



**Australian Government**

**Assessment Requirements for ICTOPN401  
Install and test a dense wavelength division  
multiplexing system**

**Release: 1**

## Assessment Requirements for ICTOPN401 Install and test a dense wavelength division multiplexing system

### Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 2.0.

### Performance Evidence

Evidence of ability to:

- determine the dense wavelength division multiplexing (DWDM) requirements for a site
- install a DWDM system and associated cabling according to plans and specifications
- test installation for operation, power and ground connections
- analyse test results and rectify faults
- complete and submit an installation report.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

### Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain DWDM principles of operation
- outline managing risk of electrostatic discharge
- outline optical fibre connector types and characteristics
- summarise optical fibre types and characteristics
- outline specific workplace health and safety requirements that impact the safe measurement and inspection of optical connectors and optical power from laser transmission systems.

### Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Telecommunications – Optical Networks field of work and include access to:

- tools and equipment requirement for installation
- a range of optical fibres to suit the installation.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

## **Links**

Companion Volume implementation guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>