Cleveland Clinic

School of Diagnostic Imaging
Information Session

Gloria Albrecht, MS, RT(R)

Program Director

216-618-5250

galbrech@ccf.org

Website:

https://portals.clevelandclinic.org/sdi

Program Shadowing/Observation

- We encourage all prospective students to participate in a clinical observation at the Cleveland Clinic

- This ensures that students have a full understanding of the career they are seeking

- You can schedule an observation by contacting Jennifer Rennick at 216-445-9972 or rennicj@ccf.org

ASRT
"BE SEEN" VIDEO
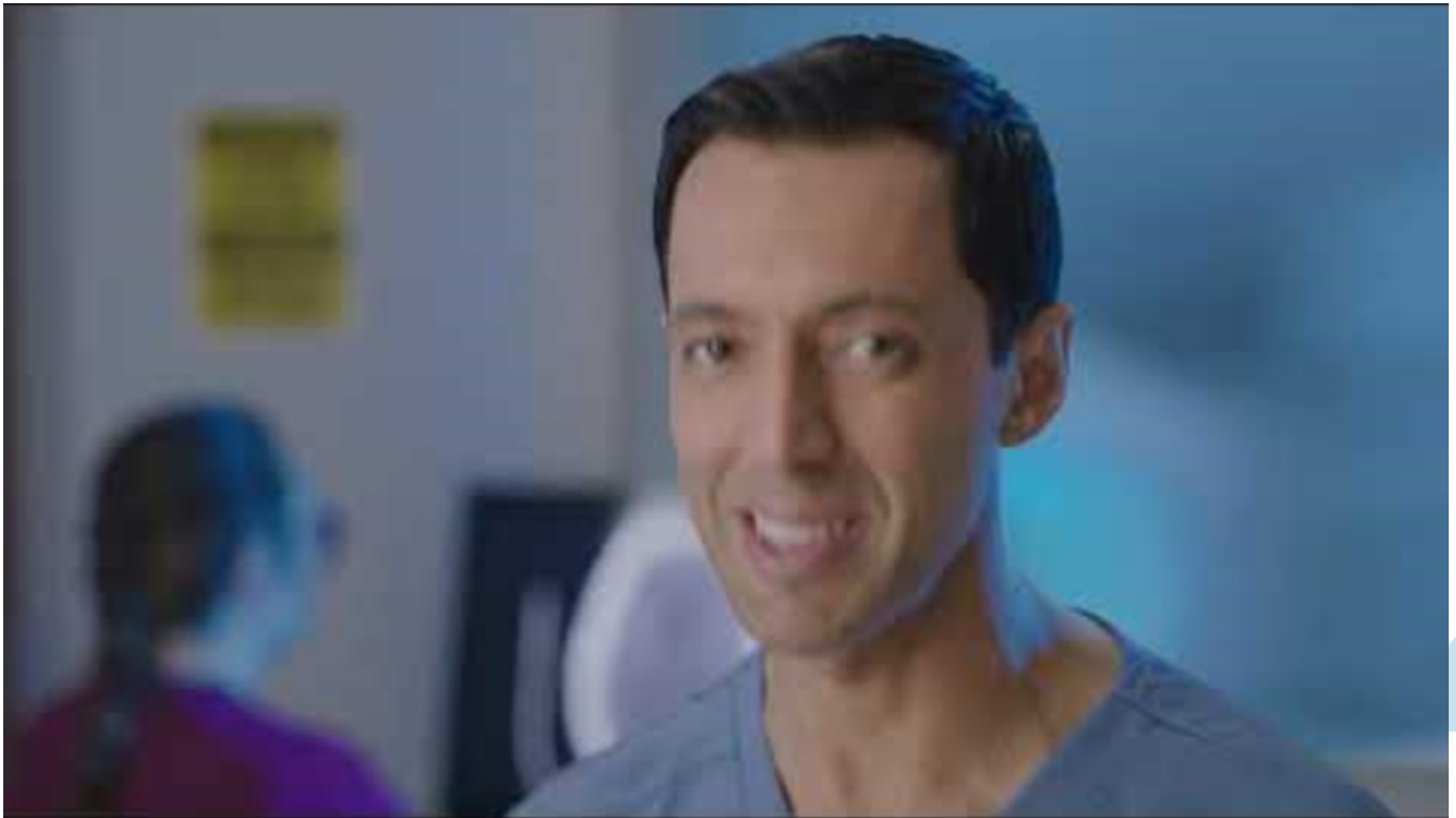
Radiologic Technology Program

Radiologic Technology Certificate & Degree Program

- Graduate with a Certificate in Radiologic Technology
- Eligible to take the ARRT National Registry Exam
- Degree completion programs:

  - Cuyahoga Community College
    - Associate of Applied Science in Radiologic Technology
  - Kent State University - Ashtabula Campus
    - Associate of Applied Science in Radiologic Technology
  - Lorain County Community College
    - Associate of Applied Science in Radiologic Technology
  - Lakeland Community College
    - Associate of Applied Technical Studies - Radiography

Radiologic Technology Certificate & Degree Program

- For ARRT certification in Radiography
  - Associate degree or higher college degree required
  - Does <u>not</u> need to be in the radiologic sciences
  - Can be earned before starting the program or during the program, before graduation
- College prerequisites for applicants:
  - Anatomy & Physiology I & II (within 10 years)
  - Medical Terminology

RT Associate Degree Completion

- Cleveland Clinic Program courses will transfer as college credit and apply toward the degree.

- Students will develop a plan to complete the general education requirements and any other degree requirements from the college.

- Cleveland Clinic Radiology Program courses transfer as a block credit toward the degree, not as individual classes/credit.

- Upon completion of both the CC radiography program courses and the college degree requirement courses, the graduate will earn both a:
  - Certificate in Radiology Technology from the Cleveland Clinic
  - Associate of Applied Science Degree or Associate of Technical Studies Degree.

- This will permit the graduate to take the ARRT Registry Examination.

RT Admission Requirements

- All pre-requisites must have a grade of "C" or better

- All must be college credit courses

Anatomy & Physiology I & II

- - If you have completed A & P I and are registered for A & P II for the Spring Semester, you may still apply to the program and be interviewed

- - <u>Must</u> pass the Anatomy & Physiology II in the Spring Semester to be eligible for acceptance

- <u>OR</u> A & P for Diagnostic Medical Imaging - BIO 1221 from CCC – applicable <u>only</u> for Tri-C degree completion

- Medical Terminology

RT Admission Requirements

- Radiography Program Application Form
  - $20 non-refundable fee
- Official high school and college transcripts
- Behavior based interview
  - Assess communication and critical thinking skills
- Deadline for pre-requisite completion & application submission
  - February 1st
  - Or until the program is full
- Career Information - www.asrt.org
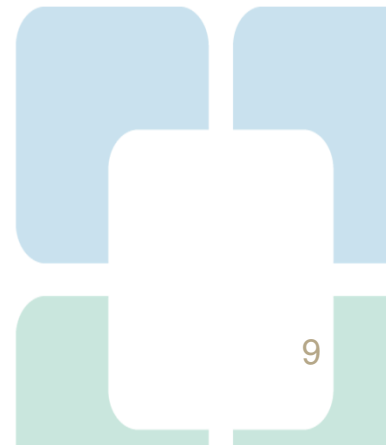
RT Competitive/Selective Acceptance

- Acceptance is a point system based on:
  - Average score on the behavior-based interview
  - High school and college GPA
  - Prerequisite course GPA
  - Number of science and math classes with a grade of "C" or better
    - The higher the grade, the more points awarded
- 18 to 21 students accepted each year
- Radiography program starts each year in August

RT Cuyahoga Community College Degree Completion Courses

- BIO 1221 Anatomy and Physiology for Medical Imaging
  - or BIO 2331 and 2341 Anatomy and Physiology I and II

- MA 1020 Medical Terminology I

- MATH 1410 Elementary Probability and Statistics I (or higher approved)
  - MATH 1240 Contemporary Math taken prior to Fall 2024 will be accepted

- PSY 1010 General Psychology
  - or PSY 101H Honors Psychology

- ENG 1010 College Composition I
  - or ENG 101H Honors English

- ENG 1020 College Composition II
  - Green = program prerequisites
  - Black = degree completion courses
 - 20 credit hours – residency requirement
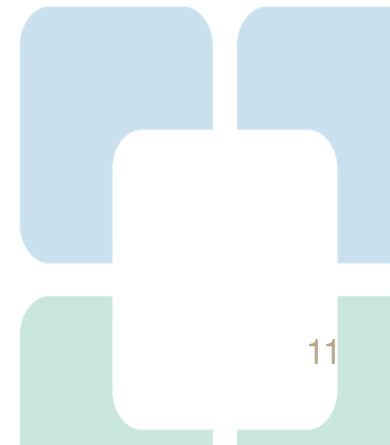
RT Lorain County Community College Degree Completion Courses

- BIOG 121 Anatomy and Physiology I
- BIOG 122 Anatomy and Physiology II
- AHLN 110 Medical Terminology
- MTHM 158 Quantitative Reasoning or,
- MTHM 168 Statistics
- ENGL 161 College Composition I
- ENGL 162 College Composition II
- BIOG 123 Cross-Sectional Anatomy
- SOCY 151 Introduction to Sociology
  - Green = program prerequisites
  - Black = degree completion courses
  - 20 credit hours – residency requirement
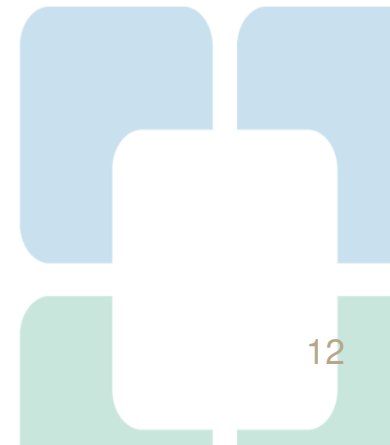
RT Kent State University – Ashtabula Campus Degree Completion Courses

- BSCI 11010 - Anatomy & Physiology for Allied Health I
- BSCI 11020 - Anatomy & Physiology for Allied Health II
- HED 14020 – Medical Terminology
- MATH 11009 – Modeling Algebra
  - or MATH 11010 – Algebra for Calculus
- ENG 11011 - College Writing I
- PSYC 11762 – General Psychology
- CHEM 10050 – Fundamentals of Chemistry
  - or CHEM 10055 - Molecules of Life
  - Green = program prerequisites
  - Black = degree completion courses
  - 15 credit hours – residency requirement
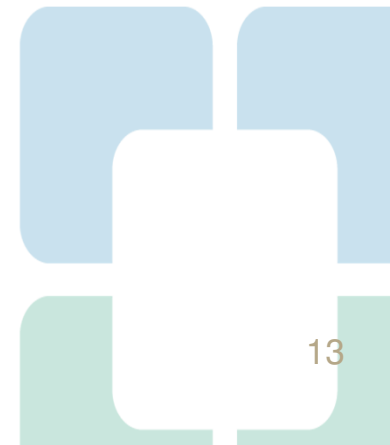
RT Lakeland Community College Degree Completion Courses

- BIOL   2210 Anatomy and Physiology I
- BIOL   2220 Anatomy and Physiology II
- HLTH   1215 Medical Terminology
- MATH   1330 Statistics for Health Sciences Mathematics
  <u>or</u> 3 credit hour college level mathematics
- ENGL   1110 English Composition I(A) <u>or</u>,
- ENGL   1111 English Composition I(B)
- 3 credits each from two of the following categories:
  - Arts & Humanities; Social & Behavioral Sciences; Natural Sciences
- Additional 3 credits math <u>or</u> one of the categories above <u>or</u> English 1120 or Effective Interpersonal Communication1100
- Additional 14 credits from categories above and/or other general studies courses and/or basic/related/foundational courses

**Students must meet with a counselor to confirm degree requirements**

- Green = program prerequisites
- Black = degree completion courses
- 20 credit hours – residency requirement

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Cleveland Clinic Technical Skill Requirements

- High school diploma or GED
- Computer skills
- Good eyesight either naturally or through correction
- Ability to hear instructions and respond to verbal requests
- Lift a minimum of 30 pounds, support up to 175 pounds
- Be able to move around and stand for long periods of time
- Good verbal and nonverbal communication skills
- Good communication and critical thinking skills
- Ability to see printed words in a textbook
- Ability to read and accurately interpret numbers on a chart

Radiography Tuition & Fees

- Program Tuition & Fees $16,080
- Nonrefundable Application Fee $20
- Acceptance fee/tuition deposit $300
  - Non-refundable
  - Applicable toward first semester tuition
- Textbooks approximately $1,000
- Registry Review fee $140
- Tuition and fees are subject to change
- 5 semester payments
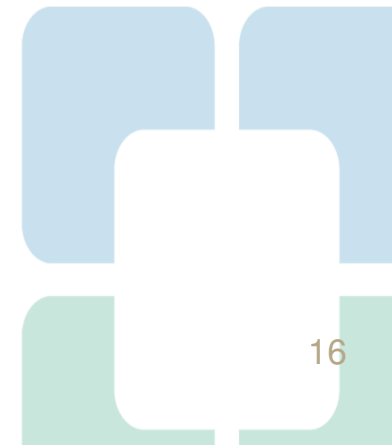
Radiography Financial Aid

- Federal financial aid available
- Complete a Free Application for Federal Student Aid, (FAFSA) online at www.fafsa.gov
- The FAFSA school code is 015252
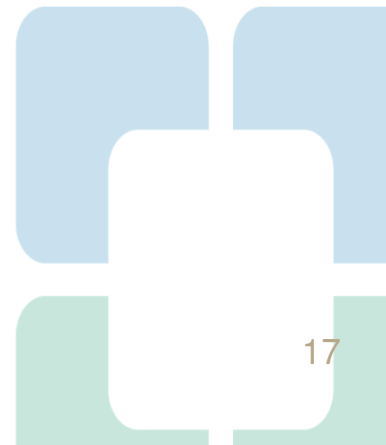
Radiography Financial Aid

- The School of Diagnostic Imaging also participates in the Post 911 GI Bill®. Please contact the United States Department of Veteran Affairs for current information.
  - Information can also be found online at www.us-gibillschools.com

- We also participate in the Workforce Institute, a county approved Local Training Provider.

Radiography Curriculum

- Radiographic Positioning & Procedures I & II
- Advanced Radiographic Procedures
- Radiographic Positioning Lab I & II*
- Radiographic Technique I & II
- Principles of Radiation Physics
- Patient Care in Radiography
- Radiographic Pathology

- Healthcare Ethics & Law
- Special Procedures
- Radiation Biology & Protection
- Radiographic Analysis
- Registry Review I & II
- Clinical Experience

*Labs are held at Euclid Hospital and Lutheran Hospital

Radiography Clinical Experience

- Competency based clinical education
- Rotate to two hospitals and at least one outpatient center
- Hospitals
  - Akron General Hospital
  - Cleveland Clinic Foundation/Main Campus
  - Euclid Hospital
  - Fairview Hospital
  - Hillcrest Hospital
  - Lutheran Hospital
  - Medina Hospital
  - Mentor Hospital
  - South Pointe Hospital
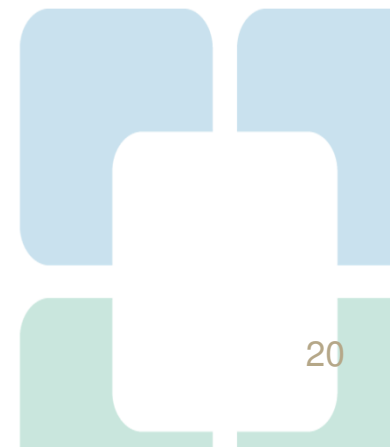
Radiography Clinical Experience

- Family Health Centers
  - Beachwood
  - Brunswick
  - Lakewood
  - Middleburg
  - Strongsville
  - Twinsburg
  - Willoughby Hills

  } 2-week rotation

- Akron Health & Wellness Centers
  - Bath
  - Green
  - Stow

  } 2-week rotation

Radiography Clinical Experience

- Clinical assignments chosen by lottery
- Monday through Friday
  - 8:00 AM – 3:30 PM
- Except for a 2-week evening rotation
  - 3:30 PM – 11:00 PM
- Academic classes weekdays
  - 8:00 AM – 3:30 PM
- Basic Life Support (CPR) for Healthcare Providers by the American Heart Association required

Radiography Program Calendar

- 5 semesters – 21 months
- Start in late August each year
- Fall & Spring – 16 weeks
  - Mid-semester break week (1)
- Summer – 12 weeks (no mid-semester break)
- Between each semester – 2 break weeks
- Time off each semester – 3 days
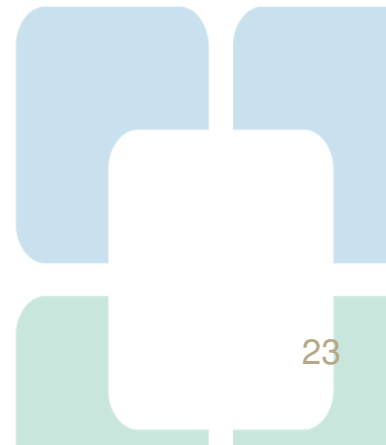
RT Registry Exam Pass Rate Program Effectiveness Data

- Graduates are eligible to take the national registry exam by the American Registry of Radiologic Technologists (ARRT)

- 83.3% average first time pass rate for the past five (5) years by the ARRT
  - Benchmark 75%

- Most pass the registry exam on the first attempt

- 5-year average job placement within 12 months of graduation is 100%

- 2023 Program Completion Rate - 100%

- 18 of 18 graduates

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RT Program Accreditation

- Accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT)

- Maximum accreditation

  - 8 years

- JRCERT can be contacted at:

  - 20 N. Wacker Drive
    Suite 2850
    Chicago, IL 60606-3182
    Phone: (312) 704-5300
    E-mail: mail@jrcert.org
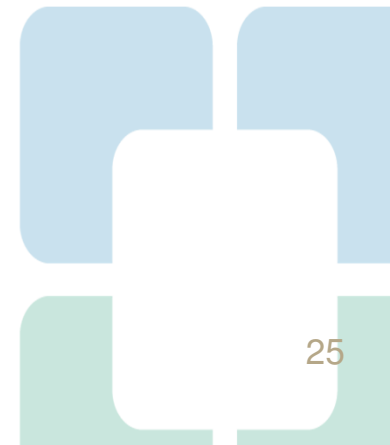
Ohio State Board of Career Colleges and Schools

- Monitors and regulates Ohio's private post-secondary career colleges and schools to ensure compliance with minimum standards set by Ohio Revised Code Chapter 3332.
- Center for Health Sciences Education (Cleveland)
- School Registration # 2165
  - Diagnostic Medical Sonography (DMS)
  - Post Primary Computed Tomography (CT)
  - Post Primary Magnetic Resonance Imaging (MRI)
  - Primary Magnetic Resonance Imaging (MRI)
  - Radiologic Technology (RT)

Ohio Department of Health Radiologic Licensure

- The Radiologic Licensure program ensures standards of knowledge and skill for operators who apply radiation to humans for diagnostic or therapeutic purposes.

- The program has licensed more than 17,000 operators, 110 educational facilities, and 180 continuing educational courses.

  - Mailing Address:
    Ohio Department of Health
    Radiologic Licensure
    246 North High Street
    Columbus, OH 43215

  - Telephone: (614) 752-2370
    Fax: (614) 564-2460
    E-mail: Xray.Licensure@odh.ohio.gov

Post Primary CT/MRI Programs

Post Primary CT/MRI Programs

- Computed Tomography Program

- Magnetic Resonance Imaging Program

- Start in August each year

- Day and evening courses available (fall)

- Curriculum
  - Introduction to CT or MRI – online
  - Cross-Sectional Anatomy & Pathology
  - CT Physics – traditional classroom or online
  - MRI Physics – traditional classroom or online
  - Clinical Experience
    - Competency based – minimum 300 hours
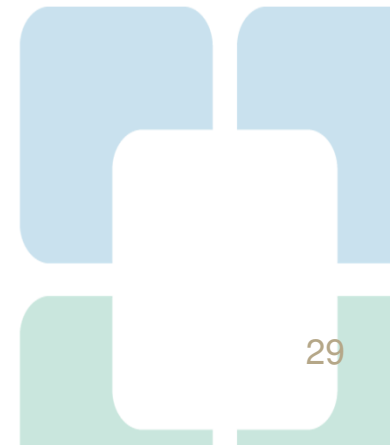
Post Primary Admission Requirements

- Must be a registered technologist in radiography, nuclear medicine, radiation therapy, or ultrasound

- Or a student in the final year of one of the aforementioned programs

- Technologists required to provide a copy of ARRT or equivalent license

- Students without ARRT or equivalent registration must provide school transcripts and receive approval from CT/MRI program coordinator

Post Primary CT/MRI Programs

- Fall Semester
  - Introduction to CT or MRI
  - Cross-Sectional Anatomy & Pathology
- Spring Semester
  - CT or MRI Clinical
  - CT or MRI Physics

Post Primary CT/MRI Programs Tuition

- Application Fee (non-refundable) $20
- Onboarding Fee: $30

- Acceptance fee/tuition deposit (non-refundable)
  - Applicable toward first semester tuition $100

- Individual Courses
  - Introduction to CT or MRI Online $480
  - Cross Sectional Anatomy and Pathology $710
  - CT or MRI Physics $710
  - CT or MRI Physics Online $760

- Clinical
  - CT Clinical Course: $1,430
  - MRI Clinical Course: $1,430

- Total Program Cost - Tuition & Fees:
  - Traditional classroom courses $3,360
  - Online courses $3,410

- CT or MRI Program textbook estimated cost $300

Post Primary CT/MRI Clinical Sites

- Cleveland Clinic Main Campus, Cleveland
- Cleveland Clinic Imaging Center, Wooster
- Cleveland Clinic Family Health Center, Beachwood
- Cleveland Clinic Family Health Center, Brunswick
- Cleveland Clinic Family Health Center, Lorain
- Cleveland Clinic Family Health Center, Strongsville
- Cleveland Clinic Family Health Center, Twinsburg
- Cleveland Clinic Family Health Center, Avon
- Akron General Medical Center, Akron

- Cleveland Clinic Family Health Center Willoughby
- Hillcrest Hospital, Mayfield Heights
- Euclid Hospital, Euclid
- South Pointe Hospital, Warrensville Heights
- Lutheran Hospital, Cleveland
- Marymount Hospital, Garfield Heights
- Fairview Hospital, Cleveland
- Ashtabula County Medical Center, Ashtabula
- Medina Hospital, Cleveland Clinic
- Cleveland Clinic Star Imaging, Boardman, Dayton, Niles, Columbus
- Union Hospital, Cleveland Clinic
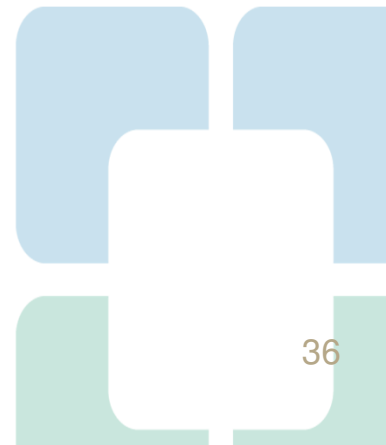
Primary MRI Program

Primary MRI Admission Requirements

- Minimum of associate degree
  - Does not need to be in radiologic sciences

- Pre-requisite courses
  - Medical Terminology
  - Anatomy & Physiology I & II <u>or</u> Anatomy & Physiology for Medical Imaging - BIO 1221 (only at Tri-C)
    - Must have a grade of "C" or better
    - Must be college credit courses
    - A&P I & II within last 10 years
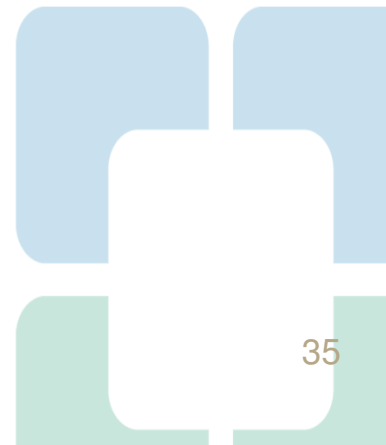
Primary MRI Admission Requirements

- Primary MRI Program Application Form
  - $20 fee (non-refundable)
- Official high school and college transcripts
- Behavior based interview
  - Assess communication and critical thinking skills
- Deadline to submit requirements
  - February 1st
  - Or until the program is full
- Career Information - www.asrt.org

Primary MRI Program

- Selective process to determine acceptance
  - Point system which includes:
    - Behavior based interview
    - High school and college GPA
    - Number of additional science and math classes with a grade of "C" or better
      - The higher the grade on the science and math courses, the more points awarded

Primary MRI Duration and Tuition

- Program duration
  - 16 months / 4 semesters
- Cost of tuition
  - $14,070 / program
  - Can be paid per semester ($3,400/semester)
- Additional expenses
  - Registry review ($450, spring semester)
  - Textbooks
  - Uniforms
- Accreditation in progress with first cohort

Primary MRI Course Schedule

- Full-time didactic and clinical program
  - Monday through Friday
  - 8 am – 3:30 pm
  - Days off each semester - 3
- First fall semester
  - Class three then two days per week
  - Clinicals three days per week (starts week 9)
- Spring, summer, second fall semester
  - Class one day each week
  - Clinicals four days per week

Primary MRI Course Schedule

- Fall semester
  - Cross Sectional Anatomy
  - Procedures I
  - Patient Care
  - Scanning lab & clinicals

- Spring semester
  - Procedures II
  - Physics I
  - MRI Pathology
  - Clinicals

- Summer semester
  - Ethics
  - Physics II
  - Clinicals

- Fall semester
  - Advanced Imaging
  - Registry Review
  - Clinicals
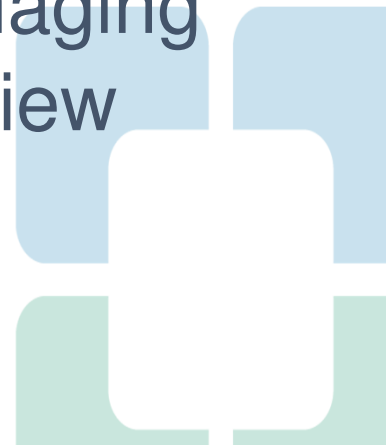
Primary MRI Clinical Sites - Hospitals

- Akron General Hospital
- Avon Hospital
- Cleveland Clinic Main Campus
- Fairview Hospital
- Hillcrest Hospital
- Lutheran Hospital
- Medina Hospital
- Mercy Hospital
- South Pointe Hospital

Primary MRI Clinical Sites – Outpatient Centers

- Akron General Health and Wellness Center
  - Bath
  - Green

- Cleveland Clinic Family Health Centers
  - Beachwood
  - Brunswick
  - Strongsville
  - Twinsburg

Clinical Assignments

- Chosen by lottery
- Monday through Friday during the day
    8:00 AM – 3:30 PM
- Academic classes during the day
    8:00 AM – 3:30 PM
- Holidays
    - New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving (including day after), and Christmas Day
- Basic Life Support (CPR) for Healthcare Providers by the American Heart Association required

Diagnostic Medical Sonography Program

DMS Program

- Began Fall of 2022
  - Accreditation in process
- Students will graduate with a diploma in Diagnostic Medical Sonography
- Application requirements:
  - High school diploma or have earned a certificate of equivalent education recognized by the U.S. Department of Education

DMS Program

- Applicants must have completed the following *college credit* pre-requisites with a grade of "C" or better:
    - Medical Terminology
    - Anatomy & Physiology I & II
        - Completed within the last ten (10) years
    - Please note: If you have completed Anatomy & Physiology I and are registered for Anatomy & Physiology II for the current semester for which you are applying, you may still apply to the program to be interviewed, but you must then complete the Anatomy & Physiology II successfully with a grade of "C" or better in that semester to be eligible for acceptance into the program.
    - Statistics or College Level Math (1400 or greater)
    - Physics for Allied Health or General Physics
    - Interpersonal Communications

DMS Program Prerequisites

Cuyahoga Community College

BIO-2331   Anatomy & Physiology I

BIO-2341   Anatomy & Physiology II

DMS- 1071   Concepts of Physics in
            Diagnostic Sonography

MATH-1410   Elementary Probability &
            Statistics

COMM-1000   Fundamentals of Interpersonal

            Communications *(or English
            equivalent)*

MA-1010   Introduction to Medical Terminology

Lorain County Community College

BIOG-121 Anatomy & Physiology I

BIOG-122 Anatomy & Physiology II

PHYC-115 Physics for Allied Health Sciences

MTHM-168 Statistics

CMMC-165 Interpersonal Communications

(or English equivalent)

ALHN-112 Introduction to Medical Terminology

DMS Program Prerequisites

Lakeland Community College

BIOL-2210   Anatomy & Physiology I

BIOL-2220   Anatomy & Physiology II

PHYS-1440   Physics for Allied Health

MATH-1330   Statistics for Health Sciences

COMM-1100   Effective Interpersonal
   Communications *(or English
   equivalent)*

HLTH-1215   Medical Terminology for Health
   Professionals

Kent State University

BSCI-21010   Anatomy & Physiology I

BSCI-21020   Anatomy & Physiology II

PHY-12111   Physics for Health
Technologies

MATH-11009   Modeling Algebra

COMM-20001   Interpersonal
Communications
         (or English equivalent)

HED-14020   Medical Terminology

DMS Application Process

- Program Application Form
  - $20 non-refundable fee
    - Check only, no money order
    - To pay with a credit card, call 216-618-5250
  - Official high school and college transcripts

- Please visit the following professional organization websites for detailed information, videos, and resources regarding the profession of sonography
  - www.ardms.org
  - www.sdms.org

DMS Program

- Selective process to determine which students will be accepted into the program
  - Point system which includes scores from:
    - Behavior based interview
    - High school and college GPA
    - Number of additional science and math classes with a grade of "C" or better
      - The higher the grade on the science and math courses, the more points awarded
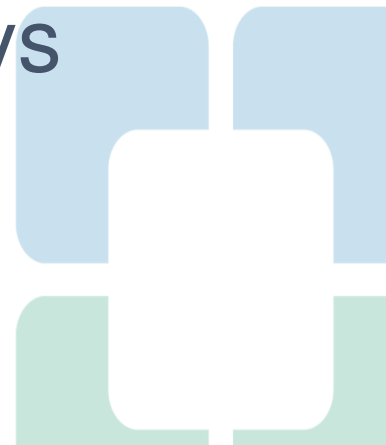
DMS Program

- Program duration
  - 21 months / 5 semesters
- Cost of tuition
  - $15,750 / program
  - Can be paid per semester ($3,150/semester)

DMS Program

- 5 semesters – 21 months
- Start in late August each year
- Fall & Spring – 16 weeks
  - Mid-semester break week (1)
- Summer – 12 weeks
- Between each 16 week semester – 2 break weeks
- Personal time off each semester – 3 days

DMS Program: Course Schedule

- Fall Semester (1st year)
  - Introduction to Sonography & Patient Care, Abdomen I, Introduction to Scanning lab, Ultrasound Physics & Instrumentation, Introduction to Clinical Experience

- Spring Semester (1st year)
  - Abdomen II, Gynecology & 1st Trimester, 2 Scan Labs, Clinicals 3 days/week

- Summer Semester (1st year)
  - 2nd & 3rd Trimester Obstetrics, Scan Lab, Ethics & Law for Health Care, SPI Review, Clinicals 3 days/week

DMS Program: Course Schedule

- Fall Semester (2nd year)
  - Introduction to Vascular, Scan Lab, Abdomen Registry Review, Clinicals 4 days/week

- Spring Semester (2nd year)
  - OB/Gyn Registry Review, Capstone, Clinicals 4 days/week

DMS Program ARDMS Exams

- American Registry for Diagnostic Medical Sonography
  - SPI
    - Sonographic Physics & Instrumentation
  - RDMS (AB)
    - Registered Diagnostic Medical Sonographer Abdominal
  - RDMS (OB/GYN)
    - Registered Diagnostic Medical Sonographer Obstetrics/Gynecology
  - RVT
    - Registered Vascular Technologist

Diagnostic Medical Sonography Clinical Sites

Akron General Health & Wellness (Bath, Green, Stow)

Akron General Hospital

Avon Hospital

Beachwood Family Health Center

Fairview Hospital

Hillcrest Hospital

Independence Family Health Center

Lutheran Hospital

Cleveland Clinic Main Campus

Marymount Hospital

Medina Hospital

Middleburg Heights Family Health Center

Southpointe Hospital

Willoughby Hills Family Health Center

Information for
All Programs

- All programs start in late August each year
- Fall & Spring – 16 weeks
  - Mid-semester break week (1)
- Summer – 12 weeks (no mid-semester break)
- Between each semester – 2 break weeks
- All RT, DMS and primary MRI students receive 21 hours of requested time off each semester.
- No classes and clinical for all Cleveland Clinic recognized holidays including:
  - New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving (includes day after), and Christmas Day
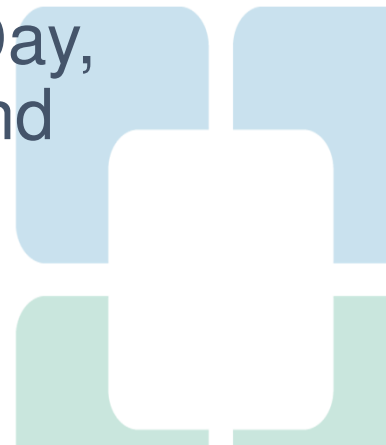
School of Diagnostic Imaging Contact Information

Program Director
Gloria Albrecht MS, RT(R)
216-618-5250
galbrech@ccf.org

Radiography Program Faculty

- Coordinator
  - Kevin McDermott Med, RT(R)
    - 216-678-1753
    - mcdermk@ccf.org
- Instructor
  - Jennifer Bridge BRS, RT(R)(CT)

CT/MRI Program Faculty

- Coordinator
  - Halley Majersky MEd, RT(R)(M)(CT)(MR)
    - 216-212-0484
    - majersh@ccf.org
- Instructor
  - Kimberly Saghy BS, RT(R)(CT)(MR)(MRSO)
    - 216-554-3375
    - saghyk@ccf.org
- Instructor
  - Gabe Kroupa MPH, (NM)(MR)(MRSO)
    - kroupag@ccf.org

Diagnostic Medical Sonography Program Faculty

- Manager
  - Angela Perry BSAS, RDMS(AB)(OB)(PS), RVT, RMSKs
    - 216-769-2452
    - perrya@ccf.org
- Coordinator
  - Amy Varcelli BSAS, RDMS(AB)(OB), RVT, RMSKs
    - 216-769-2481
    - varcela@ccf.org
- Instructor
  - Wendy Slaughter BS, RDMS(AB)(OB), RVT
    - 216-769-2482
    - slaughw@ccf.org

Cleveland Clinic is committed to providing a working and learning environment in which all individuals are treated with respect and dignity. It is the policy of Cleveland Clinic to ensure that the working and learning environment is free from discrimination or harassment on the basis of race, color, religion, gender, sexual orientation, gender identity, pregnancy, marital status, age, national origin, disability, military status, citizenship, genetic information, or any other characteristic protected by federal, state, or local law. Cleveland Clinic prohibits any such discrimination, harassment, and/or retaliation.