



A platform for IGRT Education

What is IGRTOnline?

The IGRTOnline website is an online platform for education and interaction on Image-guided Radiation Therapy

What's on this website?

The course currently available on this website is called **Image Guided Radiation Therapy: Principles and Practice**.

This is a course on the concepts, techniques and clinical applications of Image Guided Radiation Therapy. The course allows self-paced learning with interactive teaching material, quizzes and assessments.

Who is this course for?

This course is mainly aimed at radiation oncologists and radiation therapists who are new to IGRT. It is meant to be a starter course, to get an overview of the concepts and techniques. It is not ideal for advanced users, although anyone is free to enrol.

What's special about this course?

- It comprehensively covers the key concepts
- It allows you to learn at your own pace, at your own time.
- It is interactive
- Explains concepts with illustrations and animation
- Allows self-assessment with numerous quizzes
- It is completely free

Course Modules

Section 1: Principles of IGRT

- 1.1 An Introduction to IGRT
- 1.2 Errors and Uncertainties in Radiation Therapy
- 1.3 Understanding PTV Margins
- 1.4 The role of immobilization in IGRT
- 1.5 Offline and Online Correction Strategies

Section 2: The Tools and Techniques of IGRT

- 2.1 Image Fusion for Radiation Treatment Planning
- 2.2 In-room Planar X-ray based IGRT
- 2.3 In-room CT based IGRT
- 2.4 Ultrasound based IGRT
- 2.5 Electromagnetic Tracking
- 2.6 Respiratory Motion Management

Section 3: IGRT in Clinical Practice

- 3.1 IGRT for Intracranial Lesions
- 3.2 IGRT for Head and Neck Cancers
- 3.3 IGRT for Breast Cancer
- 3.4 IGRT for Lung Cancer
- 3.5 IGRT for Upper Gastrointestinal Cancer
- 3.6 IGRT for Lower Gastrointestinal Cancer
- 3.7 IGRT for Prostate Cancer
- 3.8 IGRT for Cancers of the Uterine Cervix