

Detail of program structure and study plan

Year	Semester	Code	Courses	Credits
1	1	MUGE 100	General Education for Human Development	2 (1-2-3)
		LATH 100	Art of Using Thai Language in Communication	0 (0-0-0)
		LAEN 103 / 105	English Level 1 / English Level 3	3 (2-2-5)
		SCBI 115	Basic of Life	2 (1.5-1-3.5)
		SCCH 102	General Chemistry	3 (3-0-6)
		SCCH 119	Chemistry Laboratory	1 (0-3-1)
		SCPY 155	Basic Physics for Health Science	2 (2-0-4)
		SCMA 111	Calculus	2 (2-0-4)
		Xxxxxx	Elective courses in General Education	5
	2	MUGE 101	General Education for Human Development	0 (0-0-0)
		MUGE 102	Social Studies for Human Development	0 (0-0-0)
		MUGE 103	Sciences of Arts for Human Development	0 (0-0-0)
		LATH 100	Art of Using Thai Language in Communication	3 (2-2-5)
		LAEN 104 / 106	English Level 2 / English Level 4	3 (2-2-5)
		SCCH 119	Chemistry Laboratory	0 (0-0-0)
		SCCH 125	Basic Organic Chemistry	3 (3-0-6)
		SCPY 110	General Physics Laboratory	1 (0-3-1)
		SCPY 156	Physics for Health Science	3 (3-0-6)
		SCPY 207	Electronics	2 (2-0-4)
		SCMA 160	Ordinary Differential Equations	2 (2-0-4)
Xxxxxx	Elective courses in General Education	4 (4-0-8)		

Year	Semester	Code	Courses	Credits
2	1	SCAN 101	Basic Anatomy	3 (2-3-5)
		SCMA 260	Differential Equations	2 (2-0-4)
		MTRD 201	Radiation Physics	2 (2-0-4)
		MTRD 202	Instrumentation in Diagnostic Radiology	1 (1-0-2)
		MTRD 203	Introduction to Radiation Protection	1 (1-0-2)
		MTRD 205	Radiation Dosimetry	2 (2-0-4)
		MTRD 209	Digital Electronics for Radiological Technologist	1 (1-0-2)
		MTRD 210	Transformative Learning for Radiological Technologist	2 (2-0-4)
		Xxxxxx	Elective courses in General Education	8 (8-0-16)
	2	SCMA 182	Statistics for Health Science	2 (2-0-4)
		SCBC 203	Basic Biochemistry	3 (3-0-6)
		SCBC 204	Basic Biochemistry Laboratory	1 (0-3-1)
		SCPS 202	Basic Physiology	3 (2-3-5)
		MTRD 221	Information and Communication Technology for Radiological Technologist	3 (3-0-6)
		MTRD 222	Radiographic Photography and Exposure Technique	2 (1-3-3)
		MTRD 223	Quality Control in Diagnostic Radiology	2 (1-2-3)
		MTRD 224	Medical Image Processing	2 (1-2-3)
MTRD xxx		Elective courses	2	

Year	Semester	Code	Courses	Credits
3	1	MTRD 301	Diagnostic Radiographic Technique I	2 (1-3-3)
		MTRD 302	Diagnostic Radiographic Technique II	2 (1-3-3)
		MTRD 303	Diagnostic Radiographic Technique III	2 (1-3-3)
		MTRD 304	Clinical Practice in Diagnostic Radiology I	3 (0-12-3)
		MTRD 305	Patient Care and Radiological Service Management	2 (1-2-3)
		MTRD 359	Term Paper I	1 (1-0-2)
		MTRD xxx	Elective courses	1
	2	MTRD 321	Pathology	3 (2-2-5)
		MTRD 322	Sectional Radiological Imaging	2 (2-0-4)
		MTRD 323	Contrasted Radiological Procedures	2 (2-0-4)
		MTRD 324	Introduction to Medical Mammography and Ultrasonography	1 (1-0-2)
		MTRD 325	Computed Tomography for Radiological Technologist	2 (2-0-4)
		MTRD 326	Magnetic Resonance Imaging for Radiological Technologist	2 (2-0-4)
		MTRD 327	Clinical Practice in Diagnostic Radiology II	3 (0-12-3)
		MTRD 341	Instrumentation in Nuclear Medicine	3 (2-2-5)
		MTRD 359	Term Paper I	0
	3	MTRD 342	Nuclear Medicine	3 (3-0-6)
		MTRD 343	Imaging Technique and Quality Control of Instrumentation in Nuclear Medicine	3 (2-2-5)
		MTRD 344	Clinical Practice in Nuclear Medicine I	3 (0-12-3)

Year	Semester	Code	Courses	Credits
4	1	MTRD 401	Radiobiology	2 (2-0-4)
		MTRD 402	Instrumentation in Radiotherapy	2 (2-0-4)
		MTRD 403	Radiation Dosimetry and Treatment Technique in Radiotherapy	3 (2-2-5)
		MTRD 404	Radiotherapeutic Technique and Clinical Application for Upper Body	2 (2-0-4)
		MTRD 405	Radiotherapeutic Technique and Clinical Application for Lower Body	2 (2-0-4)
		MTRD 406	Clinical Practice in Radiotherapy I	3 (0-12-3)
		MTRD 459	Term Paper II	1 (0-6-1)
	2	MTRD 451	Law for Radiological Technologist	1 (1-0-2)
		MTRD 452	Moral and Code of Ethics in Radiological Technology	1 (1-0-2)
		MTRD 453	Medical Radiation Protection	2 (2-0-4)
		MTRD 459	Term Paper II	0 (0-0-0)
MTRD xxx		Specialized practice for RT	3	

Specialized practice for RT

Code	Courses	Credits
MTRD 454	Clinical Practice in Diagnostic Radiology III	3 (0-12-3)
MTRD 455	Clinical Practice in Nuclear Medicine II	3 (0-12-3)
MTRD 456	Clinical Practice in Radiotherapy II	3 (0-12-3)
MTRD 457	Computer Application in Radiological Technology	1 (1-0-2)
MTRD 458	Current Topics in Database Technology for Radiological Technologists	2 (2-0-4)
MTRD 460	Molecular Technology and Applications in Medical Imaging and Radiation Therapy	3 (2-2-5)



Professional Elective Courses

Code	Courses	Credits
MTRD 225	Innovation in Radiology	2 (2-0-4)
MTRD 226	Basic Molecular Technique and Its Application in Radiological Technology	1 (1-0-2)
MTRD 306	Professional Communication	1 (0-2-1)
MTRD 307	Advanced Techniques in Medical Image Processing	1 (1-0-2)



