



Australian Government  
Australian Radiation Protection  
and Nuclear Safety Agency



# The ARPANSA Practical Reference Dosimetry Course

31 March to 3 April 2025

ARPANSA is pleased to announce the **eighth Practical Reference Dosimetry Course** for external beam radiotherapy.

Running over four days, the course will cover the theory and provide hands-on experience in all areas of radiation dosimetry for external beams.

The course is aimed at experienced ROMP registrars and qualified medical physicists seeking a refresher course.

Concentrating on TRS-398 Revision 1 and TG-61, the course is hands-on as well as delving into the physics behind the protocols.

## Topics include:

- quantities and units
- uncertainty calculations and reporting uncertainties
- dosimetry protocols for kV and MV photons and MeV electrons (TRS-398 Revision 1, TG-61)
- TRS-398 Revision 1
- measuring beam quality index, output, and output factors
- primary standards
- legal metrology and regulatory framework
- understanding your equipment
- ion chamber theory
- small fields, protons and MR linacs.



### The four day course consists of:

- lectures by ARPANSA staff and senior hospital physicists
- 6 practical sessions
- formal assessment at the end of each day
- certificate upon successful completion.

### At the end of the course students will:

- have a good fundamental theoretical and practical understanding of all aspects of reference dosimetry for kV X-rays, high-energy photons and electrons
- be familiar with the Australian primary standards for air kerma and absorbed dose to water used in reference dosimetry, their units and uncertainties
- understand the ACPSEM-recommended codes of practice for kV X-rays, MV photons and electrons and their practical application to clinical beams
- understand correction factors and be able to calculate uncertainties in reference dosimetry.

### Limited places available

10 to 16 participants only (fees apply). Approved for 40 CPD points.

### Venue

ARPANSA Dosimetry Laboratories  
619 Lower Plenty Road, Yallambie VIC 3085

### Tickets

To register for the course please purchase a ticket through the **TryBooking system**: [www.trybooking.com/CTLSH](http://www.trybooking.com/CTLSH)

---

For more information contact Chris Oliver  
[psdl@arpansa.gov.au](mailto:psdl@arpansa.gov.au) | 03 9433 2333  
[arpansa.gov.au](http://arpansa.gov.au)

