

## **RADIOGRAPHY**

Credit(s)

# Program Number 10-526-1 Associate Degree in Applied Science • Six Terms

Catalog No. Class Title

#### **ABOUT THE PROGRAM**

Diagnosing certain medical conditions or injuries often requires physicians to go beyond a routine physical examination; they need to see inside the body, so an x-ray of the affected area is ordered. Radiographers work with patients to acquire the necessary diagnostic images. If you're detail-oriented, caring, interested in anatomy and physiology, able to work under pressure, and inclined to work with technology and people, a career as a radiographer may be a satisfying choice for you.

#### **PROGRAM GOALS**

- Students/Graduates will demonstrate critical thinking in the clinical setting.
- Students/Graduates will demonstrate good communication skills in the clinical setting.
- Students/Graduates will possess the knowledge and skills of an entry level radiographer and are able to perform competently in the clinical setting.
- Students/Graduates will model professional and ethical behavior.
- Graduates will successfully complete the ARRT Certification Examination and enter the field to meet the needs of the community.

#### CAREER AND EDUCATION ADVANCEMENT OPPORTUNITIES

LTC credits transfer to over 30 universities. For more information visit gotoltc.edu/future-students/transfer.

#### **ADMISSION TO DO'S**

- · Work with Career Coach to:
- Submit application and \$30 fee.
- Submit official transcripts (high school and other colleges).
- Complete background check and \$20 processing fee.

#### **CLASS REGISTRATION TO DO'S**

- Complete an assessment for placement (Accuplacer or ACT).
- Complete Functional Ability Statement of Understanding form.
- Complete a program advising session with your advisor.

#### **PROGRAM READY TO DO'S**

- Complete health requirements.
- Complete 4 hours of clinical observation and submit form.
- Complete CPR BLS Healthcare Provider certification.
- Complete CNA course within the past 2 years prior to clinical start or be on current registry.

#### **APPROXIMATE COSTS**

• \$136.50 per credit tuition (WI resident) plus \$7.38 per credit student activity fee. \$10 per credit online fee. Material fee varies depending on course. Other fees vary by program. Visit gotoltc.edu/financial-aid/tuition-and-fees for details.

#### **FINANCIAL AID**

This program is eligible for financial aid. Visit gotoltc.edu/Financial-Aid or talk with your Career Coach about how to apply for aid.

#### **SPECIAL NOTE**

- Students must either have completed the Nursing Assistant course within 2 years prior to the Radiography clinical start OR be current on the Nursing Assistant Registry.
- LTC offers its Radiography program in cooperation with Nicolet Technical College.
   As a radiography student, you'll attend live or interactive TV classes and take general studies classes at your local technical college.
- LTC's Radiography program is accredited by The Joint Review Committee on Education in Radiologic Technology, 20 North Wacker Drive, Suite 2850, Chicago, Illinois 60606-3182. Phone: 1.312.704.5300.

### CONTACT

LTC Career Coach 920.693.1162 • CareerCoach@gotoltc.edu

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10806177	General Anatomy and Physiology	4
10526149 10526158 10526159 10526168	Term 1 Radiographic Procedures 1 Introduction to Radiography Radiographic Imaging 1 Radiography Clinical 1	5 3 3 2 <b>13</b>
10526192 10804107	Term 2 (Summer) Radiography Clinical 2 College Mathematics	3 3 6
10526170 10526191 10526193 10801196	Term 3 Radiographic Imaging 2 Radiographic Procedures 2 Radiography Clinical 3 Oral/Interpersonal Communication	3 5 3 3 <b>14</b>
10526194 10526196 10526199 10526189 10809198	Term 4 Imaging Equipment Operation Modalities Radiography Clinical 4 Radiographic Pathology Introduction to Psychology	3 3 1 3 <b>13</b>
10526190 10801195	<b>Term 5 (Summer)</b> Radiography Clinical 5 Written Communication	2 3 <b>5</b>
10526174 10526195 10526197 10526198 10809196	Term 6 ARRT Certification Seminar Radiographic Quality Analysis Radiation Protection & Biology Radiography Clinical 6 Introduction to Sociology	2 2 3 2 3 12

**TOTAL 67** 

Prerequisites: Chemistry and Medical Terminology

Curriculum and Program Acceptance requirements are subject to change. Program start dates vary; check with your advisor for details. The tuition and fees are approximate based on 2019-2020 rates and are subject to change prior to the start of the academic year.





ARRT CERTIFICATION SEMINAR...provides preparation for the national certifying examination prepared by the American Registry of Radiologic Technologists. Emphasis is placed on the weak areas of the individual students. Simulated registry examinations are utilized. Successful completion of the Radiography program requirements is required to enroll in this course. PREREQUISITE: 10526190 Radiography Clinical 5 and CONDITION: 105261 Radiography Admissions Requirements Met

COLLEGE MATHEMATICS...is designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. PREREQUISITE: 10834109 Pre-Algebra or Math placement assessment equivalent

GENERAL ANATOMY AND PHYSIOLOGY...examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision-making and professional communication with colleagues and patients. PREREQUISITE: 10806134 General Chemistry or equivalent

IMAGING EQUIPMENT OPERATION...introduces radiography students to the principles and application of x-ray technology. Students analyze how x-rays are produced and determine the corrective actions necessary for common equipment malfunctions. PREREQUISITE: 10526170 Radiographic Imaging 2 and CONDITION: 105261 Radiography Admissions Requirements Met

INTRODUCTION TO PSYCHOLOGY...introduces students to a survey of the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. PREREQUISITE: Reading placement assessment equivalent or COREQUISITE: 10838105 Intro to Reading and Study Skills

INTRODUCTION TO RADIOGRAPHY...introduces students to the role of radiography in health care. Students apply legal and ethical considerations to patient care and pharmacology in the radiologic sciences. PREREQUISITE: 10501101 Medical Terminology and CONDITION: 105261 Radiography Admissions Requirements Met

INTRODUCTION TO SOCIOLOGY...introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions, including family, government, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, social organization, and workplace issues. COREQUISITE: 10838105 Intro Reading and Study Skills or Reading placement assessment equivalent

MODALITIES...introduces radiography students to other types of imaging including ultrasound, MRI, mammography, and bone density scans. Students analyze the role of varous imaging technologies in health care. PREREQUISITE: 10526191 Radiographic Procedures 2 and CONDITION: 105261 Radiography Admissions Requirements Met

ORAL/INTERPERSONAL COMMUNICATION...provides students with the skills to develop speaking, verbal and nonverbal communication, and listening skills through individual speeches, group activities, and other projects. COREQUISITE: 10838105 Intro Reading and Study Skills or Reading placement assessment equivalent

RADIATION PROTECTION & BIOLOGY...prepares radiography students to protect themselves and others from exposure to radioactivity. Students examine the characteristics of radiation and how radiation affects cell biology. Students apply standards and guidelines for radiation exposure. PREREQUISITE: 10526194 Imaging Equipment Operation and CONDITION: 105261 Radiography Admissions Requirements Met

RADIOGRAPHIC IMAGING 1...introduces radiography students to the process of creating radiographic images. Students determine the factors that affect image quality including contrast, density, and distortion. Students apply OSHA standards for health and safety in the darkroom. PREREQUISITES: 10806174 General Chemistry or 10806143 General Chemistry or High School Chemistry Equivalent and CONDITION: 105261 Radiography Admissions Requirements Met

RADIOGRAPHIC IMAGING 2...prepares radiography students to apply advanced radiographic principles to the production of radiographic images. Students analyze exposure factor considerations, differentiate between film and exposure latitude, and use beam-restricting devices. PREREQUISITES: 10526159 Radiographic Imaging 1

RADIOGRAPHIC PATHOLOGY...prepares radiography students to determine the basic radiographic manifestations of pathological conditions. Students classify trauma related to site, complications, and prognosis and locate the radiographic appearance of pathologies. CONDITION: 105261 Radiography Admissions requirements met

RADIOGRAPHIC PROCEDURES 1...prepares radiography students to perform routine radiologic procedures on various parts of the body including the upper body, hip, pelvis and ankle. Students apply knowledge of human anatomy to position the patient correctly to achieve the desired result. CONDITION: 105261 Radiography Admissions Requirements Met and PREREQUISITES: 10806177 Gen Anatomy & Physiology or 10806177OL Gen Anatomy & Physiology

RADIOGRAPHIC PROCEDURES 2...prepares radiography students to perform routine radiologic procedures on various parts of the body including the skull and spine. Students apply knowledge of human anatomy to position the patient correctly to achieve the desired result. PREREQUISITE: 10526149 Radiographic Procedures 1

RADIOGRAPHIC QUALITY ANALYSIS...prepares radiography students to analyze radiographic images for quality. Students apply quality control tests to determine the causes of image problems including equpment malfunctions and procedural errors. CONDITION: 105261 Radiography Admissions Requirements Met and PREREQUISITE: 10526194 Imaging Equipment Operation

RADIOGRAPHY CLINICAL 1...is a beginning level clinical course that prepares radiography students to perform radiologic procedures on patients with extensive supervision and direction. Students apply radiation protection and standard precautions in the production of radiographs in a health care setting while adhering to legal and ethical guidelines. An emphasis of the course is the development of communication and critical thinking skills appropriate to the clinical setting. CONDITION: 105261 Radiography AdmissionsRequirements Met and COREQUISITE: 10526149 Radio Proc 1, 10526158 Intro to Radio, 10526159 Radio Imaging 1, and PREREQUISITE: 10806177 Gen A&P or 10806196 A&P II

RADIOGRAPHY CLINICAL 2...is the second level clinical course that prepares radiography students to perform radiologic procedures on patients with extensive supervision and direction. Students apply radiation protection and standard precautions in the production of radiographs in a health care setting while adhering to legal and ethical guidelines. An emphasis of the course is the development of communication and critical thinking skills appropriate to the clinical setting. COREQUISITE: 10526168 Radiography Clinical 1

RADIOGRAPHY CLINICAL 3...is the third level clinical course which prepares radiography students to perform radiologic procedures on patients with supervision and direction. Students apply radiation protection and standard precautions in the production of radiographs in a health care setting while adhering to legal and ethical guidelines. An emphasis of the course is the demonstration of communication and critical thinking skills appropriate to the clinical setting. PREREQUISITE: 10526192 Radiographic Clinical 2

RADIOGRAPHY CLINICAL 4...is the fourth level clinical course that prepares radiography students to perform radiologic procedures on patients with supervision and direction. Students apply radiation protection and standard precautions in the production of radiographs in a health care setting while adhering to legal and ethical guidelines. Students are encouraged to demonstrate independent judgment in the performance of clinical competencies. PREREQUISITE: 10526193 Radiographic Clinical 3

RADIOGRAPHY CLINICAL 5...is the fifth level clinical course that prepares radiography students to perform radiologic procedures on patients with some supervision. Students apply radiation protection and standard precautions in the production of radiographs in a health care setting while adhering to legal and ethical guidelines. Students are encouraged to demonstrate independent judgment in the performance of clinical competencies. COREQUISITE: 10526199 Radiographic Clin 4

RADIOGRAPHY CLINICAL 6...is the final clinical course which requires students to integrate and apply all knowledge learned in previous courses to the production of high quality radiographs in the clinical setting. Students apply radiation protection and standard precautions in the production of radiographs in a health care setting while adhering to legal and ethical guidelines. Students are encouraged to demonstrate independent judgment in the performance of clinical competencies. PREREQUISITE: 10526190 Radiography Clinical 5

WRITTEN COMMUNICATION...teaches the writing process, which includes prewriting, drafting, revising, and editing. Through a variety of writing assignments, the student will analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Keyboarding skills are required for this course. It also develops critical reading and thinking skills through the analysis of a variety of written documents. PREREQUISITE: 10831103 Intro to College Wrtg or Writing placement assessment equivalent and COREQUISITE: 10838105 Intro Rdg & Study Skills or Reading placement assessment equivalent