

Master of Science Program in Medical Physics

Research Focus

- Tumor Delineation for Radiation Oncology
- Dosimetry in Radiation Therapy
- Treatment Planning Algorithm
- Radiobiology Relevant to Cancer Therapy
- Medical Digital Image Processing
- Monte Carlo Simulation for Radiology

Structure of the Program

1. Credit Requirements*

Requirements	Option 1.2
Coursework	24
- Core Courses	12
- Electives	12
Required Non-credit Courses	7
Thesis	12
Total	36

* Minimum credits required

2. Core Courses

Requirements	Option 1.2	
	Course No.	Cr.
Radiation Physics and Dosimetry	658511	3
Physics and Instrumentations in Radiology	658512	3
Radiation Biology and Radiation Protection	658513	3
Digital Image Processing for Medical Physicists	658514	3
Total	4	12

3. Electives

Requirements	Option 1.2	
	Course No.	Cr.
Radiation Dosimetry and Quality Assurance of Radiation Therapy Modalities	658520	3
Clinical Application in Radiation Therapy	658521	2
Application of Radiation Biology in Clinical Oncology	658522	2
Practical Work in Radiation Therapy for Medical Physicists	658523	2
Radiation Dosimetry and Quality Assurance of Diagnostic Radiology Modalities	658524	3
Medical Imaging Informatics	658525	2
Application of Radiation Protection in Diagnostic Radiology	658526	2
Practical Work in Diagnostic Radiology for Medical Physicists	658527	2
Radiation Dosimetry and Quality Assurance of Nuclear Medicine Modalities	658528	3
Clinical Application in Nuclear Medicine	658529	2
Application of Radiation Protection in Nuclear Medicine	658530	2
Practical Work in Nuclear Medicine for Medical Physicists	658531	2
Total	12	≥12

4. Required Non-credit Course

Requirements	Option 1.2	
	Course No.	Cr.
Research Methodology in Health Science	658510	3
Anatomy and Physiology for Medical Physicists	658515	2
Seminar 1	658570	1
Seminar 2	658571	1
Total	4	7

5. Thesis Credit Requirements

Requirements	Option 1.2	
	Course No.	Cr.
Thesis 1, Option 1.2	658590	3
Thesis 2, Option 1.2	658591	3
Thesis 3, Option 1.2	658592	6
Total	3	12