# **HKCRRT Certified Medical Imaging Informaticists**

### 1. Admission of Members

- 1.1 A candidate may admit as a Member of the HKCRRT Medical Imaging Informatics and is entitled to use the title MHKCRRT (MII) 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 Computer, Information Technology, Medical Informatics or Health Informatics; **OR**
  - 1.4.2 Master of Science degree in Medical Imaging and Radiation Science (MIRS) from the Hong Kong Polytechnic University registered in or after September 2008 with no less than 40% of the modules taken associated in Medical Imaging Informatics; **OR**
  - 1.4.3 A recognized Master degree in Medical Imaging or Health Care, plus a medical imaging informatics 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) Planning and Project Management

- Organization strategic plan and policies
- Process for vendor selection
- Tendering process
- Project feasibility evaluation
- Project management skills
- Development and implementation of policies and procedures

## (B) Communications and Training

- Stakeholders in healthcare settings
- Knowledge in medical terminology
- Alerting system regarding contingency or system changes
- Strategies on communicating with decision-makers
- User feedback mechanisms
- Perform needs and training needs assessment
- Training programs implementation
- Training programs evaluation

## (C) Operation Management

- Design of PACS reporting environment
- Integration and application of human computer interface
- Process to control image flow and data integrity
- Policy on importing and exporting studies

## (D) <u>Information Technology</u>

- Archiving architecture
- Network architecture
- Hardware and software management
- Data mining for operations, quality assurance, and planning purposes
- IT standards
- Replacement planning

# (E) Systems Management

- Optimization of system capacity and throughput
- Planning for disaster recovery and business continuity
- Strategies for troubleshooting and system monitoring
- Data migration planning
- Data security and privacy

## (F) Clinical and Technological Integration

- Capability assessment of various imaging modalities
- Modalities integration
- Quality assurance (QA) and improvement (QI) procedures
- Hazards in the healthcare environment
- Medical imaging standards (DICOM, HL-7, HIPPA, MQSA, SNOMED)
- IHE guidelines
- Enterprise systems integration

### (G) Imaging Informatics

- Image processing and enhancement
- Data compression
- 3D, visualization and multi-media
- Speech recognition
- Computer-Aided Detection and Diagnosis (CAD)
- Imaging facilities design
- Imaging vocabularies and ontologies
- Other new imagining technologies

## 3. Part B: Clinical Requirements

- 3.1 The candidates are required to have 2 years of experience of Medical Imaging Informatics Administration.
- 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 MII

4.1 A MII specialist qualification is available to candidates who have attained a grade of

75% or above in an examination set by the MII Faculty of HKCRRT <u>AND</u> performed the required clinical training as outlined above in Section 3.

- 4.2 The prerequisites for the accreditation examination will include:
  - **4.2.1** Being a Radiographer registered with the Hong Kong Radiographers Board; **AND**
  - 4.2.2 Have had 5 years of post-registration working experience in radiography or medical imaging; **AND**
  - 4.2.3 A recognized Master degree in medical imaging or related fields
- 4.3 The HKCRRT (MII) accreditation examination will involve a 3-hour paper covering various topics of the MII syllabus conducted by HKCRRT.
- 4.4 The approximate percentages of questions related to each topics are listed below:

Planning and Project Management	5%
Communications and Training	5%
Operation Management	10%
Information Technology	20%
Systems Management	20%
Clinical and Technological Integration	20%
Imaging Informatics	<u>20%</u>
	100%

### 5. Admission of Fellows

- 5.1 A candidate may admit as a Fellow of the HKCRRT Medical Imaging Informatics and is entitled to use the title FHKCRRT (MII) if satisfying the enlisted requirements.
- 5.2 Being a Radiographer registered with the Hong Kong Radiographers Board; **AND**
- 5.3 In possesion of the academic & clinical requirements
  - 5.3.1 A recognized Doctorate in Computer, Information Technology, Medical Informatics or Health Informatics; **OR**
  - 5.3.2 A recognized Master degree in Computer, Information Technology, Medical Informatics or Health Informatics; plus 5-year experience of Medical Imaging Informatics Administration; **OR**
  - 5.3.3 A recognized Master degree in medical imaging or related fields, plus a medical Imaging Informatics qualification recognized by the College; plus 5-year experience of Imaging Informatics Administration; **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 candidate should produce the supporting document(s) of his/her working experience e.g. full resume of working experience, recommendation from his/her superiors.

# 6. Continuing Professional Development (CPD)

6.1 To remain current the membership and fellowship accredited, the medical Imaging Informatics practitioner must accrue at least 45 CPD credits in each triennium, of which 15 credits are relevant to Imaging Informatics.