

Course check list

If you have not graduated from a CAMPEP accredited medical physics graduate program, indicate within your personal statement which of the following topics were covered in your academic training – including the number of lecture hours. The lack of these courses DOES NOT eliminate you from consideration, rather it allows us to determine your Medical Physics specific didactic background.

Clinical

Anatomy
Physiology
Clinical Oncology
Radiobiology

Radiological Physics

Atomic and Nuclear Structure
Radioactivity
Radiation Interactions with Matter
Dosimetry: Theory and Measurement
Radiation Protection and Safety

Imaging in Medicine

Conventional Planar X-Ray Imaging
Digital X-Ray Imaging and Computed Tomography
Ultrasound Imaging
Magnetic Resonance Imaging
Nuclear Medicine/Imaging

Radiation Therapy

Radiation Producing Treatment Devices
External Beam Radiation Therapy
Treatment Planning
Imaging for Therapy
Radiation Therapy with Neutrons, Protons, and Heavy Ions
Special Techniques in Radiotherapy
Brachytherapy
Radiation Protection in Radiotherapy

Professional Practice

Conflict of Interest
Ethics
Scientific Misconduct
AAPM Task Group Reports

Mathematical Methods for Radiological Sciences

Image and Imaging Systems Analysis (e.g. ROC, MTF)
Image reconstruction
Statistics for Clinical Research
Convolution/superposition
Fourier Transforms
Mutual Information