

The following are lower division department requirements for the Medical Imaging programs. These programs include: **Echocardiography, Radiologic Science, Nuclear Medicine Technology, Diagnostic Medical Sonography, Vascular Technology**

Oregon Institute of Technology Courses	Quarter Credits	PCC Course Equivalents	Quarter Credits
BIO 231, 232, & 233 Anatomy & Physiology	12	*BI 231, 232, & 233 Anatomy & Physiology	12
CHE 101 & 104 Elementary Chemistry w/lab	4	*CH 100 Fundamentals of Chemistry	4
MATH 111 College Algebra	4	MTH 111B or C College Algebra	5
MATH 112 Trigonometry	4	*MTH 112 Elementary Functions	5
WR 121 & 122 English Composition	6	WR 121 & 122 English Composition	8
MIT 103 Introduction to Medical Imaging	3	*Take at OIT (offered as web course)	-
BIO 200 Medical Terminology	2	*MP 111 Medical Terminology	4
SPE 111 Fundamentals of Speech	3	SP 111 Public Speaking	4
PSY 201, 202, or 203	3	PSY 201 (A) or 202 (A) Intro. to Psychology	4
Social Science	3	See General Education for list of courses	4
Humanities	3	See General Education for list of courses	3-4

\*A weighted GPA of 3.0 or above in these areas is strongly recommended. A 2.8 is the minimum.

**There is only 1 year of Pre-Medical Imaging Technology coursework. Students begin the Professional Coursework in their Sophomore year.**

**Additional Required Sophomore and Junior coursework:**

WR 227 Technical Writing, SP 215 Small Group Communication, 1 Communication Elective (see general education sheet), 2 Humanities Electives (see general education sheet), 2 Social Science Electives (see general education sheet), BUS 316 & 317- Take at OIT (offered as a web course).

**Application Information:** All applicants will be required to attend the Selection Activity Day to be considered for an MIT program. The activities will take approximately 3-4 hours. You must fill out the RSVP form located on the OIT webpage and submit no later than the application due date.

**Application to OIT:** Students must be admitted to OIT prior to applying to the MIT program.

**Application to the MIT program:** Applications are available through the MIT 103 course. If you have misplaced the MIT Program Application or need an updated version, please contact Debbie Caldwell at 541-885-1992 or e-mail at [debbie.caldwell@oit.edu](mailto:debbie.caldwell@oit.edu). Applications are due in April, please check the website for official deadline date.

**Background checks:** Students are required to complete a background check and attach the printed version to your application. Complete instructions are located in the Background Checks link of our MIT webpage.

**Official transcripts:** These are transcripts your local college will send to our OIT Admissions office. Transcripts MUST be received by the time you apply to the MIT Program. You will also need to send your updated official spring transcripts to our Admission's office, please check the website for deadlines.

**Unofficial transcripts:** These are your unofficial grades that you can print off the web. These need to be attached to your application. You will also need to send your updated unofficial spring grades to the Selection Committee as soon as possible (check the website for deadline information). These can be sent via fax, mail or e-mail.

o Fax number: 541-885-1320

o E-mail: [tammy.clark@oit.edu](mailto:tammy.clark@oit.edu)

o Mail: OIT

Attn: MIT Selection Committee, DOW Hall

3201 Campus Drive

Klamath Falls, OR 97601

## Medical Imaging Technology

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(541) 885-1000

<http://www.oit.edu/programs/mit>

**Echocardiography:** Echocardiography is a safe method of obtaining ultrasound images for diagnosis of cardiac pathology in adult and pediatric patient populations. Echocardiographers conduct patient interviews, compile health histories and determine risk assessments pertaining to cardiovascular disease. The Echocardiographer reports pertinent findings to the physician as part of the diagnostic process.

### **Radiologic Science:**

Radiologic science is a branch of medicine that deals with the creation of detailed images of the internal structures of the human body for the purpose of diagnosing disease, and to a lesser extent, administering therapeutic treatments. Before 1972, what was commonly called radiology was generally limited to examinations of the skeletal system, the digestive tract and the vessels of the circulatory system. The organs of the digestive tract and blood vessels could only be seen under x-ray examination with the aid of a substance introduced into them. For the digestive tract, the element barium, mixed with water, is used. For blood vessels, an iodine preparation is injected directly into an artery or vein.

*Upon completion of the program, students are eligible to take the radiography examination, administered by the American Registry of Radiologic Technologists (ARRT).*

### **Nuclear Medicine Technology:**

Nuclear medicine is the medical specialty concerned with the use of small amounts of radioactive materials for diagnostic, therapeutic and research purposes. Nuclear medicine procedures use radioactive materials to perform body function studies and organ imaging; analyze biologic specimens; and treat disease. Organ imaging requires an intravenous injection, oral administration, or inhalation of radioactive materials (called radiopharmaceuticals), which localize and concentrate in a specific organ or organ system of the body. Instruments called scanners or scintillation cameras detect the radiation emitted by the radiopharmaceutical to produce an image, and measure the function of the organ.

*The NMT option at OIT is the only nuclear medicine program in Oregon, and one of only thirty bachelor of science in nuclear medicine programs in the country.*

### **Diagnostic Medical Sonography:** Kent Blevins, Assistant Professor 541-885-1368 **E-mail:** kent.blevins@oit.edu

As an imaging professional, you will be an integral part of this process. The oldest medical imaging modality is radiography -- the use of x-rays to image the body. Radiographers were recruited by radiologists to sonographically examine the abdomen, small parts (breast, thyroid, testicle, etc.), pelvis, fetus, neonatal brain, heart and vessels.

Exams performed at our sites:

The entire pelvic and abdominal cavities, interoperative brain (adult), neonatal brain (newborn), carotid Doppler, adult echo, fetal echo, aorta, inferior vena cava, chest cavity for effusions, lower extremity Doppler, upper extremity Doppler, fetal, and glandular sonography. We like to call this "whole-body" sonography.

### **Vascular Technology:**

Vascular technologists use banks of computers and probes that work like video cameras. Color or black-and-white live pictures of the insides of blood vessels are shown on video screens. This information is then used to detect abnormalities within the vascular system, assisting a physician's diagnosis of patient conditions.

In 1992, Oregon Tech introduced the nation's first bachelor's degree program in vascular technology. The curriculum provides students with both didactic and clinical training in all areas of vascular technology. *Upon graduation, a student may take the national Vascular Technology registry through the ARDMS.*

*PCC endeavors to create accurate transfer guides for students; however, requirements may change without notice. Students are responsible for working with PCC advisors and their transfer institution to ensure that their academic plan will meet requirements and timelines.*