

Bachelor of Science
Program in
Radiologic Technology

Name of the Curriculum: Bachelor of Science Program in Radiologic Technology

Name of Degree : (Full) Bachelor of Science (Radiologic Technology)
(Abbr.)) .B.SRadiologic(Technology

Curriculum

Degree Requirements : Total a minimum of 149 Credits

Curriculum Structure

1) General Education Courses	30	Credits
– Language and Communication Courses	12	Credits
– Humanity and Social Science Courses	9	Credits
– Sciences and Mathematics Courses	6	Credits
– Learning by Activity Courses	3	Credits
2) Field of Specialization	113	Credits
– Core Courses	37	Credits
– Major	76	Credits
3) Free Elective	a minimum of 6	Credits

Course Syllabus

1.General Education	30	Credits
1.1 Language and Communication:	12	Credits
001101 ENGL 101 Listening and Speaking in English	3	Credits
001102 ENGL102 Reading and Writing in English	3	Credits
001201 ENGL 201 Critical Reading and Effective Writing	3	Credits
001226 ENGL 226 English inHealth Sciences Context	3	Credits
1.2 Humanities and Social Sciences:	9	Credits
Select from:		
009103 LS 103 Information Literacy and Information Presentation	3	Credits
011100 PHIL 100 Man and Philosophy	3	Credits
011257 PHIL 257 Ethics	3	Credits
011269 PHIL 269 Philosophy of Sufficiency Economy	3	Credits

050103	HUGE 103	Thai Society and Culture	3 Credits
109114	FAGE 114	Art in Everyday Life	3 Credits
154104	GEO 104	Environmental Conservation	3 Credits
176100	HUGE 100	Law and Modern World	3 Credits
701103	ACC 103	General Accounting	3 Credits
751100	ECON 100	Economics for Everyday Life	3 Credits
851100	MC 100	Introduction to Communication	3 Credits

1.3 Science and Mathematics:

6

Credits

Select from:

201100	SC 100	Integrated Science	3 Credits
201110	SC 110	Integrated Mathematical Sciences	3 Credits
201114	SC 114	Environmental Science in Today's World	3 Credits
203100	CHEM 100	Chemistry in Everyday Life	3 Credits
204100	CS 100	Information Technology and Modern Life	3 Credits
206100	MATH 100	Mathematics in Everyday Life	3 Credits
208101	STAT 101	Statistics for Everyday Life and Work	3 Credits
211100	BCT 100	Eating Well: Better Living and Disease Prevention	3 Credits
360100	PLP 100	Plant Pathology in Everyday Life	3 Credits
461100	PLP 100	Herbs for Health and Beauty	3 Credits
510100	AMS 100	Wellness	3 Credits
953111	SE 111	Software for Everyday Life	3 Credits

1.4 Learning through Activities:

3

Credits

516101	IT 101	Learning through Activity 1	1 Credit
516102	IT 102	Learning through Activity 2	1 Credit
Select from:			1 Credit
057122	EDPE 122	Swimming for Life and Exercise	1 Credit
057123	EDPE 123	Volleyball for Life and Exercise	1 Credit
057125	EDPE 125	Rhythmic Activities for Life and Exercise	1 Credit
057126	EDPE 126	Basketball for Life and Exercise	1 Credit

057127	EDPE 127	Badminton for Life and Exercise	1 Credit
057128	EDPE 128	Tennis for Life and Exercise	1 Credit
057129	EDPE 129	Table Tennis for Life and Exercise	1 Credit

2. Field of Specialization

113

Credits

2.1 Core Courses

37

Credits

202184	BIOL 184	Basic Biology for the Health Sciences 1	4 Credits
203151	CHEM 151	General Chemistry for the Health Sciences	3 Credits
203152	CHEM 152	Organic Chemistry for the Health Sciences	3 Credits
203157	CHEM 157	General Chemistry Laboratory for the Health Sciences	1 Credit
203158	CHEM 158	Organic Chemistry Laboratory for the Health Sciences	1 Credit
206101	MATH 101	Calculus for Health Sciences	3 Credits
207131	PHYS 131	Physics for Associated Medical Sciences Students 1	2 Credits
207162	PHYS 162	Physics for Associated Medical Sciences Students 2	3 Credits
207171	PHYS 171	Physics Laboratory for Associated Medical Sciences Students 1	1 Credit
207172	PHYS 172	Physics Laboratory for Associated Medical Sciences Students 2	1 Credit
208263	STAT 263	Elementary Statistics	3 Credits
302233	ANAT 233	Basic Anatomy	3 Credits
303232	BCHM 232	Biochemistry for Radiologic Technology Students	3 Credits
318322	PATH 322	Pathology for Associated Medical Science Students	2 Credits
321231	PHSO 231	Physiology for Associated Medical Sciences Students	4 Credits

2.2 Major

76

Credits

515201	RT 201	Basic Medical Radiation Physics	3 Credits
515202	RT 202	Medical Imaging Science	1 Credit
515204	RT 204	Dosimetry	3 Credits
515205	RT 205	Radiobiology for Radiologic Technology Students	2 Credits
515221	RT 221	Radiographic Photography	3 Credits

515252	RT 252	Instrument in Diagnostic Radiology	3 Credits
515254	RT 254	Instrument in Diagnosis Radiology for Analog Type	1 Credit
515255	RT 255	Instrument in Diagnosis Radiology for Digital Type	2 Credits
515306	RT 306	Radiation Protection	2 Credits
515310	RT 310	Topographic Anatomy	1 Credit
515311	RT 311	Radiographic Anatomy and Radiopathology	2 Credits
515334	RT 334	General Radiographic Techniques	3 Credits
515335	RT 335	Special Radiographic Techniques	3 Credits
515337	RT 337	Equipments and Techniques of Computed Tomography and Ultrasonography	3 Credits
515338	RT 338	Equipments and Techniques of Magnetic Resonance Imaging	2 Credits
515361	RT 361	Techniques in Nuclear Medicine 1	3 Credits
515362	RT 362	Techniques in Nuclear Medicine 2	2 Credits
515364	RT 364	Nuclear Medicine Instrumentation and Quality Control	2 Credits
515370	RT 370	Application of Radiobiology in Radiotherapy	1 Credit
515373	RT 373	Radiotherapy Technique	3 Credits
515374	RT 374	Clinical Application of Radiotherapy	3 Credits
515380	RT 380	Practice in General Radiographic Technique	3 Credits
515381	RT 381	Practice in Special Radiographic Technique	3 Credits
515382	RT 382	Practice in Nuclear Medicine	3 Credits
515403	RT 403	Molecular Imaging	2 Credits
515407	RT 407	Knowledge Integration in Biomedical Imaging and Radiotherapy	3 Credits
515440	RT 440	Ethics in Radiological Practice	1 Credit
515441	RT 441	Radiology Unit Administration	1 Credit
515442	RT 442	Law for Radiologic Technologist	1 Credit
515455	RT 455	Quality Assurance in Diagnostic Radiology	2 Credits
515475	RT 475	Advanced Radiotherapeutic Techniques	1 Credit
515481	RT 481	Seminar	1 Credit
515483	RT 483	Practice in Radiotherapy	3 Credits
515490	RT 490	Research Methodology in Radiologic Technology	1 Credit

515491	RT 491	Term Paper	2 Credits
552232	NGF 232	Care of Patients with Radiological Diagnosis and Therapy	1 Credits

2.3 Minor: None

3. Free Elective: A minimum of 6

Credits

Total a minimum of 149

Credits

Recommended Study Program

Year 1

Semester 1	Credits
ENGL 101 Listening and Speaking in English	3
BIOL 184 Basic Biology for the Health Sciences 1	4
CHEM 151 General Chemistry for the Health Sciences	3
CHEM 157 General Chemistry Laboratory for the Health Sciences	1
MATH 101 Calculus for Health Sciences	3
PHYS 131 Physics for Associated Medical Sciences Students 1	3
PHYS 171 Physics Laboratory for Associated Medical Sciences Students 1	1
Humanity and Social Science Course	3
Total	20

Semester 2	Credits
ENGL 102 Reading and Writing in English	3
CHEM 152 Organic Chemistry for the Health Sciences	3
CHEM 158 Organic Chemistry Laboratory for the Health Sciences	1
PHYS 162 Physics for Associated Medical Sciences Students 2	3
PHYS 172 Physics Laboratory for Associated Medical Sciences Students 2	1
Humanity and Social Science Course	3
Sciences and Mathematics Courses	3
Sciences and Mathematics Courses	3
Total	20

Year 2

Semester 1	Credits
ENGL 201 Critical Reading and Effective Writing	3
STAT 263 Elementary Statistics	3
ANAT 233 Basic Anatomy	3
BCHM 232 Biochemistry for Radiologic Technology Students	3
RT 201 Basic Medical Radiation Physics	3
RT 252 Instrument in Diagnostic Radiology	3
Free elective	3
Total	21

Semester 2	Credits
ENGL 226 English in Health Sciences Context	3
PHSO 231 Physiology for Associated Medical Sciences Students	4
RT 202 Medical Imaging Science	1
RT 204 Dosimetry	3
RT 205 Radiobiology for Radiologic Technology Students	2
RT 221 Radiographic Photography	3
RT 254 Instrument in Diagnosis Radiology for Analog Type	1
RT 255 Instrument in Diagnosis Radiology for Digital Type	2
NGF 232 Care of Patients with Radiological Diagnosis and Therapy	1
Learning by Activity Courses	1
Total	21

Year 3

Semester 1	Credits
PATH 322 Pathology for Associated Medical Science Students	2
RT 306 Radiation Protection	2
RT 310 Topographic Anatomy	1
RT 334 General Radiographic Techniques	3
RT 361 Techniques in Nuclear Medicine 1	3
RT 364 Nuclear Medicine Instrumentation and Quality Control	2
RT 370 Application of Radiobiology in Radiotherapy	1
Humanity and Social Science Course	3
Total	17

Semester 2	Credits
RT 311 Radiographic Anatomy and Radiopathology	2
RT 335 Special Radiographic Techniques	3
RT 337 Equipments and Techniques of Computed Tomography and Ultrasonography	3
RT 338 Equipment and Techniques of Magnetic Resonance Imaging	2
RT 362 Techniques in Nuclear Medicine 2	2
RT 373 Radiotherapy Technique	3
RT 374 Clinical Application of Radiotherapy	3
RT 380 Practice in General Radiographic Technique	3
Total	21

Summer	Credits
RT 381 Practice in Special Radiographic Technique	3
RT 382 Practice in Nuclear Medicine	3
Total	6

Year 4

Semester 1	Credits
RT 403 Molecular Imaging	2
RT 455 Quality Assurance in Diagnostic Radiology	2
RT 481 Seminar	1
RT 483 Practice in Radiotherapy	3
RT 490 Research Methodology in Radiologic Technology	1
IT 101 Learning through Activities 1	1
Free elective	3
Total	13

Semester 2	Credits
RT 407 Knowledge Integration in Biomedical Imaging and Radiotherapy	3
RT 440 Ethics in Radiological Practice	1
RT 441 Radiology Unit Administration	1
RT 442 Law for Radiologic Technologist	1
RT 475 Advanced Radiotherapeutic Techniques	1
RT 491 Term Paper	2
IT 102 Learning through Activities 2	1
Total	10