

MASTER OF SCIENCE PROGRAM IN MEDICAL RADIATION SCIENCES INTERNATIONAL PROGRAM/REVISED PROGRAM 2566 B.E.

PROGRAM

- (Thai) วิทยาศาสตร์มหาบัณฑิต สาขาวิชาวิทยาศาสตร์รังสีการแพทย์ (หลักสูตรนานาชาติ)
(English) Master of Science Program in Medical Radiation Sciences (International Program)

DEGREE

- (Thai)
Full title : วิทยาศาสตรมหาบัณฑิต (วิทยาศาสตรรังสีการแพทย์)
Abbrev. : วท.ม. (วิทยาศาสตรรังสีการแพทย์)
- (English)
Full title : Master of Science (Medical Radiation Sciences)
Abbrev. : M.S. (Medical Radiation Sciences)

DEGREE REQUIREMENTS

- Type 1 (Plan A Type A1)
- Type 2 (Plan A Type A2): 36 Credits

STUDY DURATION

Type 1 (Plan A Type A1): 2 Years (4 Semesters), a maximum of 5 years
Type 2 (Plan A Type A2): 2 Years (4 Semesters), a maximum of 5 years

PROGRAM STRUCTURE

- Type 1 (Plan A Type A1)

Degree Requirements 36 credits

A. Thesis

515798 Master's Thesis 36 credits

B. Academic Activities

1. Students have to organize a seminar and give a presentation in the topic related to their theses at least once per semester beginning from 1st semester of 1st academic year, and students have to attend at least 80 percent of the regularly journal club seminar scheduled in each semester.
2. At least 1 master's thesis work or a part of master's thesis work must be published or at least accepted to publish in a international journal listed in Scopus, ISI, Pubmed and student must be the first author of the publications with the affiliation "Faculty of Associated Medical Sciences, Chiang Mai University" Or Received a patent/ a patent application number with Readiness Level (TRL/PRL/SRL) of 4 or above, in which student must be the first author with the affiliation of "Faculty of Associated Medical Sciences,

Chiang Mai University” Or Innovation work with Readiness Level (TRL/PRL/SRL) of 5 or above, in which student must be the first author with the affiliation of “Faculty of Associated Medical Sciences, Chiang Mai University” , And least 1 master’s thesis work or a part of master’s thesis work must be presented in international conference accepted by the field of study.

3. Students have to report their study/thesis progression to the curriculum administrative committee, and the graduate school every semester.

C. Non-credit Courses

1. Graduate School requirement a foreign language
2. Program requirement The student may enroll other graduate courses(s) under the consent of the advisor

- **Type 2 (Plan A Type A2)**

Degree Requirements	a minimum of	36	credits
A. Coursework	a minimum of	18	credits
1. Graduate Courses	a minimum of	18	credits
1.1 Field of Specialization	a minimum of	18	credits
1.1.1 Required courses		12	credits
515701 MRS.701 Mathematics for Medical Radiation Sciences		3	credits
515703 MRS.703 Radiation Physics and Chemistry		3	credits
515705 MRS.705 Research Methodology, Data Analysis and Research Presentation		2	credits
515791 MRS.791 Seminar in Medical Radiation Sciences 1		1	credits
515792 MRS.792 Seminar in Medical Radiation Sciences 2		1	credits
515793 MRS.793 Seminar in Medical Radiation Sciences 3		1	credits
515794 MRS.794 Seminar in Medical Radiation Sciences 4		1	credits
1.1.2 Elective courses	a minimum of	6	credits
Fundamental subjects			
515702 MRS.702 Molecular and Cellular Biophysics		3	credits
515704 MRS.704 Medical Imaging 1		3	credits
Radiopharmaceuticals and molecular imaging subjects			
515710 MRS.710 Radiopharmaceuticals 1		3	credits
515711 MRS.711 Radiopharmaceuticals 2		3	credits
515712 MRS.712 Membrane Biophysics		3	credits
515713 MRS.713 Free Radicals in Biology and Medicine		2	credits
515714 MRS.714 Advanced Molecular Imaging		3	credits
515715 MRS.715 Molecular Targets and Molecular Imaging Probes Development		3	credits
515716 MRS.716 Photomedicine		3	credits
515717 MRS.717 Cellular and Molecular Radiobiology		3	credits
515789 MRS.789 Advanced Research Topics in Biomedical Imaging		3	credits
Medical imaging subjects			
515720 MRS.720 Medical Imaging 2		5	credits
515723 MRS.723 Digital Radiography		3	credits

515724 MRS.724 Medical Signal and Image Processing	3 credits
515725 MRS.725 Image Reconstruction Techniques for Magnetic Resonance Imaging	3 credits

Health physics subjects

515731 MRS.731 Laboratory of Health Physics	1 credits
515732 MRS.732 Radiation Protection in Specific Applications	3 credits
515733 MRS.733 Emergency Exposure Situation and Intervention	3 credits
515734 MRS.734 Radiation Laws	3 credits
515735 MRS.735 Radiation Detection and Measurement for Medical Radiation Sciences	4 credits
515736 MRS.736 Integrated Knowledge of Medical Radiation Imaging	5 credits
515737 MRS.737 Radiation Shielding Materials	4 credits

1.2 Other courses

2. Advanced Undergraduate Courses **None**

B. Thesis

515798 Master’s Thesis	18 credits
------------------------	------------

C. Academic Activities

1. Students have to organize a seminar and give a presentation in the topic related to their theses at least once per semester beginning from 1st semester of 1st academic year, and students have to attend at least 80 percent of the regularly journal club seminar scheduled in each semester.
2. At least 1 master’s thesis work or a part of master’s thesis work must be published or at least accepted to publish in a national journal (in English) listed in TCI Tier1 , or Scopus, ISI, Pubmed, or must be presented in international conference proceeding accepted by the field of study and student must be the first author of the publications with the affiliation “ Faculty of Associated Medical Sciences, Chiang Mai University” Or Received a patent/ a patent application number with Readiness Level (TRL/PRL/SRL) of 4 or above, in which student must be the first author with the affiliation of “ Faculty of Associated Medical Sciences, Chiang Mai University” Or Innovation work with Readiness Level (TRL/PRL/SRL) of 5 or above, in which student must be the first author with the affiliation of “Faculty of Associated Medical Sciences, Chiang Mai University”.
3. Students have to report their study/ thesis progression to the curriculum administrative committee, and the graduate school every semester.

D. Non-credit Courses

1. Graduate School requirement a foreign language
2. Program requirement The student may enroll other graduate courses(s) under the consent of the advisor

STUDY PLAN

- Type 1 (Plan A Type A1)

1 st year					
Semester 1		Credits	Semester 2		Credits
515791	Seminar in Medical Radiation Sciences 1	0	515792	Seminar in Medical Radiation Sciences 2	12
			515798	Master's Thesis for student of type 1 (Plan A Type A1)	
				Pass foreign language examination requirement	
				Present thesis proposal	
Totally		0	Totally		12

2 nd year					
Semester 1		Credits	Semester 2		Credits
515793	Seminar in Medical Radiation Sciences 3	0	515794	Seminar in Medical Radiation Sciences 4	0
515798	Master's Thesis for student of type 1 (Plan A Type A1)	12	515798	Master's Thesis for student of type 1 (Plan A Type A1)	12
				Thesis defense exam	
Totally		12	Totally		12

TOTAL 36 CREDITS

● Type 2 (Plan A Type A2)

1 st year					
Semester 1		Credits	Semester 2		Credits
515701	Mathematics for Medical Radiation Sciences	3	xxxxxx	Elective courses	6
515703	Radiation Physics and Chemistry	3	515792	Seminar in Medical Radiation Sciences 2	1
515705	Research Methodology, Data Analysis and Research Presentation	2		Pass foreign language examination requirement	-
515791	Seminar in Medical Radiation Sciences 1	1		Present thesis proposal	-
Totally		9	Totally		7

2 nd year					
Semester 1		Credits	Semester 2		Credits
515799	Master's Thesis for student of type 2 (Plan A Type A2)	9	515799	Master's Thesis for student of type 2 (Plan A Type A2)	9
515793	Seminar in Medical Radiation Sciences 3	1	515794	Seminar in Medical Radiation Sciences 4	1
				Thesis defense exam	
Totally		10	Totally		10

TOTAL 36 CREDITS