CARDIOVASCULAR INTERVENTIONAL TECHNOLOGY

Degrees Offered
Bachelor of Medical Imaging & Therapeutic Sciences
Post-Baccalaureate Professional Certificate in Cardiovascular Interventional Technology

Length of Program
Each semester consists of approximately 12-16 hours of course work and clinical rotations scheduled throughout the 12-month program, starting in August and ending in August the following year. Program education covers both vascular and cardiac interventional technology.

Description
Completion of an accredited Radiography program, ARRT certification in Radiography, and 27 specific college prerequisites (http://www.unmc.edu/alliedhealth/education/vit/admission) are required for admission into the CVIT Program, which is offered as a post-primary certification modality at UNMC.

Members of the CVIT faculty include radiologic technologists with CVIT certification, interventional radiologists, nurses, and program directors that teach courses relating to their expertise.

After completion of the program, graduates are awarded a Bachelor Degree in Medical Imaging & Therapeutic Sciences or Post-Baccalaureate Professional Certificate in Cardiovascular Interventional Technology. Students are eligible to sit for the American Registry of Radiologic Technologists certification in Cardiac Interventional Radiography and/or Vascular Interventional Radiography if the post-primary certification eligibility requirements are met. Requirements can be found in the ARRT Certification Handbook on the ARRT web site (https://www.arrt.org).

Admissions Requirements
1. Graduate from an accredited Radiography program. Students in their final months of study are eligible to apply.
3. Undergraduate cumulative GPA of at least 2.5 on a 4.0 scale.
4. Radiography program GPA of at least 3.0 on a 4.0 scale.
5. Complete a shadow experience with a CVIT Program Representative. (Email tammy.webster@unmc.edu to schedule a shadow experience.)


Enrollment in each program is limited and competitive. The admissions committee of each program, composed of program faculty and administration, evaluates the qualifications of each applicant and makes the final selections for admission.

University / College Required Prerequisites:

Total of 87 semester hours of transfer credit; a maximum of 60 semester hours of credit from an accredited Radiography program and 27 semester hours of specific prerequisite course work (see below). If a Radiography program is less than 60 semester hours, additional transfer credit from a regionally accredited institution will be required to meet the 87 semester hour total.

Completion of the following 27 semester hours of required prerequisite course work:

- Language/Social Sciences (12 semester hours)
- Coursework meeting this requirement may include but is not limited to composition, literature, communication, speech, foreign language, philosophy, sociology, psychology, art, history, religion.
- Mathematics (3 semester hours)
- Mathematics or statistics
- Natural Sciences (12 semester hours)
- Course work meeting this requirement may include but is not limited to biology, chemistry, physics, anatomy, physiology or earth science.

Advanced Placement
A maximum of 6 College Level Examination Program (CLEP) or Advanced Placement (AP) semester hours will be accepted for transfer. CLEP semester hours in math and science will not be accepted & no more than 3 CLEP or AP hours of English Composition will be accepted.

College prerequisites, course requirements, and program requirements are subject to change.

How to Apply
For information on how to apply, visit our "How to Apply (https://www.unmc.edu/alliedhealth/education/vit/admission/apply.html)" website. To view application deadlines, visit our "Application Deadlines (https://www.unmc.edu/alliedhealth/education/deadlines.html)" website.

Degree Requirements
Students must successfully complete each course within the CVIT curriculum in order to be considered for the Bachelor of Science degree in Medical Imaging & Therapeutic Sciences. A minimum total of 120 semester credit hours are required for the Bachelor of Science degree in Medical Imaging & Therapeutic Sciences. Students must transfer in a minimum of 87 semester credit hours, 27 semester credit hours of which come from specific prerequisite coursework and a maximum of 60 semester credit hours for their radiography curriculum. Additionally, students will complete approximately 33 semester hours within the CVIT curriculum. Students must also successfully complete each course within the CVIT curriculum in order to be considered for the Post-Baccalaureate Professional Certificate in Cardiovascular Interventional Technology.

All required didactic and clinical courses must be completed with a minimum letter grade of C- or better in order to successfully complete the program. The 12-month program consists of lecture, demonstration, laboratory, and clinical instruction. The 400 level courses are designated for students pursuing the Bachelor of Science degree while the 600 level courses are designated for students pursuing the Post-Baccalaureate Professional Certificate.
Certification

The American Registry of Radiologic Technologists (ARRT) is the credentialing organization that recognizes individuals qualified in the use of ionizing and non-ionizing radiation to promote high standards of patient care in diagnostic medical imaging, interventional procedures and therapeutic treatment. The ARRT tests and certifies technologists and administers continuing education and ethics requirements for their annual registration.

ARRT Post-Primary Certification - The ARRT provides certification in Cardiac Interventional and Vascular Interventional disciplines.

Upon completion of the CVIT program at UNMC, graduates are eligible to apply for the national examination(s) for certification offered by ARRT.

For more information about the ARRT and requirements for certification and registration please contact:
The American Registry of Radiologic Technologists (https://www.arrt.org)
1255 Northland Drive
St. Paul, MN 55120-1155
Phone: 651.687.0048

Licensure

Depending on the state in which you decide to practice, you may also be required to become licensed as a radiologic technologist. Each state has its own laws in regard to licensure. Individual states hold the authority to administer the license and grant individuals permission to practice radiologic technology within their state.

More information on licensure in Nebraska (http://dhhs.ne.gov/Pages/licensing.aspx)

About the Profession

If you were a Cardiovascular Interventional Technologist your job would be to perform invasive diagnostic or curative procedures such as angiograms and intravascular catheterizations.

Cardiovascular Interventional Technology (CVIT) is an integral and advancing component of diagnostic and therapeutic radiologic procedures. CVIT involves specialized radiographic techniques used in angiography, interventional procedures (i.e. angioplasty), and central venous access procedures.

The CVIT Technologist is a key member of the radiology team that performs vascular and interventional procedures. These procedures are unique in that they require the integration of technical, radiologic, and clinical skills.

Career Outlook

Cardiovascular interventional technologists use imaging technology to help physicians diagnose cardiac (heart) and peripheral vascular (blood vessel) ailments in patients. They also help physicians treat problems with cardiac and vascular systems, such as blood clots. As imaging technology evolves, medical facilities will use it to replace more invasive, costly procedures.

According to the U.S. Department of Labor, Bureau of Labor Statistics, employment is expected to grow by 24 percent from 2014 to 2024, much faster than average for all occupations. While salaries vary depending upon shift differential, on-call pay, and years of experience, the US Department of Labor estimated the median salary in 2016 to be $64,280 per year.

Curriculum

Curriculum

First Year

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<tr>
<th>Fall</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>MITS 457R or MITS 657R</td>
<td>CARDIOVASCULAR INTERVENTIONAL TECHNOLOGY I or CARDIOVASCULAR INTERVENTIONAL TECHNOLOGY I</td>
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<tr>
<td>MITS 473R or MITS 673R</td>
<td>CVIT CLINICAL EDUCATION I or CVIT CLINICAL EDUCATION I</td>
</tr>
<tr>
<td>MITS 410R or MITS 610R</td>
<td>SECTIONAL ANATOMY &amp; PATHOLOGY I or SECTIONAL ANATOMY &amp; PATHOLOGY I</td>
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| Credit Hours | 13 |

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<th>Spring</th>
<th>Credit Hours</th>
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<tbody>
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<td>MITS 411R or MITS 611R</td>
<td>SECTIONAL ANATOMY &amp; PATHOLOGY II or SECTIONAL ANATOMY &amp; PATHOLOGY II</td>
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<td>MITS 458R or MITS 658R</td>
<td>CARDIOVASCULAR INTERVENTIONAL TECHNOLOGY II or CARDIOVASCULAR INTERVENTIONAL TECHNOLOGY II</td>
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<td>MITS 468R or MITS 668R</td>
<td>SPECIAL PROJECTS II or SPECIAL PROJECTS II</td>
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<td>MITS 474R or MITS 674R</td>
<td>CVIT CLINICAL EDUCATION II or CVIT CLINICAL EDUCATION II</td>
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| Credit Hours | 14 |

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<th>Summer</th>
<th>Credit Hours</th>
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<tr>
<td>MITS 475R or MITS 675R</td>
<td>CVIT CLINICAL EDUCATION III or CVIT CLINICAL EDUCATION III</td>
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| Credit Hours | 7 |

| Total Credit Hours | 34 |