

HKCRRT Certified Medical Dosimetrists

1. Admission of Members

- 1.1 A candidate may admit as a Member of the HKCRRT (Medical Dosimetrist) and is entitled to use the title MHKCRRT(Medical Dosimetrist) if satisfying the enlisted requirements.
- 1.2 Being a Radiographer registered with the Hong Kong Radiographers Board; **AND**
- 1.3 Have had 5 years of post-registration working experience in radiography, medical imaging or radiotherapy; **AND**
- 1.4 Academic requirements
 - 1.4.1 A recognized Master degree or above in Medical Dosimetry; **OR**
 - 1.4.2 A recognized Bachelor degree in medical imaging or related fields plus a Medical Dosimetrist specialist qualification recognized by the College (as outlined below in Section 2); **AND**
- 1.5 Have completed the required clinical training or experience (as outlined below in Section 3); **AND**
- 1.6 Being recommended by the Council.

2. Part A: Academic Requirements

Syllabus

(A) *Radiation Physics*

- Radioactivity
- X-ray production and characteristics of radiations
- Radiation measurement and related equipment

(B) *Dose calculation*

- External beam of photon and electron calculations
- Beam modification devices effect
- Tissue inhomogeneities

(C) *Treatment Planning*

- Dose distribution of photon and electron
- Clinical Oncology and treatment schemes
- Radiobiology and calculations
- Interpretation of Dose Volume Histogram
- IMRT

(D) *Localisation*

- Patient data acquisition
- Patient positioning and immobilization
- Special set up devices

- Treatment simulations
- Medical imaging for oncology
- Image registration

(E) Brachytherapy

- Radioactive sources characteristics
- Dose distributions
- Application of radioactive sources
- (F) Radiation protection
- Radiation monitoring for personnel and patients
- Principles of radiation protection

(F) Quality Assurance

- Equipment safety and accuracy
- Plan and treatment accuracy

(G) Information technology

- Data importing and exporting
- Computer system management
- Planning computer algorithms

3. Part B: Clinical Requirements

- 3.1 A minimum of 2 years of post-registration working experience in medical dosimetry.
- 3.2 The candidates should produce supporting document(s) of his/her working experience e.g. full resume of working experience, recommendation from his/her superiors.

4. HKCRRT Certification Examination for Medical Dosimetry

- 4.1 A Certified Medical Dosimetrist qualification is available to candidates who have attained a grade of 75% or above in an examination set by the Medical Dosimetry Faculty of HKCRRT **AND** performed the required clinical training as outlined above in Section 3.
- 4.2 The Certification Examination will involve a 3-hour paper consisting of not more than 150 multiple choice questions.
- 4.3 The approximate percentages of questions related to each topic are listed below:

<i>Radiation Physics</i>	<i>(15%)</i>
<i>Dose calculation</i>	<i>(20%)</i>
<i>Treatment Planning</i>	<i>(30%)</i>
<i>Localisation</i>	<i>(20%)</i>
<i>Brachytherapy</i>	<i>(5%)</i>
<i>Quality Assurance</i>	<i>(5%)</i>
<i>Information technology</i>	<i>(5%)</i>
	<i>100%</i>

5. Admission of Fellows

- 5.1 A candidate may admit as a Fellow of the HKCRRT and is entitled to use the title FHKCRRT (Certified Medical Dosimetrist) if satisfying the enlisted requirements.
- 5.2 Being a Radiographer registered with the Hong Kong Radiographers Board; **AND**
- 5.3 In possession of the academic & clinical requirements
 - 5.3.1 A recognized Doctorate in Medical Dosimetry with 8 years of post-registration clinical experience; **OR**
 - 5.3.2 A recognized Master degree in Medical Dosimetry or a Certified Medical Dosimetrist qualification recognized by the HKCRRT; plus 3-year full time equivalent post specialization clinical experience of Medical Dosimetry ; **AND**
- 5.4 2 publications in peer-reviewed journals; **AND**
- 5.5 2 episodes in teaching / lecturing / presentation in open conferences; **AND**
- 5.6 Being recommended by the Council.
- 5.7 The clinical experience component requires the candidate's Specialty Supervisor to acknowledge completion of the requirements.
- 5.8 If applicants apply for fellowship directly, the clinical requirements as stated in Section 3 should be fulfilled.

6. Continuing Professional Development (CPD)

- 6.1 Once certified in Medical Dosimetry (Certified Medical Dosimetrist), the radiographer must complete 45 CPD credits in each triennium, of which 15 credits are relevant to Medical Dosimetry in order to maintain the certified specialist credential.