

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 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) |
| 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) |

