**Day 1: Radionuclides & radiation protection**

* Physics for Nuclear Medicine
* Radionuclide Production
* Radiopharmaceuticals
* Nuclear Medicine / PET Case Studies
* Radiation Detectors
* Radiation Protection in Nuclear Medicine

**Day 2: Gamma camera imaging**

* The Gamma Camera
* Nuclear Medicine Imaging Techniques
* SPECT Imaging
* Iterative Reconstruction
* Nuclear Medicine / PET Case Studies
* Quality Control and Performance Assessment of Gamma Camera Systems
* Image Processing Techniques
* Advances in Gamma Camera Technology

**Day 3: PET/CT**

* Principles of CT imaging
* PET Instrumentation
* PET Tracer Production and Molecular Targeting
* Principles of Tracer Kinetics
* The Future of Nuclear Medicine
* PET in Radiotherapy
* Advances in PET Technology

**Day 4: Internal dosimetry**

* Introduction to the MIRD Schema
* Quantitative Imaging
* Absorbed Dose Calculation Algorithms
* Applications of Internal Dosimetry
* Radiobiology for MRT
* Dosimetry in Emerging Clinical Therapies
* Practical Session

Each lecture will be 45 minutes in duration.