terminology and conventions and explaining railway signalling principles. It also includes the interpretation of key signalling design documents as well as applying health and safety legislative requirements to different signalling work.

Persons achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and comply with relevant codes of practice, rules and/or guidelines.

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

Pre-requisite Unit

Not applicable

Competency Field

Rail Signalling

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1 Identify health and safety	**1.1** Basic roles, responsibilities and rights of rail signalling

© Commonwealth of Australia, 2024 Powering Skills Organisation

	legislative requirements of different signalling works		work are identified and explained according to jurisdictional health and safety legislative requirements
		1.2	Duty of care requirements are identified
		1.3	Onsite rail signalling safe work practices are identified and explained
2	**Identify types of signalling equipment**	**2.1**	Principal components of the signalling system and their purpose are identified
		2.2	Different types of signalling interlocking systems are identified
3	**Identify key information in signalling design documents**	**3.1**	The major design document types/categories and their purpose are identified
		3.2	Signalling arrangement plans/track plans are interpreted and equipment and structures are identified when inspecting a rail signalling works/site
		3.3	Key information is located in a track insulation/bonding plan when inspecting a rail signalling works/site
		3.4	The structure of a circuit book is interpreted, and key information is located
4	**Apply basic signalling terminology and conventions**	**4.1**	Basic terminology for signalling infrastructure, systems and operation is applied
		4.2	Naming and numbering conventions are applied to a range of signalling designs
		4.3	Relevant signalling standards are accessed and interpreted
		4.4	Fail safe, right side and wrong side failures are identified
5	**Apply rail signalling principles**	**5.1**	Methods of ensuring safe distances are maintained between rail vehicles are identified
		5.2	The difference between controlled and automatic signalling is identified
		5.3	Workplace procedures for maintaining independence when conducting checking or verifying actions are interpreted and applied

© Commonwealth of Australia, 2024 Powering Skills Organisation

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 is a new unit.

Links

Companion Volume Implementation Guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6

© Commonwealth of Australia, 2024 Powering Skills Organisation