

# ADVANCED MEDICAL IMAGING AND LEADERSHIP

Program Contact: Paula DeMaio (paula.demaio@qu.edu)203-582-7973

The MHS in Advanced Medical Imaging and Leadership at Quinnipiac University is an interprofessional program. The integrated curriculum features core business discipline courses, guided health management courses and advanced imaging modalities in three distinct pathways: magnetic resonance imaging (MRI), computed tomography (CT) and women's imaging (WI). Graduates of the MHS-AMIL program are prepared to become advanced imaging professionals possessing the foundational education necessary for future entry-level leadership and managerial roles within their respective radiology healthcare organizations.

## MHS in Advanced Medical Imaging and Leadership Curriculum

### Computed Tomography

Course	Title	Credits
<b>First Year</b>		
<b>Summer Semester</b>		
AMI 523	Advanced Sectional Anatomy (Computed Tomography)	3
AMI 538 & 538L	Introduction to CT Scanning and Computed Tomography Lab I	4
MBA 601	Foundations for Decision Making	1
OL 601	Foundations of Organizational Behavior and Leadership (Students interested in earning MBA should take MBA 625 instead)	3
OL 610 or OL 650	Crucial Conversations as Leaders (Students interested in earning MBA should take MBA 615 instead of OL 610 or OL 650) or Leading Organizational Change	3
<b>Credits</b>		<b>14</b>
<b>Fall Semester</b>		
AMI 537	Computed Tomography Clinical I	2
AMI 570	Capstone I	1
HM 600	Foundations of Health Care Management	3
HM 621	Quality Management in Health Care Facilities	3
<b>Credits</b>		<b>9</b>
<b>Spring Semester</b>		
AMI 539	Computed Tomography Clinical II	2
AMI 560	Pathology for CT and MRI Technologists	3
AMI 575	Capstone II	3
HM 660	Human Resource Management in Health Care Administration	3
HM 664	Financial Management in Health Care Organizations	3
<b>Credits</b>		<b>14</b>
<b>Total Credits</b>		<b>37</b>

### Magnetic Resonance Imaging

Course	Title	Credits
<b>First Year</b>		
<b>Summer Semester</b>		
AMI 523	Advanced Sectional Anatomy	3
AMI 515 & 515L	Introduction to Magnetic Resonance Imaging and Magnetic Resonance Imaging Principles I - Lab Practicum	4
MBA 601	Foundations for Decision Making	1
OL 601	Foundations of Organizational Behavior and Leadership (Students interested in earning MBA should take MBA 625 instead)	3
OL 610 or OL 650	Crucial Conversations as Leaders (Students interested in earning MBA should take MBA 615 instead of OL 610 or OL 650) or Leading Organizational Change	3
<b>Credits</b>		<b>14</b>
<b>Fall Semester</b>		
AMI 516 & 516L	Advanced MRI Principles and Imaging and Magnetic Resonance Imaging Principles II - Lab Practicum	4
AMI 517	Magnetic Resonance Imaging Clinical I	2
AMI 570	Capstone I	1
HM 600	Foundations of Health Care Management	3
HM 621	Quality Management in Health Care Facilities	3
<b>Credits</b>		<b>13</b>
<b>Spring Semester</b>		
AMI 518	Magnetic Resonance Imaging Clinical II	2
AMI 560	Pathology for CT and MRI Technologists	3
AMI 575	Capstone II	3
HM 660	Human Resource Management in Health Care Administration	3
HM 664	Financial Management in Health Care Organizations	3
<b>Credits</b>		<b>14</b>
<b>Total Credits</b>		<b>41</b>

### Women's Imaging

Course	Title	Credits
<b>First Year</b>		
<b>Summer Semester</b>		
AMI 534	Bone Densitometry	1
AMI 540	Principles of Mammography	3
AMI 541L	Mammography and Bone Densitometry Lab	2
MBA 601	Foundations for Decision Making (Students interested in earning MBA should take MBA 625 instead)	1
OL 601	Foundations of Organizational Behavior and Leadership	3
OL 610 or OL 650	Crucial Conversations as Leaders (Students interested in earning MBA should take MBA 615 instead of OL 610 or OL 650) or Leading Organizational Change	3
<b>Credits</b>		<b>13</b>

**Fall Semester**

AMI 530	Mammography and Bone Densitometry Clinical I	2
AMI 545	Women's Health and Imaging	3
AMI 570	Capstone I	1
HM 600	Foundations of Health Care Management	3
HM 621	Quality Management in Health Care Facilities	3
<b>Credits</b>		<b>12</b>

**Spring Semester**

AMI 531	Mammography and Bone Densitometry Clinical II	2
AMI 575	Capstone II	3
HM 660	Human Resource Management in Health Care Administration	3
HM 664	Financial Management in Health Care Organizations	3
<b>Credits</b>		<b>11</b>
<b>Total Credits</b>		<b>36</b>

## Student Learning Outcomes

Upon completion of the Advanced Medical Imaging and Leadership program, students will demonstrate the following competencies:

**Goal: Students will be clinically competent.**

1. **Clinically Knowledgeable:** Apply skills and knowledge from foundational courses.
2. **Procedurally Knowledgeable:** Demonstrate growth in procedural knowledge from all AMIL coursework.

**Goal: Students will demonstrate effective communication skills.**

1. **Effective Communication:** Execute interpersonal communication with patients.
2. **Oral Proficiency:** Demonstrate their ability to present clear and creative ideas in a formal manner.

**Goal: Students will demonstrate critical thinking.**

1. **Critical Decision-Making:** Demonstrate their ability to navigate typical and atypical clinical scenarios while performing non-routine and routine procedures.
2. **Image Analysis:** Evaluate images for quality and diagnostic value.

**Goal: Students will grow and develop as professionals.**

1. **Professionalism:** Conduct themselves professionally and understand and apply ethical decision-making.
2. **Professional Research:** Create a culminating capstone project.

## Mission Statement

The Advanced Medical Imaging and Leadership program supports the mission statements of both Quinnipiac University and the School of Health Sciences and their commitment to excellence in education. The mission of the Advanced Medical Imaging and Leadership program is to develop students' technical, professional and interpersonal communication skills through a logical and organized sequence of didactic, laboratory and clinical experiences. The program offers multiple clinical assignments to provide maximum exposure to advanced imaging modalities and associated protocols. Graduates of the Advanced Medical

Imaging and Leadership program will meet the needs of the community for highly qualified professionals, and the program will prepare students for career entry and advanced study.

## Program Objectives

The objectives of the Advanced Medical Imaging and Leadership program are to:

- Provide excellent education in both the didactic and clinical learning environment
- Provide research opportunities that contribute to the clinical and scientific knowledge base in the field of diagnostic radiology
- Provide the skills necessary to prepare graduates for practice as advanced modality imaging professionals
- Provide essential and fundamental leadership skills to better position graduates for entry-level supervisory opportunities within radiology healthcare organizations
- Foster a sense of commitment to continuing education and professional development

These objectives are consistent with the mission statement of Quinnipiac University, which is to provide a supportive and stimulating environment for intellectual and personal growth.

## Admission Requirements

The eligibility requirements for the MHS-AMIL program include:

1. Bachelor's degree from an accredited institution
2. Radiologic technologist in good standing with the American Registry of Radiologic Technologists
3. State of Connecticut Licensure as a radiographer prior to clinical component of the program
4. Prerequisite course requirements:
  - 3-4 credits of physics or chemistry
  - 3 credits of college-level mathematics
  - 12-15 credits of biology with labs, including:
    - 6-8 credits of anatomy and physiology

Admission to the program is conducted on a rolling basis. Decisions are made individually as an application becomes complete. Final decision on which applicants are selected into the program will be made by the program director, with input from MHS-AMIL program faculty. An interview is required when appropriate with the program director and at least two members of the MHS-AMIL faculty in attendance. Applications will be ranked based on a strong academic record, experience in a relevant clinical area, perceived ability to complete a challenging didactic and clinical program and the strength of recommendation by reference person.