

Dosimetry Audit

1-5 December 2025 | Delft, The Netherlands

The course will provide a unique opportunity to experience a hands-on practical course to learn how to set up, run, analyse and report a dosimetry audit that assesses the dosimetric capability of an institution. The course will also give you the possibility to set up a new dosimetry auditing network. In addition, the course is suitable for those who are specialists in dosimetry in their own centre and who want to understand more deeply the results that dosimetry audits can offer and how they relate to clinical work.



Target group

The course is aimed at physicists who are interested in learning about issues which exist in dosimetry and how audit can be developed to find these issues.

Course Aim

This advanced course aims to provide training which will help participants develop a deeper understanding of issues which exist in dosimetry and how to develop dosimetry audit as well as learn how to select and use the most appropriate equipment, report the results and what to do when errors and issues are found. The goal is to give the participants hands-on experience and the opportunity to partake in discussion with experienced auditors, such that they are then in a strong position to take their new skills away and apply them both in the clinic and in setting up new dosimetry audits for a variety of reasons. This will be a practical course through the integration of lectures, discussions and real-world scenarios. The program is aimed to be an introduction to the key elements of dosimetry auditing with worked examples and advice, as well as the opportunity to discuss techniques under the guidance of experts. The faculty will include experts from standards laboratories, clinical trials quality assurance groups and dosimetry audit networks, who have not only carried out audits themselves but have also developed approaches for validating advanced radiotherapy techniques. This course is suitable both for those who want to learn how to run audits as well as those who wish to take part in audits and benefit from the findings.

Course Content

- Clinical relevance of audit
- How to design a good audit
- Choosing the right tools
- Determining the uncertainty budget
- Setting audit tolerances
- On-site vs. remote vs. virtual audits
- Novel audit methodologies
- Lessons learned from dosimetry audits
- Reporting audit results and follow-up
- Effective film dosimetry
- Using patient specific QA devices
- Reference and small field dosimetry
- End-to-end VMAT/SBRT audit
- Specific TPS planned scenarios
- Reporting on case studies with problem

