



Australian Government

**Assessment Requirements for ICTTEN431
Design a dense wavelength division
multiplexing system**

Release: 1

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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:

- design a dense wavelength division multiplexing (DWDM) system and associated cabling according to plans and specifications
- design DWDM power and ground connections
- complete and confirm installation design 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:

- recognise principles of operation of a DWDM
- recognise electrostatic discharge and apply work practices to minimise damage to equipment
- recognise and describe the function and types of optical fibre connectors and characteristics of optical fibre
- describe specific work health and safety (WHS) requirements that impact the safe inspection of optical connectors
- recognise and apply principles of safe measurement of optical power for laser transmission systems
- describe tools and ancillary equipment commonly used for DWDM systems
- recognise and describe common power wiring faults.

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 should be typical of those experienced in the telecommunications networks engineering field of work and include access to:

- special purpose tools, equipment and materials
- a suitable site for DWDM equipment installation
- tools and equipment required 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.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>