

PLI-16-445

## nbn™ FIBRE SPLICER

This course provides attendees with the accreditation, competencies and skills to confidently construct the fibre optic network attributes for nbn's™ FTTP, FTTN architectures.

## nbn™ COURSES

PERPETUAL LEARNING INSTITUTE offers a comprehensive range of nbn™ courses to equip you with the necessary skills and knowledge required to work on the nbn™ network

PERPETUAL  
LEARNING  
INSTITUTE is  
a Nationally  
Approved Training  
Provider of  
Telstra™ & nbn™

Contact us today  
for full details



This course is designed for individuals with minimal experience and ensures that learning outcomes can be applied immediately to field activities using our advanced real world hands on learning environments.

On completion, learners will have the confidence to build common network attributes including all optical joint enclosures used within the nbn™ optical architectures (TFN, DFN & LFN) as well as splicing ribbon and stranded optical cable types.



### BOOK ONLINE

Information is subject to change  
For the most current information and training schedule, please visit : [www.perpetual.edu.au/book](http://www.perpetual.edu.au/book)



### ACCREDITATIONS

Perpetual Learning Institute Pty. Ltd. is a nationally Registered Training Organisation (RTO code: 40809)

Perpetual Learning Institute Pty. Ltd is also a Nationally Approved Training Provider (ATP) of nbn™ & Telstra™



APPROVED

## COURSE OUTLINE



### Overview of nbn™ Architectures

- Overview of FTTP – Fibre To The Premise
- Overview of FTTB – Fibre To The Basement
- Overview of FTTN – Fibre To The Node
- Components associated with optical network of FTTP, FTTN architectures
- Service delivery overview for FTTP, FTTN networks
- Working safely in the telecommunication environment

### Overview of Optical Fibre Cabling & Joint enclosures

- Overview of nbn™ cable joint enclosures - AJL, BJL, DJL, FJL, HDODF
- Overview of FTTP FDH (Fibre Distribution Hub – including optical splitter technology)
- Optical connector cleaning techniques
- Cable types used within nbn's™ optical network
- Fibre optic cable numbering system
- Cable stripping techniques for ribbon and stranded cable ( nbn™ specific)
- Cable labelling and markings
- Prepare cabling for installation in joint enclosures

### Fibre optic Splicing Techniques

- Splicing tooling
- Stranded fibre cleaving practices
- Ribbon fibre cleaving practices
- Detailed overview of stranded fibre splicing techniques
- Detailed overview of ribbon fibre splicing techniques
- Fusion splicing techniques and acceptable limits (NBN Specific)
- Matching Splice Protectors to Splicing

### DFN & LFN/MTLFN Active Network Components

- Overview of Alcatel's nbn™ Node
- Overview of Commscope nbn™ Node
- Overview of DPU's

### Fibre Optic Joint Enclosure Assembly Principles

- Warren & Brown 2 draw internal cable subrack
- FOSC 400 (DJL)
- Corning ORS (Brank DJL / AJL)
- Flexible Joint Location (FJL)
- Optical splitters into FJL
- Breakout Joint Location (BJL)

### Practical Exercise

- Build DJL (FOSC 400) 288F / 576F
- Build a Branch DJL (Corning ORS) -72F
- Build W&B 2 draw -72F
- Build FJL -72F
- Build BJL 12F

The above includes cable stripping and joint installation and splicing practices

### Practical Exercise

- Theoretical assessment
- Practical assessment

## INDUSTRY PROBLEM

- With the deployment of the nbn™, Australia now needs additional skilled workers to construct the different network architectures.
- New network architectures and technologies require the development of new skills and knowledge to ensure success.



## PERPETUAL LEARNING SOLUTION

- Working as an nbn™ Approved Training Provider, PERPETUAL LEARNING INSTITUTE has enhanced our traditional courses to align directly to the skills needed for the nbn™ rollout.
- The development of carefully constructed skill based programs is where we excel – the art of training.
- Unlike other training organisations which focus primarily on technology, PERPETUAL LEARNING INSTITUTE is structured toward Field Operations staff. Technology theory is combined with large quantities of practical exercises to reinforce the learning process.
- PERPETUAL LEARNING INSTITUTE is the market leader with regards to hands on practical training that is supported by our real world learning simulators – “We bring the field environment to you”.



## COURSE INFORMATION

### Course Locations:

Melbourne, Adelaide,  
Sydney, Hobart,  
Canberra,  
Cairns,  
Brisbane,  
Darwin and Perth



Location and timing will be advised at enrolment

Class Size: 10 - 12 students

Learners are required to complete a portfolio of evidence to achieve certification of Units of Competency listed below.

### Included:

All materials used for practical exercises, technical manuals for each attendee, test equipment, emulation environment.

1 week phone support.

## WORK ON THE nbn™

There are specific technical competencies that must be attained prior to commencing any type of work on the nbn™.

The following table shows the relevant Units of Competency that will be achieved on successful completion.

Once complete the student can formally gain accreditation on nbn's™ workforce compliance platform enAble™ (<https://enable.nbnco.com.au/>)



### Units of Competency provided by PLI-16-445

Unit Code	Unit Name
ICTBWN302	Install optical fibre splitters in fibre distribution hubs
ICTCBL316	Install ribbon fibre cable in the FTTX distribution network
ICTTEN311	Inspect, clean and handle optical fibre and connectors
ICTCBL208	Splice and terminate optical fibre cable