Module: Radiobiological Principles and Practice
Postgraduate Certificate / Diploma / M.Sc. in Advanced Radiotherapy Practice

• The aim of this module is to provide an understanding of the biological consequences of ionising radiation exposure and its potential in cancer treatment. It leads to a more comprehensive understanding of treatment planning dose restrictions and calculations, conventional delivery protocols and purpose of alternative fractionation schedules.

• At the end of the module you will be able to:
  – Compare and contrast the main characteristics of normal and malignant tissue biology and structure.
  – Explain and apply the 5 basic radiobiological principles to clinical situations.
  – Characterise and predict the effects of altered fractionation schedules on normal tissue complications and tumour control.
  – Explain and appraise the cancer risk associated with radiation exposure.