

# Maine College of Health Professions

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*Education that Enriches Lives*

College Catalog,  
Addendum 1

2021-2022



## Bachelor of Science in Medical Imaging (BS MI) Computed Tomography Track

### About Our Program

The Bachelor's Degree Program in Medical Imaging, Computed Tomography Track, will provide a pathway of professional growth for radiographers, radiation therapists, or nuclear medicine technologists to advance their studies in medical imaging. The program will provide the knowledge, skills, and abilities in leadership and computed tomography for graduates to work as leaders within medical imaging and function as vital members of the healthcare team.

### Student Learning Outcomes

1. Develop the skills necessary to become a leader within a diverse healthcare setting.
2. Apply evidence-based research to contribute to excellence in healthcare.
3. Comply with advanced, current, and emerging practices and technologies in a healthcare setting.
4. Use knowledge that supports advanced certification in medical imaging.

### Curriculum Plan

#### Credits Awarded Prior to Program Start

Credential ARRT or NMTCB certification	45
General Education Courses	23
<b>Total Credits Awarded Prior to Start</b>	<b>68</b>

Program Courses	Credit Hours
ENG 210 English Literature	3
HUM 2XX Humanities Elective	3
MAT 160 Intro to Statistics	3
PHI 2XX Ethics Elective	3
SSC 2XX Social Science Elective	3
GE 3XX General Elective	3
GE 4XX General Elective	3
HCA 410 Healthcare Informatics and Technology	3
IPE 411 Interprofessional Education (IPE)	3
HCA 410 Healthcare Compliance and Accreditation	3
HCA 420 Research Methods & Information Literacy	3
HCA 430 Healthcare Delivery Models	3
CT 300 Multiplanar Anatomy	3
CT 310 Patient Care and Radiation Safety	2
CT 320 CT Procedures	3
CT 330 CT Physics and Instrumentation	2
CT 340 CT Clinical Practicum I* †	4
CT 350 CT Clinical Practicum II* †	4

**Total Program Credits** 54

**Total Credits upon Graduation** 122

\* CT 340 & CT 350 can be replaced by CT 360 CT 340 & CT 350 can be replaced with any 400 level HCA course (total credits upon graduation to 120).

**Note:** Qualified students may enter the BS MI program at any point and do not necessarily need to take courses in a prescribed sequence.

**BS MI Course Prerequisites:** In order to enroll in all BS MI courses, students must be accepted into the BS MI Program or receive permission from the Dean. Note: Select courses may have additional prerequisites.

## Bachelor of Science in Medical Imaging (BS MI) Mammography Track

### About Our Program

The Bachelor's Degree Program in Medical Imaging, Mammography Track, will provide a pathway of professional growth for radiographers to advance their studies in medical imaging. The program will provide the knowledge, skills, and abilities in leadership and mammography for graduates to work as leaders within medical imaging and function as vital members of the healthcare team.

### Student Learning Outcomes

1. Develop the skills necessary to become a leader within a diverse healthcare setting.
2. Apply evidence-based research to contribute to excellence in healthcare.
3. Comply with advanced, current, and emerging practices and technologies in a healthcare setting.
4. Use knowledge that supports advanced certification in medical imaging.

### Curriculum Plan

#### Credits Awarded Prior to Program Start

Credential ARRT or NMTCB certification	45
General Education Courses	23
<b>Total Credits Awarded Prior to Start</b>	<b>68</b>

Course	Credit Hours
ENG 210 English Literature	3
HUM 2XX Humanities Elective	3
MAT 160 Intro to Statistics	3
PHI 2XX Ethics Elective	3
SSC 2XX Social Science Elective	3
GE 3XX General Elective	3

GE 4XX General Elective	3
HCA 410 Healthcare Informatics and Technology	3
IPE 411 Interprofessional Education (IPE)	3
HCA 410 Healthcare Compliance and Accreditation	3
HCA 420 Research Methods & Information Literacy	3
HCA 430 Healthcare Delivery Models	3
MAM 300 Patient Care in Mammography	2
MAM 310 Image Production in Mammography	3
MAM 320 Anatomy, Physiology, and Pathology of the Breast	2
MAM 330 Mammography Procedures	3
MAM 340 Mammography Clinical Practicum †	6
<b>Total Program Credits</b>	<b>52</b>

**Total Credits upon Graduation 120**

† MAM 340 can be replaced with any two 400 level HCA courses

**Note:** Qualified students may enter the BS MI program at any point and do not necessarily need to take courses in a prescribed sequence.

**BS MI Course Prerequisites:** In order to enroll in all BS MI courses, students must be accepted into the BS MI Program or receive permission from the Dean. Note: Select courses may have additional prerequisites.

## Bachelor of Science in Medical Imaging (BS MI) Sonography Track

### About Our Program

The Bachelor's Degree Program in Medical Imaging, Diagnostic Medical Sonography Track, will provide a pathway of professional growth for individuals with an Associate Degree or higher in an allied health profession to advance their studies in sonography. The program will provide the knowledge, skills, and abilities in leadership and sonography for graduates to work as leaders within medical imaging and function as vital members of the healthcare team.

### Student Learning Outcomes

1. Develop the skills necessary to become a leader within a diverse healthcare setting.
2. Apply evidence-based research to contribute to excellence in healthcare.
3. Comply with advanced, current, and emerging practices and technologies in a healthcare setting.
4. Use knowledge that supports advanced certification in medical imaging.

## Curriculum Plan

### Credits Awarded Prior to Program Start

Professional certification	45
General Education Courses	23
<b>Total Credits Awarded Prior to Start</b>	<b>68</b>

Course	Credit Hours
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ENG 210 English Literature	3
HUM/SSC 2XX Humanities/Social Science Elective	3
MAT 160 Intro to Statistics	3
PHI 2XX Ethics Elective	3
IPE 411 Interprofessional Education (IPE)	3
HCA 410 Healthcare Compliance and Accreditation	3
HCA 420 Research Methods & Information Literacy	3
HCA 430 Healthcare Delivery Models	3
DMS 301 Introduction to Sonography	3
DMS 311 Sonography of the Abdomen	4
DMS 320 Obstetrical and Gynecological Sonography I	3
DMS 330 Sonography Lab I (180 hours)	3
DMS 340 Sonography Physics & Instrumentation	3
DMS 350 Sonography of Superficial Structures & Other Procedures	3
DMS 360 Obstetrical and Gynecological Sonography II	3
DMS 370 Sonography Lab II (120 hours)	2
DMS 380 Sonography Clinical Practicum I (240 hours)	4
DMS 390 Sonography Clinical Practicum II (480 hours)	8
DMS 400 Sonography Seminar & Review	3
DMS 410 Sonography Clinical Practicum III (360 hours)	6
<b>Total Credits upon Graduation</b>	<b>137</b>

## Bachelor of Science in Medical Imaging (BS MI) Prior Learning Track

### About Our Program

The Bachelor's Degree Program in Medical Imaging, prior learning track, will provide a pathway of professional growth for radiographers, radiation therapists, or nuclear medicine technologists that have post-primary certifications to advance their studies in medical imaging. The program will provide graduates the knowledge, skills, and abilities to work as leaders within medical imaging and function as vital members of the healthcare team.

### Student Learning Outcomes

1. Develop the skills necessary to become a leader within a diverse healthcare setting.

2. Apply evidence-based research to contribute to excellence in healthcare.
3. Comply with advanced, current, and emerging practices and technologies in a healthcare setting.
4. Use knowledge that supports advanced certification in medical imaging.

### Curriculum Plan

#### Credits Awarded Prior to Program Start

Credential ARRT or NMTCB certification	45
General Education Courses	23
Prior Learning Credits	10-18
<b>Total Credits Awarded Prior to Start</b>	<b>78-86</b>

The following prior learning credits will be awarded for post-primary or additional primary certifications:

Bone Densitometry (BD)*	10
Computed Tomography (CT)	18
Interventional: Cardiac or Vascular (CI/VI)	18
Magnetic Resonance Imaging (MR)	18
Mammography (M)	18
Nuclear Medicine (N)	18
Radiation Therapy (T)	18
Sonography: Sonography, Breast, or Vascular (S/BS/VS)	18

\* Two additional 400 level HCA courses needed for degree completion.

Course	Credit Hours
ENG 210 English Literature	3
HUM 2XX Humanities Elective	3
MAT 160 Intro to Statistics	3
PHI 2XX Ethics Elective	3
SSC 2XX Social Science Elective	3
GE 3XX General Elective	3
GE 4XX General Elective	3
HCA 410 Healthcare Informatics and Technology	3
IPE 411 Interprofessional Education (IPE)	3
HCA 410 Healthcare Compliance and Accreditation	3
HCA 420 Research Methods and Information Literacy	3
HCA 430 Healthcare Delivery Models	3
<b>Total Program Credits</b>	<b>36</b>
<b>Total Credits upon Graduation</b>	<b>120-122</b>

**Note:** Qualified students may enter the BS MI program at any point and do not necessarily need to take courses in a prescribed sequence.

**BS MI Course Prerequisites:** In order to enroll in all BS MI courses, students must be accepted into the

BS MI Program or receive permission from the Dean. Select courses may have additional prerequisites.

## Academic Courses

### HCA 300 Healthcare Marketing

#### 3 Credits

This course will introduce students to marketing concepts and components used within healthcare organizations. Special attention is given to how community relations impact healthcare marketing. The course will also explore the role that current marketing issues and trends play in the strategic planning process. Prerequisite: Admission to BS in MI or BS in HCA program or permission of the Dean

### HCA 310 Human Resource Management in Healthcare

#### 3 Credits

This course focuses on applying human resource management concepts within the healthcare setting. Students will explore legal, behavioral, and administrative requirements necessary to optimize organizational performance. Prerequisite: Admission to BS in MI or BS in HCA program or permission of the Dean

### HCA 320 Healthcare Administration Preceptorship I

#### 3 Credits

This course offers students an opportunity to gain, hone, and apply administrative knowledge and skills while completing an approved work experience within a healthcare environment. This course meets online weekly for a total of 15 hours. Students are additionally required to complete a total of 120 hours in the internship environment. Students must source and secure faculty approval for internship sites. Prerequisite: HCA 411, HCA 430, Ethics elective, ENG 101, COM 101, PSY 101

### HCA 401 Healthcare Informatics and Technology

#### 3 Credits

The focus of this course is to explore patient care technologies, information systems, telecommunication technologies, and communication devices that support the healthcare environment. Students will gain an understanding of the impact these information management systems have on the healthcare team, delivery of care, efficiency and productivity, patient safety and health outcomes. Prerequisite: Admission to BS in MI or BS in HCA program or permission of the Dean

### **HCA 410 Healthcare Compliance and Accreditation**

#### **3 Credits**

This course introduces healthcare compliance as an industry. Students will explore the federal and state laws that regulate the delivery and reimbursement practices of the U.S. healthcare system. Students will investigate federal, state, and voluntary compliance programs in healthcare settings. Prerequisite: Admission to BS in MI or BS in HCA program or permission of the Dean.

### **HCA 420 Research Methods and Information Literacy**

#### **3 Credits**

Research methods and information literacy will be the focus of this course. Topics will include research terminology, literature searching, and literature evaluation. This content is geared to increase and disseminate intellectual inquiry, information literacy and the use of scholarly research methods. Prerequisite: MAT 160, Admission to BS in MI or BS in HCA program or permission of the Dean.

### **HCA 430 Healthcare Delivery Models**

#### **3 Credits**

In this course students will focus on various methods of healthcare delivery in the United States. Students will discover barriers related to cost, quality, and access to healthcare. They will compare characteristics of healthcare in the U.S. with healthcare systems in other countries. Students also investigate current and future issues and trends in healthcare reform. Prerequisite: Admission to BS in MI or BS in HCA program or permission of the Dean.

### **HCA 440 Financial Management in Healthcare**

#### **3 Credits**

This course will engage students in the foundations of financial management in delivery of healthcare services. Topics will include the purpose and methods of financial reporting in addition to financial risk, variances, and an overview of payer-mix models. Students also explore the financial, political, and economic aspects of healthcare finance. Prerequisite: Admission to BS in MI or BS in HCA program or permission of the Dean.

### **HCA 450 Risk Management in Healthcare**

#### **3 Credits**

This course focuses on the complex issues and concerns of healthcare administration as they apply to risk management. Students will explore the diverse tools, techniques, and theories as related to

various stakeholders in a healthcare environment. Prerequisite: Admission to BS in MI or BS in HCA program or permission of the Dean.

### **HCA 460 Leadership in Healthcare Administration**

#### **3 Credits**

Students in this course will focus on why/how leadership, teambuilding, and change management are vital components of all health care organizations. To promote an effective team, the healthcare professional must be able to lead within an interdisciplinary team. Students will also focus on leadership principles to help create positive culture and manage change. Prerequisite: Admission to BS in MI or BS in HCA program or permission of the Dean.

### **HCA 470 Healthcare Strategy and Policy**

#### **3 Credits**

This course offers a broad overview of healthcare strategy and policy with focus on how economic forces, political trends, and changing social priorities influence policy development. Students will explore how policy initiatives impact stakeholders. Prerequisite: Admission to BS in MI or BS in HCA program or permission of the Dean.

### **HCA 480 Healthcare Administration Preceptorship II**

#### **3 Credits**

This course offers students an opportunity to gain, hone, and apply administrative knowledge and skills while completing an approved work experience within a healthcare environment. This course meets online weekly for a total of 15 hours. Students are additionally required to complete a total of 120 hours in the internship environment. Students must source and secure faculty approval for internship sites. Prerequisite: HCA 320, 9 HCA credits at the 400 level.

### **IPE 411/NUR 411 Interprofessional Education (IPE)**

#### **3 Credits**

The focus of this course is to examine the healthcare professional's role as a member of the healthcare team. Students will analyze current research to describe the prevalence and outcomes of fragmented healthcare and the benefits of interprofessional healthcare. Students will learn about the roles of other members of the healthcare team and will develop knowledge and skills in interprofessional collaboration that can be used to improve patient safety and healthcare outcomes. Prerequisite: Admission to BS in MI or BS in HCA program or permission of the Dean.