MEDICAL IMAGING A.A.S. DEGREE

www.clcillinois.edu/programs/mim

A.A.S. PROGRAM OVERVIEW

Biological and Health Sciences Division
Room B213 (847) 543-2042

***Degree:* Associate in Applied Science, Medical Imaging**
Plan 21MI

This is a limited enrollment program. MIM courses are offered during the day in eight-week modules, alternating between classroom and clinical education. Classes are offered through blended learning instruction. Students are required to meet the screening requirements in effect at the time of screening. Students who screen and are accepted into a limited enrollment program will be required to complete the curriculum that is in place at the time of entrance into the program. If students who screen are not granted admission, they must rescreen and satisfy all screening and curriculum requirements in place for a future program start. See page 30 for more information about the CAREERS agreement.

SCREENING DEADLINE:
THIRD MONDAY IN OCTOBER

The Medical Imaging Program prepares radiographers to work in medical facilities producing radiographic examinations which are interpreted by a radiologist or another medical specialist. Graduates of the program are qualified to take the national certification examination given by the American Registry of Radiologic Technologists. Graduates also meet the additional criteria required for Illinois licensure. The Medical Imaging program is nationally accredited by the Joint Review Committee on Education in Radiologic Technology: 20 North Wacker Drive, Suite 2850 Chicago, IL 60606-3182, (312) 704-5300, mail@jrcert.org.

The mission of the College of Lake County Medical Imaging Program is to cultivate exceptional Radiologic Technologists through equitable high-quality instruction in didactic, laboratory, and clinical settings. The Medical Imaging Program advocates independent, professional and ethical judgment, cultural and technical competence, advanced quality care, and continuous education to the diverse communities it serves.

The College of Lake County Medical Imaging Program's Vision is committed to providing a holistic education designed to meet the needs of community stakeholders. In addition, the Medical Imaging Program upholds the Values of the College of Lake County… Purpose, Integrity, Excellence, Inclusion, Unity and Compassion.

The number of students that can be admitted to the MIM Program is limited. Therefore, a screening procedure is used to select the academically best qualified from those who request consideration. Preference is given to residents of CLC's district, or a community college district which does not offer a Medical Imaging program and is a member of the CAREER consortium. Students who live outside of CLC's district but are eligible for in-district tuition because they are employed by a district employer are NOT considered residents of the district for purposes of selection into the program.

Students enrolled in the program are required to undergo a background check and a urine drug screen prior to attending their clinical site (MIM 114). The results of the background check and drug screen may result in the student losing his/her seat in the program. The costs are borne by the student.

TO BE CONSIDERED FOR ADMISSION TO THE MEDICAL IMAGING PROGRAM, STUDENTS MUST COMPLETE THE FOLLOWING SCREENING REQUIREMENTS PRIOR TO THE SCREENING DEADLINE.

Students must have submitted the following documents to the Welcome and One-Stop Center:

A. Student Information Form.
B. **Official** high school transcript with graduation date
   OR
   Official GED test scores
   OR
   Official college transcripts with graduation date and degree awarded
   OR
   Official foreign high school or college transcript evaluated by a NACES approved agency
C. Medical Imaging Program Request for Screening Form
D. If using courses from another college to meet prerequisites or degree requirements, submit an official transcript and a "Request for Evaluation of Prior College Transcripts" form to the Office of Registrar and Records.

TYPICAL JOBS

- Radiologic Technologist
- Magnetic Resonance Imaging (MRI) Technologist
- Computed Tomography (CT) Technologist
- Mammographer
- Interventional Technologist

EMPLOYERS

- Hospitals
- Acute care centers
- Physicians' offices
- Diagnostic imaging centers
- Outpatient centers
- Surgery centers

PROGRAM GOALS

Students and graduates will have the following:

- Critical thinking and problem-solving skills
- Clinical competence
- Communication skills
- An awareness of the importance of professional growth and development

In addition, the program has instituted measures to gauge its effectiveness.

MEDICAL IMAGING A.A.S. DEGREE

www.clcillinois.edu/programs/mim

MINIMUM SELECTION CRITERIA: STUDENT RECORDS MUST INDICATE THE FOLLOWING:

A. High school graduate or equivalent or high school senior in last term
B. College Reading and Writing Readiness and Basic Algebra Readiness
C. CLC Cumulative GPA is 2.0 or above
D. High school chemistry or physics with a lab (1 year, C or better) **OR** CHM 120 or CHM 121 or PHY 121 or an equivalent course (C or better)
E. BIO 123, BIO 161 or BIO 244 or an equivalent course (C or better)
F. One of the following Math options
   - High School Algebra (2 years, C or better) **OR**
   - TM02 C or better (within 18 months of completion) **OR**
   - CLC ALEKS Math Placement Test 30+ **OR**
   - Math ACT score 20+ **OR**
   - Math SAT score 510+ **OR**
   - MTH 102 C or better **OR**
   - MTH 105 C or better **OR**
   - Completion of a higher level math course than 102 or 105 C or better **OR**
   - Equivalent course from another college or university
G MIM 110: Introduction to Medical Imaging- C or better
H. Applicants may take the NLN PAX exam once every 90 days (approximately three months). NLN PAX exam results that are less than 90 days between exams will not be considered. Scores used for screening into limited enrollment programs will be valid for only 3 years prior to a screening deadline. Scores older than 3 years will not be considered for screening. Visit **www.nlnonlinetesting.org** for available test dates and times.
I. Must be eighteen (18) years of age by the fall semester following the screening deadline in order to enroll in the first clinical course (MIM 114).

Students must earn a minimum grade of "C" in each Imaging course to continue in and graduate from the program.

Note: The lecture portion of the course is blended learning. MIM courses are provided in 8 week learning modules, alternating between didactic and clinical education.

SPRING SEMESTER ONE		**4**
BIO 245	Anatomy and Physiology II	4
SUMMER SESSION ONE		**5**
MIM 111	Radiographic Anatomy and Positioning I	5
FALL SEMESTER ONE		**13**
MIM 113	Radiographic Anatomy and Positioning II	5
MIM 114	Clinical Practice I	3
MIM 116	Advanced Radiographic Procedures I	2
ENG 121	English Composition I	3
WINTER INTERSESSION ONE		**1**
MIM 115	Clinical Practice II	1
SPRING SEMESTER TWO		**13.5**
MIM 112	Principles of Radiographic Exposure	2.5
MIM 115	Clinical Practice II	3
MIM 210	Technical Aspects of Patient Care	2
PSY 121	Introduction to Psychology	3
CMM 121	Fundamentals of Speech ***or***	
CMM 123	Dynamics of Small Group Discussion	3
SPRING INTERSESSION ONE		**1**
MIM 212	Clinical Practice III	1
SUMMER SESSION TWO		**3**
MIM 212	Clinical Practice III	3
FALL SEMESTER TWO		**14**
MIM 211	Imaging Equipment	6
MIM 216	Computer Imaging	2
MIM 215	Clinical Practice IV	3
CMM 127	Intercultural Communication	3
WINTER INTERSESSION ONE		**1**
MIM 215	Clinical Practice IV	1
SPRING SEMESTER THREE		**15**
MIM 214	Advanced Topics in Radiography	6
MIM 275	Introduction to Sectional Anatomy	1
MIM 219	Radiography Seminar	2
MIM 271	Clinical Practice V	3
HUM 127	Critical Thinking	3
Total Hours for A.A.S. Degree		**70.5**

RADIOLOGIC TECHNOLOGIST

Radiologic Technologists perform radiographic examinations that create the images needed for diagnosis. Radiography integrates scientific knowledge and technical skills with effective patient interaction to provide quality patient care and useful diagnostic information (**www.asrt.org**).

WORK ENVIRONMENT

Radiologic Technologists work in Radiology departments at hospitals, acute care centers, outpatient clinics, surgical centers, imaging centers and doctors offices. Duties may include performing radiographic examination in the emergency department, the operating room, the intensive care unit, the nursery and the patient rooms.

CAREER OPPORTUNITIES

There are additional career opportunities that are available after completing this program.

Radiologic Technologists can further specialize in Computed Tomography (CT), Magnetic Resonance Imaging (MRI), Nuclear Medicine, Radiation Therapy, Mammography, Interventional Radiography, Cardiovascular Radiography, and Sonography (Ultrasound). Radiologic Technologists can also further their careers in education, sales, management and Picture Archiving Communication Systems (PACS) administration.

MEDICAL IMAGING A.A.S. DEGREE

www.clcillinois.edu/programs/mim

PREGNANCY POLICY

During the first semester in the medical imaging program, all students will be taught basic radiation protection procedures. These instructions will include enough background so that students will be able to understand the possible biological risks of ionizing radiation to the embryo and fetus. In addition, any perspective student attending a Medical Imaging information session receives the NRC guide #8.29 and #8.13 with a brief overview.

Information is available through the United States Nuclear Regulatory Commission (NRC) guide #8.13 on instruction concerning prenatal radiation exposure. The NRC guide and forms are available in the appendices of the MIM handbook or at **http://pbadupws.nrc.gov/docs/ML0037/ML003739505.pdf**

A student may voluntarily inform the department chair and the radiation safety officer in writing using the form in the back of guide #8.13 should a pregnancy occur during the educational period. The pregnancy then becomes declared and a fetal dosimeter will be issued to the student to monitor radiation exposure. The signed NRC 8.13 form letter for declaring pregnancy will be placed in the student's CLC file. A student may rescind pregnancy declaration at any time in writing to the department chair.

Once the student declares their pregnancy, the possible risks to the embryo and fetus shall be reviewed and the review documented and signed by the radiation safety officer and the student. The student will then be referred to the department chair for discussion and documentation of the student's pregnancy options.

The student will choose one of the following pregnancy options:

1. The student may continue in the program without modification. In this case, two dosimeters will be used, one worn at the collar and on top of the apron during fluoroscopy and one worn on the belt and under the apron during fluoroscopy to record the student exposure and the fetal exposure respectively. Should recorded fetal exposure increase to 500 mrem or be received at a rate greater than 50 mrem per month at any time during pregnancy, the student will be required to take a leave of absence [see (b) below]. All course objectives and rotations shall be equivalent to any and all students enrolled in those particular courses. Adherence to radiation protection policies should eliminate almost all fetal exposure. Other counseling on radiation protection procedures shall be done as needed.

2. A leave of absence may be taken until the birth of the child. All medical imaging grades will be recorded as withdrawn (W) if the student grades are acceptable at the time. This will permit the student to return with no penalty. Student acceptance to clinical facilities depends upon availability of sites.

3. The student may terminate the program. All medical imaging grades will be recorded as withdrawn (W) if the student grades are acceptable at the time.

CONTACT INFO

Grayslake Campus
19351 W. Washington St.
Grayslake, IL 60030

Lynn Wiechert, Ed.D., R.T. (R) (CT)
Department Chair
(847) 543-2880
bio559@clcillinois.edu

Joe Dielman, M.A., R.T.(R)
Clinical Coordinator
Phone: (847) 543-2313
jdielman@clcillinois.edu

Biological and Health Sciences
(847) 543-2042

May 2020
Per 2020-21 catalog

College Lake County

MEDICAL IMAGING A.A.S. DEGREE

www.clcillinois.edu/programs/mim

Medical Imaging Technical Performance Standards

Medical Imaging is a practice of discipline with cognitive, sensory, affective, and psychomotor performance requirements. Based on those requirements [and the State of Illinois licensing requirements], a list of "Performance Standards" has been developed. Each standard has an example of an activity or activities that a potential student will be required to perform while enrolled in the radiography program. Please note that these examples are not all inclusive.

Issue	Standard	Examples of Required Activities (Not all inclusive)
Visual	Visual ability sufficient for observation and assessment necessary in the operation of equipment and care of patients.	• Visualize x-ray collimator centering light and identify its center. • Observe the patient in order to assess the patient's condition and/or needs from a distance of at least 20 feet. • Can see numbers, letters, calibrations, etc., of varying sizes located on equipment utilized by a radiographer.
Hearing	Auditory abilities sufficient to monitor and assess patient needs, and to provide a safe environment.	• Hear a patient talk in a normal tone from a distance of 20 feet • Hear monitor alarm, emergency signals, and cries for help.
Tactile	Tactile ability sufficient for patient assessment and operation of equipment and care of patients.	• Perform palpatation, tactile assessment and manipulation of body parts to ensure proper body placement and alignment. • Manipulate dials, buttons and switches of various sizes.
Mental	Mental ability sufficient for patient assessment and operation of equipment and care of patients.	• Be able to visually concentrate and focus attention, thoughts, and efforts on patients and equipment for varying periods of time. • Be able to respond to patients' changing physical conditions.
Environmental Requirements	Physical health sufficient enough to be able to tolerate certain conditions present in the clinical setting.	• Be able to tolerate risks of discomforts in the clinical setting that require special safety precautions, additional safety education, and health risk monitoring (i.e., ionizing radiation), working with sharps, chemicals, and infectious disease. Students may be required to use protective clothing or gear such as masks, goggles, gloves, and lead aprons.
Communication	Communication abilities sufficient for interaction with others in verbal and written form.	• Effectively communicate to the patient in order to converse, instruct the patient, relieve anxiety, gain their cooperation during procedures, understand the patient when they are communicating symptoms of medical emergency.

College Lake County

MEDICAL IMAGING A.A.S. DEGREE

www.clcillinois.edu/programs/mim

Issue	Standard	Examples of Required Activities (Not all inclusive)
Mobility	Physical abilities sufficient to move from room to room and maneuver in small spaces.	• Assist all patients, according to individual needs and abilities, in moving, turning, transferring from transportation devices to x-ray table, etc. • Be able to push, pull, and lift a minimum 50 lbs. • Push a stretcher and/or wheelchair without injury to self, patient, and others. • Push a mobile x-ray machines from one location to another, including turning corners, getting on and off an elevator, and manipulating it in a patient's room or surgery.
Motor Skills	Gross and fine motor abilities sufficient to provide safe effective patient care.	• Manually move the x-ray tube and position the tube at various angles and heights up to 7 feet. • Accurately draw up sterile contrast media and other solutions without contaminating the syringe and/or needles, etc. • Physically be able to administer emergency care including performing CPR. • Place cassettes (image receptors) in Bucky trays and properly manipulate all locks. • Be able to stand for periods as long as 2-hours wearing lead aprons and to walk a distance of 5 miles during a normal work day.
Critical Thinking	Critical thinking ability sufficient for safe, clinical judgment.	• Identify cause-effect relationships in clinical situations. • Evaluate radiographs to ascertain that they contain proper identification and are of diagnostic value. • Select exposure factors and accessory devices for all radiographic procedures with consideration of patient size, age, and extent of disease. • Assess patient's condition and needs from a distance of at least 20 feet. • Initiate proper emergency care protocols, including CPR, based on assessment data.
Interpersonal Behavioral and Social Skills	Interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.	• Establish rapport with patients, families, and colleagues. • Allow mature, sensitive, and effective relationships with patients and fellow workers (interpersonal skills). • Tolerate physically taxing workload. • Function effectively under stress. • Adapt to changing environments (flexible schedules, emergency conditions). • Display compassion, professionalism, empathy, integrity, concern for others, and interest and motivation.

Developed by St. Petersburg College Radiography Program: Permission granted to CLC.

The American with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 and College of Lake County policy prohibits discrimination against individuals with disabilities. One of the purposes of this document is to ensure that students are aware of the requirements of this program and acknowledge their understanding of the program requirements. Students who have a disability and are in need of accommodations or modifications must contact the Office for Students with Disabilities ("OSD"). The OSD will determine whether or not any reasonable accommodations or modifications can be provided.