

# BS MITS DAO

## Overview

The BSMITS Degree Advancement Option (DAO) is offered through the University of Nebraska Medical Center (UNMC) campus and provides working medical imaging and therapeutic science professionals the opportunity to earn an advanced degree while continuing to work in their professions.

Qualified candidates are mentored by a faculty advisor who works with students to develop an Individual Plan of Study for degree completion.

A minimum of 20 semester hours of coursework from UNMC must be completed to qualify for degree completion. Students must be awarded a minimum of 120 total semester hours of college credit to be eligible to graduate from UNMC; therefore, additional coursework may be required. Students are allowed up to five years to complete the degree advancement option; however, it is possible to complete the program in three semesters.

Students are required to write papers, complete projects, conduct research, communicate with professors and students online, work independently on assignments and with coworkers on group projects, do case presentations and take quizzes and exams.

The University of Nebraska Medical Center, College of Allied Health Professions (CAHP) is accredited by the North Central Association of Colleges and Colleges. The BSMITS option is considered a degree advancement program and does not include a professional clinical education component; therefore, it is not under the purview of the Joint Review Commission on Education in Radiologic Technology (JRCERT).

## Degree Completion

Upon successful completion of BSMITS curriculum, students will receive diploma and graduation information from UNMC Student Services. Students must be awarded a minimum of 120 total semester hours of college credit (UNMC courses + transfer credit + professional certification credit) by the UNMC Office of Academic Records in order to be eligible to graduate from UNMC.

## BSMITS DAO Website (<https://www.unmc.edu/alliedhealth/academics/programs/rt/bsmits/>) Curriculum

Code	Title	Credit Hours
<b>BSMITS Required Courses</b>		
CAHP 423	PRINCIPLES OF CRITICAL INQUIRY	2
MITS 440R	CASE STUDIES & JOURNAL REVIEW	2
CAHP 430	SCANNING HEALTH CARE ENVIRONMENT	3
CAHP 431	MANAGEMENT IN HEALTH CARE	3
<b>Total Credit Hours</b>		<b>10</b>

A minimum of 20 semester credit hours must be completed at UNMC. BSMITS elective course offerings are listed below. All courses are subject to change based on instructor availability, enrollment, and technology. All DAO courses are offered at least once each academic year (August–August).

Code	Title	Credit Hours
<b>BSMITS Elective Course Options</b>		
CAHP 360	PATHOGENIC MEDICAL MICROBIOLOGY	4
CAHP 400	BIOCHEMISTRY FOR HEALTH PROFESSIONALS	3
CAHP 415	COMMUNICATION FOR INDIVIDUALIZED HEALTH CARE	3
CAHP 420	FOUNDATIONS OF INFORMATION TECHNOLOGY IN HEALTHCARE	2
CAHP 422	PRINCIPLES OF EDUCATION FOR HEALTH CARE PROFESSIONALS	2
CAHP 426	HEALTH CARE ETHICS AND CRITICAL THINKING	3
MITS 407S	ADVANCED OBSTETRICAL ULTRASOUND	3
MITS 408S	GYNECOLOGICAL ULTRASOUND	1
MITS 409S	GENITOURINARY ULTRASOUND	1
MITS 410R	SECTIONAL ANATOMY & PATHOLOGY I	4
MITS 411R	SECTIONAL ANATOMY & PATHOLOGY II	4
MITS 414S	PRACTICAL APPLICATION OF SONOGRAPHY	3
MITS 413R	RADIOLOGIC CONTRAST AGENTS	2
MITS 414T	ONCOLOGY SECTIONAL ANATOMY & PATHOLOGY I	2
MITS 415T	ONCOLOGY SECTIONAL ANATOMY & PATHOLOGY II	2
MITS 419R	MRI PHYSICS & SYSTEMS I	2
MITS 420R	MRI PHYSICS & SYSTEMS II	2
MITS 422S	VASCULAR ANATOMY AND PHYSIOLOGY	3
MITS 423S	PATHOLOGY FOR THE HEALTH CARE PROFESSIONAL	2
MITS 425R	MRI POSITION & PROTOCOL I	2
MITS 424S	BREAST SONOGRAPHY	2
MITS 432S	ABDOMINAL ULTRASOUND	3
MITS 437S	CARDIAC ANATOMY AND PHYSIOLOGY	3
MITS 438S	CARDIAC PATHOLOGY AND HEMODYNAMICS	4
MITS 438N	ADVANCED RADIATION BIOLOGY	3
MITS 441R	MRI POSITIONING & PROTOCOLS II	2
MITS 443S	FETAL ECHOCARDIOGRAPHY	2
MITS 451R	MRI SAFETY	1
MITS 455S	HIGH RESOLUTION SONOGRAPHY	1
MITS 456S	NEUROSONOGRAPHY	2
MITS 457S	PEDIATRIC SONOGRAPHY	2
MITS 457R	CARDIOVASCULAR INTERVENTIONAL TECHNOLOGY I	3
MITS 458S	MUSCULOSKELETAL SONOGRAPHY	2
MITS 458R	CARDIOVASCULAR INTERVENTIONAL TECHNOLOGY II	3

MITS 460R	CT PROTOCOLS AND CROSS-SECTIONAL ANATOMY	2
MITS 461R	CT PHYSICS	1
MITS 462S	VASCULAR PATHOLOGY AND HEMODYNAMICS	2
MLS 302	INTRODUCTION TO HEMATOLOGY	3
MLS 404	IMMUNOLOGY	3

**BSMITS DAO Website** (<https://www.unmc.edu/alliedhealth/academics/programs/rt/bsmits/>)

## Fall Courses

### General CAHP Courses

Code	Title	Credit Hours
CAHP 420	FOUNDATIONS OF INFORMATION TECHNOLOGY IN HEALTHCARE	2
CAHP 426/626	HEALTH CARE ETHICS AND CRITICAL THINKING	3
CAHP 430/630	SCANNING HEALTH CARE ENVIRONMENT	3
CAHP 723	PRINCIPLES OF CRITICAL INQUIRY	2

### General Medical Imaging & Therapeutic Science Courses

Code	Title	Credit Hours
MITS 410R/610R	SECTIONAL ANATOMY & PATHOLOGY I (Proctor Required)	4
MITS 414T/614T	ONCOLOGY SECTIONAL ANATOMY & PATHOLOGY I (Proctor Required)	2
MITS 423S/623S	PATHOLOGY FOR THE HEALTH CARE PROFESSIONAL	2
MITS 451R/651R	MRI SAFETY	1*

### Cardiovascular Interventional Technology Courses

Code	Title	Credit Hours
MITS 457R/657R	CARDIOVASCULAR INTERVENTIONAL TECHNOLOGY I (Proctor Required)	3

### Computed Tomography Courses

Code	Title	Credit Hours
MITS 460R/660R	CT PROTOCOLS AND CROSS-SECTIONAL ANATOMY	2
MITS 461R/661R	CT PHYSICS	1

### Diagnostic Medical Sonography Courses

Code	Title	Credit Hours
MITS 414S	PRACTICAL APPLICATION OF SONOGRAPHY	3
MITS 422S/622S	VASCULAR ANATOMY AND PHYSIOLOGY	3
MITS 424S/624S	BREAST SONOGRAPHY	2
MITS 432S/632S	ABDOMINAL ULTRASOUND	3
MITS 437S/637S	CARDIAC ANATOMY AND PHYSIOLOGY	3
MITS 443S/643S	FETAL ECHOCARDIOGRAPHY	2

MITS 457S/657S	PEDIATRIC SONOGRAPHY	2
MITS 458S/658S	MUSCULOSKELETAL SONOGRAPHY	2
MITS 462S/662S	VASCULAR PATHOLOGY AND HEMODYNAMICS	2

### Magnetic Resonance Imaging Courses

Code	Title	Credit Hours
MITS 419R/619R	MRI PHYSICS & SYSTEMS I (Proctor Required)	2
MITS 425R/625R	MRI POSITION & PROTOCOL I (Proctor Required)	2*

### Medical Laboratory Science Courses

Code	Title	Credit Hours
MLS 404	IMMUNOLOGY	3

\*Denotes experiential learning component and must have access to specialized equipment. For example, MRI Scanner.

## Spring Courses

### General CAHP Courses

Code	Title	Credit Hours
CAHP 360	PATHOGENIC MEDICAL MICROBIOLOGY	4
CAHP 400	BIOCHEMISTRY FOR HEALTH PROFESSIONALS	3
CAHP 422	PRINCIPLES OF EDUCATION FOR HEALTH CARE PROFESSIONALS	2
CAHP 423	PRINCIPLES OF CRITICAL INQUIRY	2
CAHP 426/626	HEALTH CARE ETHICS AND CRITICAL THINKING	3
CAHP 431	MANAGEMENT IN HEALTH CARE	3
CAHP 631/HDS 831	MANAGEMENT IN HEALTH CARE	3

### General Medical Imaging & Therapeutic Science Courses

Code	Title	Credit Hours
MITS 411R/611R	SECTIONAL ANATOMY & PATHOLOGY II (Proctor Required)	4
MITS 413R	RADIOLOGIC CONTRAST AGENTS	2
MITS 415T/615T	ONCOLOGY SECTIONAL ANATOMY & PATHOLOGY II (Proctor Required)	2
MITS 423S/623S	PATHOLOGY FOR THE HEALTH CARE PROFESSIONAL	2
MITS 438N/638N	ADVANCED RADIATION BIOLOGY (Proctor Required)	3
MITS 451R/651R	MRI SAFETY	1

### Cardiovascular Interventional Technology Courses

Code	Title	Credit Hours
MITS 458R/658R	CARDIOVASCULAR INTERVENTIONAL TECHNOLOGY II (Proctor Required)	3

**Computed Tomography Courses**

Code	Title	Credit Hours
MITS 460R/660R	CT PROTOCOLS AND CROSS-SECTIONAL ANATOMY	2
MITS 461R/661R	CT PHYSICS	1

**Diagnostic Medical Sonography Courses**

Code	Title	Credit Hours
MITS 407S/607S	ADVANCED OBSTETRICAL ULTRASOUND	2
MITS 408S/608S	GYNECOLOGICAL ULTRASOUND	1
MITS 409S/609S	GENITOURINARY ULTRASOUND	1
MITS 414S	PRACTICAL APPLICATION OF SONOGRAPHY	3
MITS 422S/622S	VASCULAR ANATOMY AND PHYSIOLOGY	3
MITS 424S/624S	BREAST SONOGRAPHY	2
MITS 438S/638S	CARDIAC PATHOLOGY AND HEMODYNAMICS	3
MITS 443S/643S	FETAL ECHOCARDIOGRAPHY	2
MITS 457S/657S	PEDIATRIC SONOGRAPHY	2
MITS 458S/658S	MUSCULOSKELETAL SONOGRAPHY	2
MITS 462S/662S	VASCULAR PATHOLOGY AND HEMODYNAMICS	2

**Magnetic Resonance Imaging Courses**

Code	Title	Credit Hours
MITS 420R/620R	MRI PHYSICS & SYSTEMS II (Proctor Required)	2*
MITS 441R/641R	MRI POSITIONING & PROTOCOLS II (Proctor Required)	2*

**Medical Laboratory Science Courses**

Code	Title	Credit Hours
MLS 302	INTRODUCTION TO HEMATOLOGY	3
MLS 404	IMMUNOLOGY	3

\*Denotes experiential learning component and must have access to specialized equipment. For example, MRI Scanner.

**Summer Courses****Summer****General CAHP Courses**

Code	Title	Credit Hours
CAHP 415/615	COMMUNICATION FOR INDIVIDUALIZED HEALTH CARE	3

**General Medical Imaging & Therapeutic Science Courses**

Code	Title	Credit Hours
MITS 423S/623S	PATHOLOGY FOR THE HEALTH CARE PROFESSIONAL	2
MITS 440R	CASE STUDIES & JOURNAL REVIEW	2
MITS 451R/651R	MRI SAFETY	1

**Computed Tomography Courses**

Code	Title	Credit Hours
MITS 460R/660R	CT PROTOCOLS AND CROSS-SECTIONAL ANATOMY	2
MITS 461R/661R	CT PHYSICS	1

**Diagnostic Medical Sonography Courses**

Code	Title	Credit Hours
MITS 414S	PRACTICAL APPLICATION OF SONOGRAPHY	3
MITS 422S/622S	VASCULAR ANATOMY AND PHYSIOLOGY	3
MITS 424S/624S	BREAST SONOGRAPHY	2
MITS 443S/643S	FETAL ECHOCARDIOGRAPHY	2
MITS 455S/655S	HIGH RESOLUTION SONOGRAPHY	1
MITS 456S/656S	NEUROSONOGRAPHY	2
MITS 457S/657S	PEDIATRIC SONOGRAPHY	2
MITS 458S/658S	MUSCULOSKELETAL SONOGRAPHY	2
MITS 462S/662S	VASCULAR PATHOLOGY AND HEMODYNAMICS	2

**Handbook Introduction**

The contents of this handbook are intended to help current and prospective students understand the structural and procedural operations for the Bachelor of Science in Medical Imaging & Therapeutic Sciences Degree Advancement Option. The academic offerings under BSMITS DAO are administered by the College of Allied Health Professions (CAHP) at the University of Nebraska Medical Center (UNMC).

Students are responsible for understanding and following all policies of the College of Allied Health Professions (<https://catalog.unmc.edu/allied-health-professions/cahppolicies/>) and the University of Nebraska Medical Center (<https://catalog.unmc.edu/general-information/student-policies-procedures/background-check-policy/>).

**Mission & Description**

The mission of the BSMITS Degree Advancement Option (DAO) is to provide medical imaging and therapeutic science professionals who have completed an accredited radiography, radiation therapy, sonography, or nuclear medicine technology program the opportunity to advance their education and professional goals.

Qualified candidates are mentored by a faculty advisor who works with students to develop an Individual Program of Study for degree completion. The Program of Study includes a core of required management and education courses along with a selection of medical imaging and therapeutic science courses tailored to students' clinical and educational background along with their professional goals.

A minimum of 20 semester hours of coursework from UNMC must be completed to qualify for degree completion. Students must earn a minimum of 120 total semester hours of college credit to be eligible to graduate from UNMC; therefore, additional coursework may be required. Students are allowed up to five years to complete the degree.

advancement option; however, it is possible to complete the program in three semesters.

The program is completely online, and classes are available through a variety of distance learning technologies. Students are required to write papers, complete projects, conduct research, communicate with professors and students online, work independently on assignments and with coworkers on group projects, present case studies, and complete quizzes and exams.

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## Handbook Links

- Academic Expectations (<https://catalog.unmc.edu/allied-health-professions/bsmitsdaoacademicexpectations/>)
- Admission Policies & Requirements (<https://catalog.unmc.edu/allied-health-professions/bsmitsdaoadmission/>)
- Background Checks (<https://catalog.unmc.edu/allied-health-professions/bsmitsdaobackgroundcheck/>)
- Code of Conduct (<https://catalog.unmc.edu/allied-health-professions/bsmitscodeofconduct/>)
- Competencies & Objectives (<https://catalog.unmc.edu/allied-health-professions/bsmitsdaocompetencies/>)
- Counseling, Psychological, & Disability Services (<https://catalog.unmc.edu/allied-health-professions/bsmitsdaocounseling/>)
- Degree Requirements (<https://catalog.unmc.edu/allied-health-professions/bsmitsdaodegreereq/>)
- Program Advisement & Faculty (<https://catalog.unmc.edu/allied-health-professions/bsmitsdaoadvisement/>)
- Program Course Sequence and Graduation (<https://catalog.unmc.edu/allied-health-professions/bsmitsdaoprogramsequence/>)
- Program Mission & Description (<https://catalog.unmc.edu/allied-health-professions/bsmitsdaomission/>)
- Transfer of Credit (<https://catalog.unmc.edu/allied-health-professions/bsmitsdaotransferofcredit/>)
- Time Limit for Degree (<https://catalog.unmc.edu/allied-health-professions/bsmitsdaotimelimit/>)