



MIDWESTERN
CAREER COLLEGE



Academic Catalog

MCC-Ohio Supplement

Published October 8, 2025



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STATE APPROVAL

Midwestern Career College - Cleveland is licensed and registered with the State of Ohio Board of Career Colleges and Schools, **School Registration NO. 2283.**

Midwestern Career College - Columbus is licensed and registered with the State of Ohio Board of Career Colleges and Schools, **School Registration NO. 2282.**

ACCREDITATION

Midwestern Career College is accredited by the Commission of the Council on Occupational Education. For more information about the College's accreditation, you may contact Council on Occupational Education, 7840 Roswell Road, Building 300, Suite 325, Atlanta, GA 30350, Telephone: 770-396-3898, Fax: 770-396-3790, www.council.org

PROGRAMMATIC RECOGNITION

The Associate of Applied Science in Magnetic Resonance Imaging (MRI) Technology and Applied Science in Diagnostic Medical Imaging Radiography programs are programmatically recognized by the American Registry of Radiologic Technologists (ARRT): <https://www.arrt.org/about-the-profession/learn-about-the-profession/recognized-educational-programs>.

CAMPUS LOCATIONS AND DESCRIPTIONS

MCC-CLEVELAND AFFILIATE CAMPUS

7261 Engle Rd.,
Middleburg Heights, OH 44130
Tel: (216) 270-5080
Email: info@mcccollege.edu

Office Hours

Monday through Thursday	9am to 6pm
Friday	9 am to 4pm

Programs Offered

Associate degrees:

- Associate of Applied Science in Magnetic Resonance Imaging (MRI) Technology
- Associate of Applied Science in Diagnostic Medical Imaging Radiography

Diploma Programs:

- Clinical Medical Assisting
- Sterile Processing
- Cybersecurity
- Data Science

MCC-COLUMBUS AFFILIATE CAMPUS

2780 Airport Dr, Suite 120
Columbus, OH 43219
Tel: (614) 300-5710
Email: info@mcccollege.edu

Office Hours

Monday through Thursday	9am to 6pm
Friday	9 am to 4pm

Programs Offered

Associate degrees:

- Associate of Applied Science in Magnetic Resonance Imaging (MRI) Technology

Diploma Programs:

- Clinical Medical Assisting

Administration

INSTITUTIONAL MANAGEMENT TEAM

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PROGRAM AND COURSE NAME ABBREVIATIONS

Program Name	Program Abbreviation
Associate of Applied Science in Magnetic Resonance Imaging (MRI)Technology	AAS MRI
Associate of Applied Science in Diagnostic Medical Imaging Radiography	AAS RAD
Clinical Medical Assisting	CMA
Cybersecurity	CYS
Data Science	DSC
Sterile Processing	STP

FACULTY

FULL TIME

Bland, Lavada Lead Instructor	STP	AAS in Healthcare Business and Administration - Devry University, Chicago, IL; Sterile Processing Central Sterile Processing Certification - Chicago, IL; Surgical Technology Banner Institute of Surgical Technology - Chicago, IL; Emergency Medical Technician Basic Christ Hospital EMT-B Program - Oaklawn, IL; Medical Assisting and Phlebotomy Illinois School of Health Careers - Chicago, IL
Burgess, Brittany Program Director	AAS ST, STP	Associate of Applied Science in Surgical Technology – Motte Technical College, Clarksville, TN; CST
Dertz, Danielle Program Director	AAS MRI	Bachelor Administration – Colombia University, AAS Magnetic Resonance Imaging Technology - Midwestern Career College; Certification: Registered Technologist Magnetic Resonance Imaging (RT MR) - The American Registry of Radiologic Technologists (ARRT), AAS Diagnostic Medical Imaging Radiography – Midwestern Career College
Greenfield, Balitha Associate Director	CMA	Bachelor of Science in Business Management – Everest University South Orlando, FL. Professional Diploma in Medical Assisting – Robert Morris University, Chicago, IL
Gruenewald, Gary Lead Instructor	AAS RAD	Masters in Health Services Administration – University of St. Francis Joliet, IL. Bachelors of Health Arts – College of St. Francis, Joliet, IL. Certificate Program – School of Radiologic Technology – Ravenswood Hospital, Chicago, IL. Certification: Radiography (R) - The American Registry of Radiologic Technologists (ARRT).
Mahmood, Hamza Lead Instructor	CYS DSC	Bachelor of Science Cyber Security and Network Administration – Green River; Associate of Applied Science Information Technology Systems and Security – Green River College; College Certificate Information Technology Fundamentals – Green River College.

PART TIME

Allen, Curis	STP	AAS – Cuyahoga Community College; Certificate in Healthcare Business Administration – Indiana Wesleyan University; CRSCT; CBSPD
Hayes, Jennifer	AAS RADA	Bachelor of Science – University of Saint Francis; Certificate of Radiologic Technology – Northwestern Memorial Academy; ARRT
Klima, Brian	CMA	Associate in Business and HR Management and Diploma in Medical Assisting– Ohio Business College, Sheffield Village, OH; Certified Medical Assistant (CMA) American Association of Medical Assistants (AAMA)
Litten, Susan	AAS MRI	Masters of Health Administration and Education, University of Phoenix, Phoenix, AZ; Bachelor of Science Major in Health Administration, University of Phoenix, Phoenix, AZ; Certification: (R) Radiography, (MR) Magnetic Resonance Imaging, (CT) Computed Tomography - The American Registry of Radiologic Technologists (ARRT)

STUDENT HOLIDAY CALENDAR

There are no classes scheduled on the following holidays:

- New Year's Day, January 1
- Birthday of Martin Luther King, Jr., the third Monday in January
- Memorial Day, the last Monday in May
- Juneteenth National Independence Day, June 19
- Independence Day, July 4
- Labor Day, the first Monday in September
- Thanksgiving Day, the fourth Thursday in November
- Day after Thanksgiving
- Christmas Eve, December 24
- Christmas Day, December 25

ACADEMIC CALENDAR

Future program and term start dates are subject to change.

DEGREE PROGRAMS

New student orientation usually takes place one or two weeks before the start of the term. College success course starts after orientation and ends the day before the term start date. New students should check with their admissions counselor for new student orientation and college success dates for their program.

2024-2026 CALENDAR FOR OHIO AFFILIATE CAMPUSES

- Associate of Applied Science in Magnetic Resonance Imaging (MRI) Technology
- Associate of Applied Science in Diagnostic Medical Imaging Radiography

Allied Health Degree Programs listed above are offered on an accelerated schedule with three 16-week terms per calendar year.

There is a one-week break between the Spring/Summer and Fall terms and a two to three-week break before the Winter term. There is no break in April for Spring Break, and there is no break between the Winter and Spring/Summer terms. Course schedules are released 30 days prior to the start of each term. Final grades are submitted within seven days after the term ends. Student enrollment status changes are processed within 14 days of the final grade posting date.

Fall 2024	
Term Start	August 26, 2024
Term End	December 15, 2024

Winter 2025	
Term Start	January 6, 2025
Term End	April 27, 2025
Spring/Summer 2025	
Term Start	April 28, 2025
Term End	August 17, 2025
Fall 2025	
Term Start	August 25, 2025
Term End	December 14, 2025

Winter 2026	
Term Start	January 5, 2026
Term End	April 26, 2026
Spring/Summer 2026	
Term Start	April 27, 2026
Term End	August 17, 2026
Fall 2026	
Term Start	August 31, 2026
Term End	December 20, 2026

DIPLOMA PROGRAMS

New student orientation usually takes place one or two weeks before the start of the term. College success course starts after orientation and ends the day before the term start date. New students should check with their admissions counselor for new student orientation and college success for their program.

CLINICAL MEDICAL ASSISTING FALL 2025 CLEVELAND & COLUMBUS AFFILIATE CAMPUSES

Term I	
Start Date	August 25, 2025
End Date	January 18, 2026
Term II	
Start Date	January 26, 2026
End Date	June 14, 2026
Term III	
Start Date	June 22, 2026
End Date	November 8, 2025

STERILE PROCESSING FALL 2025 CLEVELAND AFFILIATE CAMPUS

Term I	
Start Date	August 25, 2025
End Date	January 18, 2026
Term II	
Start Date	January 26, 2026
End Date	June 14, 2026

CYBERSECURITY FALL2025 CLEVELAND AFFILIATE CAMPUS

Term I	
Start Date	August 25, 2025
End Date	January 18, 2026
Term II	
Start Date	January 26, 2026
End Date	June 14, 2026

DATA SCIENCE FALL 2025 CLEVELAND AFFILIATE CAMPUS

Term I	
Start Date	August 25, 2025
End Date	January 18, 2026
Term II	
Start Date	January 26, 2026
End Date	June 14, 2026

CANCELLATION POLICY – OHIO AFFILIATE CAMPUSES

All notices of cancellations must be made in writing to the Office of Admissions.

- The student has the right to cancel the Enrollment Agreement until midnight of the fifth (5th) business day after the date of signing enrollment agreement but prior to the first (1st) day of class. All tuition and instructional fees, including the application or registration fee shall be refunded to the student within thirty (30) days of cancellation.
- When notice of cancellation is given after midnight of the fifth (5th) business day following the date of signing enrollment agreement but prior to the close of business on the student's first (1st) day of class attendance, the college will retain the application or registration fee.
- New students are subject to a 15-calendar-day evaluation period at the beginning of their first term, during which time the college will evaluate the student's readiness to engage in his or her academic program. To meet the 15-day requirements, a student must show acceptable levels of attendance, academic progress, and completion of the enrollment process. If the college determines that the student is not prepared to engage with his or her program of study, the student will be cancelled from all classes. Students cancelled by the college shall receive a refund of all tuition and instructional fees, other than fees for any instructional materials that are not returned. Refunds will be issued within 30 calendar days of the date of cancellation.
- The College reserves the right to cancel classes when the number of students enrolled is too small.

TUITION REFUND POLICY – OHIO AFFILIATE CAMPUSES

Refunds for tuition and refundable fees shall be made in accordance with following provisions as established by Ohio Administrative Code section 3332-1-10:

- A student who starts class and withdraws during the first full calendar week of the quarter or semester shall be obligated for twenty-five percent (25%) of the tuition and refundable fees for that academic term plus the registration fee.
- A student who withdraws during the second full calendar week of the academic term shall be obligated for fifty percent (50%) of the tuition and refundable fees for that academic term plus the registration fee.
- A student who withdraws during the third full calendar week of the period academic term shall be obligated for seventy-five percent (75%) of the tuition and refundable fees for that academic term plus the registration fee.
- A student who officially withdraws beginning with the fourth full calendar week of the academic term will not be entitled to a refund of any portion of the tuition or refundable fees.

The college shall make the appropriate refund within thirty days of the date the school is able to determine that a student has withdrawn or has been terminated from a program. Refunds shall be based upon the last date of a student's attendance or participation in an academic school activity. Refunds are made directly to the source of payment. Deposits or down payments shall become part of the tuition.

- The college shall refund all tuition and fees paid by the student to the college in the following circumstances:
 - a. The program offered by the college has authorization revoked for cause and the students enrolled in the program at the time of revocation are unable to complete the program at another institution.
 - b. The college cancels or discontinues the program of study in which a student is enrolled without providing the student with a teach-out option. The student must be active in the program at the time of program cancellation.

Any refund of tuition and fees under this provision shall first be made to the applicable student aid lenders of each affected student.

In addition to the Refund Policy outlined above, the College shall use the "Return to Title IV Funds (R2T4) Policy" required by the U.S. Department of Education when performing R2T4 funds calculations.

Academic Programs

CIP CODES

Associate of Applied Science in Diagnostic Medical Imaging Radiography	51.0911
Associate of Applied Science in Magnetic Resonance Imaging (MRI) Technology	51.0920
Clinical Medical Assisting	51.0801
Cybersecurity	11.1003
Data Science	11.0101
Sterile Processing	51.1012

CIP AND SOC CODES RELATIONSHIP

The 2010 Classification of Instructional Programs (CIP) is a taxonomic coding scheme of instructional programs. Its purpose is to facilitate the organization, collection, and reporting of fields of study and program completions activity. The CIP was originally developed in 1980 by the National Center for Education Statistics (NCES) in the U.S. Department of Education. For more information on CIP codes, please visit <https://nces.ed.gov/ipeds/cipcode/default.aspx?y=55>

The 2010 Standard Occupational Classification (SOC) system is used by Federal statistical agencies to classify workers into occupational categories to collect, calculate, or disseminate data. All workers are classified into one of 840 detailed occupations according to their occupational definition. To facilitate classification, detailed occupations are combined to form 461 broad occupations, 97 minor groups, and 23 major groups. For more information on SOC codes, please visit <http://www.bls.gov/soc/classification.htm>

Relationships between CIP and SOC may be one-to-one, one-to-many, many-to-one, or many-to-many. Since SOC codes tend to be more specific than CIP codes, it is likely that one CIP code will map to multiple SOC codes. This is in part because the CIP codes describe instructional programs that will often provide training that can be applied to multiple occupations.

It is possible that there may be no direct correspondence between a CIP Code and a SOC code. This may occur because the CIP program code is not career related, because an insufficient number of institutions offer the program, to justify having a CIP-SOC code crosswalk, or because program CIP contains “other” program code (These are codes ending in “99” code format: XX.XX99 or xx.9999), and the title ends in “Other.” Where the scope of the group containing an “other” CIP is broader, it may not be possible to identify SOC codes for which the CIP program provides direct preparation. This is true, in part, because the CIP provides little or no guidance or information about what specialties are classified in the “other” CIP code, and the CIP classification allows for variation by the state as to what is classified as “other.” For more information on the CIP-SOC crosswalk, please visit <https://nces.ed.gov/ipeds/cipcode/resources.aspx?y=55>

Associate of Applied Science in Diagnostic Medical Imaging Radiography

PROGRAMMATIC RECOGNITION

Midwestern Career College's Associate of Applied Science in Diagnostic Medical Imaging Radiography is recognized by the American Registry of Radiologic Technologists (ARRT): <https://www.arrt.org/about-the-profession/learn-about-the-profession/recognized-educational-programs>.

PROGRAM DESCRIPTION

The Associate of Applied Science in Diagnostic Medical Imaging Radiography program is designed for students who plan to learn more about radiography and become a professional in the health care field. It delves into the intricacies of biology, radiation safety, radiation protection, proper patient positioning, patient safety, equipment, image analysis, anatomy, and pathology. Through coursework and externship, students will become knowledgeable in the use of diagnostic medical imaging radiography for the purpose of helping physicians diagnose illness and pathology. Upon completion of the program, graduates will be prepared to take the American Registry of Radiologic Technologists (ARRT) certification and enter the workforce as an entry-level radiologic technologist.

PROGRAM MISSION STATEMENT

The mission of the Associate of Applied Science in Diagnostic Medical Imaging Radiography program is to provide premier career-focused education in radiographic medical imaging, preparing competent entry-level radiographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

PROGRAM INFORMATION

Program Length: **80 weeks**

Clock Hours: **1680**

Semester Credit Hours: **73**

Eligibility to sit for the American Registry of Radiologic Technologists (ARRT) certification upon program completion.

PROGRAM OBJECTIVES

The Associate of Applied Science in Diagnostic Medical Imaging Radiography prepares students to:

- Demonstrate knowledge and clinical competency to perform the duties of an entry-level radiologic technologist;
- Communicate effectively and professionally as a member of the healthcare team;
- Demonstrate problem-solving and critical thinking skills;
- Demonstrate professional and ethical conduct in a health care setting.

PROGRAM GOALS

The Associates of Applied Science in Diagnostic Medical Imaging Radiography Program prepares competent entry-level radiographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

Cognitive

- Recognize the difference between normal anatomy and pathology;
- Understand how to adjust protocols per exam;
- Develop critical thinking in a high paced radiography setting.

Psychomotor

- Demonstrate knowledge and skill level to select appropriate protocols and parameters needed to perform successful radiographic exams;
- Demonstrate proper patient positioning procedures.

Affective

- Recognize the importance of proper patient care and safety in a challenging environment;
- Learn the value of patient understanding, empathy, and sympathy;
- Provide patient care and instructions specific to exam procedures.

CURRICULUM DEVELOPMENT

Midwestern Career College has developed its curriculum for the AAS in Diagnostic Medical Imaging Radiography program using the recommendations and guidelines set forth by American Registry of Radiologic Technologists (ARRT), the American Society of Radiologic Technologists (ASRT), and by the American College of Radiology (ACR).

PROGRAM COURSES

Courses	Semester Credit Hours
Term I	
ALH102 Anatomy and Physiology	3
ALH104 Medical Terminology	2
BIO101 Introduction to Biology	3
RAD104 Principles of Radiography I	3
RAD105 Patient Care in Radiography	3
Term II	
RAD112 Radiographic Anatomy	3
RAD114 Principles of Radiography II	3
RAD121 Radiographic Positioning and Procedures I	3
RAD125 Radiation Health and Safety	3
Term III	
RAD120 Law and Ethics in Imaging Sciences	1
RAD122 Radiographic Positioning and Procedures II	3
RAD140 Radiographic Pathology	2
RAD161 Clinical Education I	6
SYC114 Introduction to Psychology	3
Term IV	
HUM115 Introduction to Humanities	3
RAD123 Specialized Procedures in Radiography	3
RAD145 Radiographic Image Analysis	2
RAD162 Clinical Education II	6
Term IV	
ENG118 Introduction to Communication & Composition	3
MTH113 General Education Mathematics	3
PRO115 Professional Development for Medical Imaging	3
RAD155 DMIR Registry Review	3
RAD163 Clinical Education III	6

Associate of Applied Science in Magnetic Resonance Imaging (MRI) Technology

PROGRAMMATIC RECOGNITION

The program is recognized by the American Registry of Radiologic Technologists (ARRT):
<https://www.arrt.org/about-the-profession/learn-about-the-profession/recognized-educational-programs>.

PROGRAM DESCRIPTION

Associate of Applied Science in Magnetic Resonance Imaging (MRI) Technology program prepares students with the general education, applied knowledge, technical skills, and work habits required for entry-level positions in the Magnetic Resonance Imaging (MRI) Technology field. The Magnetic Resonance Imaging Technologist utilizes the resonant frequency properties of atoms within a magnetic field to image anatomic and/or physiologic conditions of the body to assist physicians in the diagnosis and treatment of disease.

PROGRAM MISSION STATEMENT

The mission of Midwestern Career College's Associate of Applied Science in Magnetic Resonance Imaging (MRI) Technology program is to provide premier career-focused education in Magnetic Resonance Imaging (MRI) technology to prepare competent entry-level Magnetic Resonance Imaging technologists in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

PROGRAM INFORMATION

Program Length: **80 weeks**

Clock Hours: **1840**

Semester Credit Hours: **72**

Eligibility for Phlebotomy Certification through National Center for Competency Testing (NCCT).

Eligibility for the Registered Phlebotomy Technician (RPT) exam through American Medical Technologists (AMT) after completing 25 additional venipunctures draws (total of 50) and 10 skin punctures not provided by MCC.

Eligibility to sit for the American Registry of Radiologic Technologists (ARRT) certification upon program completion.

PROGRAM OBJECTIVES

The Associate of Applied Science in Magnetic Resonance Imaging (MRI) Technology Program prepares students to:

- Demonstrate knowledge and clinical competency to perform the duties of an entry-level MRI technologist;
- Communicate effectively and professionally as a member of the healthcare team;
- Demonstrate problem-solving and critical thinking skills;
- Demonstrate professional and ethical conduct.

PROGRAM GOALS

The Associates of Applied Science in Magnetic Resonance Imaging (MRI) Technology Program prepares competent entry-level Magnetic Resonance Imaging technologists in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

Cognitive

- Recognize the difference between normal anatomy and pathology;
- Understand how to adjust protocols per exam;
- Develop critical thinking in a high paced MRI setting.

Psychomotor

- Demonstrate knowledge and skill level to select appropriate protocols and parameters needed to perform successful MRI exams;
- Demonstrate proper patient positioning procedures.

Affective

- Recognize the importance of proper patient care and safety in a challenging environment;
- Learn the value of patient understanding, empathy, and sympathy;
- Provide patient care and instructions specific to exam procedures.

CURRICULUM DEVELOPMENT

Midwestern Career College has developed its curriculum for the AAS in MRI Technology program using the recommendations and guidelines set forth by the American Registry of Magnetic Resonance Imaging Technologists (ARMRIT), American Registry of Radiologic Technologists (ARRT), the American Society of Radiologic Technologists (ASRT), and by the American College of Radiology (ACR).

PROGRAM COURSES/SAMPLE SEQUENCE OF COURSES

The program course sequence is subject to change.

Courses	Semester Credit Hours
Term I	
ALH102 Anatomy and Physiology	3
ALH104 Medical Terminology	2
BIO101 Introduction to Biology	3
MRI115 MRI Physics and Instrumentation	3
MRI125 Patient Care and Safety in MRI	4
Term II	
ALH125 Venipuncture for Imaging Professionals	3
ENG118 Introduction to Communication & Composition	3
MRI135 Sectional Anatomy I	3
MRI151 MRI Clinical Positioning Sim I	3
Term III	
MRI119 Laws and Ethics in Imaging Sciences	2
MRI144 MRI Clinical I	6
MRI152 MRI Clinical Positioning Sim II	3
SYC114 Introduction to Psychology	3
MRI136 Sectional Anatomy II	2
Term IV	
MRI153 MRI Clinical Positioning Sim III	3
MRI145 MRI Clinical II	6

HUM115 Introduction to Humanities	3
MRI249 Medical Imaging Pathology	2
Term IV	
PRO115 Professional Development for Medical Imaging	3
MRI265 MRI Registry Review	3
MRI146 MRI Clinical III	6
MTH113 General Education Mathematics	3

Clinical Medical Assisting

Diploma program

PROGRAM DESCRIPTION

The Clinical Medical Assisting program prepares students in attaining theoretical and practical knowledge in the realm of medical assisting. The program focuses on clinical and administrative duties performed by medical assistants, which include phlebotomy, EKG, and patient care. Upon successful completion of the program students will be familiar with medical terminology, medical procedures, as well as be equipped to perform administrative capabilities within a medical facility.

PROGRAM MISSION STATEMENT

The mission statement of Midwestern Career College's Clinical Medical Assisting Program is to provide premier career-focused education in medical assisting to prepare competent entry-level medical assistant in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

PROGRAM INFORMATION

Program Length: **60 weeks**

Clock Hours: **930**

Course Prep Hours: **125**

Semester Credit Hours: **42**

Eligibility for Phlebotomist, EKG, and Medical Assistant Certifications through National Center for Competency Testing (NCCT).

Eligibility for the Registered Phlebotomy Technician (RPT) exam through American Medical Technologists (AMT) after completing 25 additional venipunctures draws (total of 50) and 10 skin punctures not provided by MCC.

Eligibility for the Registered Medical Assistant (RMA) exam through American Medical Technologists (AMT).

Eligibility for the Certified Medical Assistant (CMA) exam through American Association of Medical Assistants (AAMA).

Eligibility to sit for Phlebotomy Technician (CPT), EKG Technician (CET), and Certified Clinical Medical Assistant (CCMA) exam through National Healthcareer Association (NHA).

PROGRAM OBJECTIVES

The Clinical Medical Assisting program prepares students to:

- Provide knowledge and comprehensive training in Anatomy and Physiology of the body structures;
- Demonstrate knowledge of Pathological conditions and skills in performing routine clinical procedures;
- Perform entry-level medical assisting with both clinical and administrative duties;
- Demonstrate the knowledge and skills in Electronic Health Records and Medical Insurance, Billing and Coding;
- Develop working knowledge in CLIA waived Laboratory procedures such as infection control, sterilization processes, Phlebotomy, Pharmacology;
- Prepare patients and help physicians with diagnostic procedures and minor surgical procedures performed in clinics;
- Demonstrate professionalism and effective communication in a healthcare setting;
- Provide patient care in accordance with laws, policies, and regulations;
- Demonstrate effective critical thinking skills.

PROGRAM GOALS

The Clinical Medical Assisting Program prepares competent entry-level Medical Assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

Cognitive

- Learn medical terminology and anatomy and physiology of the body structures;
- Demonstrate knowledge of pathological conditions and skills in performing routine clinical procedures;
- Perform entry-level medical assisting duties in clinical and administrative areas;
- Demonstrate the knowledge and skills in Electronic Health Records and Medical Insurance, Billing and Coding;
- Demonstrate effective critical thinking skills.

Psychomotor

- Develop working knowledge in CLIA waived Laboratory procedures such as infection control, sterilization processes, phlebotomy, and pharmacology;
- Prepare patients and help physicians with diagnostic procedures and minor surgical procedures performed in clinics.

Affective

- Demonstrate professionalism and effective communication in a healthcare setting;
- Provide patient care by law, policies, and regulations.

PROGRAM COURSES/SAMPLE SEQUENCE OF COURSES

The program course sequence is subject to change.

Courses	Semester Credit Hours
Term I	
CSC101 Student Success	1
DMA100 Introduction to Technology and Healthcare	1
ALHT108 Medical Terminology	3
ALHT120 Anatomy & Physiology	3
PHL115 Phlebotomy Technician	4
DMA133 Patient Communication and E.H.R.	3
Term II	
EKG115 EKG Technician	3
ALHT117 Pathophysiology	3
DMA134 Medical Insurance, Billing, and Coding	3
DMA135 Clinical Medical Assisting	5
Term III	
ALHT130 Introduction to Pharmacology	3
ALHT135 Professionalism in Healthcare	3.5
DMA130 Medical Assisting Externship	3.5
DMA140 Medical Assistant Comprehensive Review	3

Participation in and completion of the externship course is contingent on the student meeting all externship registration and participation requirements as defined by the Externship Handbook and is subject to site availability.

Cybersecurity

Diploma program

PROGRAM DESCRIPTION

The Cyber Security program offers comprehensive training tailored for entry-level careers in the Cyber Security industry. Covering essential security information, procedures, and processes applicable across various sectors including business, government, and non-profit organizations, the program includes instruction in fundamental security concepts, network fundamentals and defense strategies, identity and access management, cryptography principles, system administration, logging and monitoring techniques, programming fundamentals, web security, project management, as well as threats and vulnerabilities awareness.

PROGRAM MISSION STATEMENT

The Cybersecurity program aims at providing premier career-focused education to empower students with academic training, technical expertise, and professional support to launch or advance their successful careers in the Information Technology industry.

PROGRAM INFORMATION

Program Length: **40 weeks**

Clock Hours: **855**

Semester Credit Hours: **34**

PROGRAM OBJECTIVES

Upon successful completion of the Cybersecurity program, the students will:

- Implement and maintain procedures and processes used in all types of business, governmental, non-profit environments.
- Apply practical skills in security basics, networks basics and defense, and web security to interpret and investigate security incidents.
- Evaluate and communicate the human role in security systems emphasizing ethics, social engineering vulnerabilities and training.
- Analyze and resolve security issues in networks and computer systems to secure an IT infrastructure.
- Develop policies and procedures to manage enterprise security risks.

PROGRAM COURSES/SAMPLE SEQUENCE OF COURSES

The program course sequence is subject to change.

Courses	Semester Credit Hours
Term I	
CYS100 Security Foundations	3
CYS101 Networking Foundations	3
CYS102 System Administration	3
CYS103 Network Defense	3
CYS104 Cryptography and Access Management	3
Term II	
CYS105 Logging and Monitoring	3
CYS106 Programming Foundations	3
CYS107 Web Application Security & Project Management	3
CYS108 Threats and Vulnerabilities	3
CYS110 Group Projects	7

Data Science

Diploma program

PROGRAM DESCRIPTION

The Data Science program is offered via distance delivery and prepares students for an entry-level career in Data Science and analysis. The Program focuses on the statistical and computational techniques required to gain meaningful business insights from data in any industry. It includes training in statistics, computer programming, data visualization, data modeling, big data, and machine learning.

PROGRAM MISSION STATEMENT

The Data Science program aims to provide premier, career-focused education to empower students with academic training, technical expertise, and professional support to launch or advance their careers in the Information Technology industry.

PROGRAM INFORMATION

Program Length: **40 weeks**

Clock Hours: **855**

Semester Credit Hours: **34**

PROGRAM OBJECTIVES

Upon successful completion of the Data Science program, the students will:

- Apply mathematical principles to the analysis of data.
- Analyze very large data sets in the context of real-world problems.
- Develop and implement data analysis strategies based on theoretical principles, ethical considerations, and detailed knowledge of the underlying data.
- Demonstrate an understanding of appropriate research methods used to collect and analyze data for decision-making and communications, inclusive of traditional and digital forms of communication.
- Demonstrate an ability to articulate, assess and apply appropriate theories and principles of information management.
- Demonstrate presentation proficiency for written oral, and visual communications in traditional and digital forms of communication.

PROGRAM COURSES/SAMPLE SEQUENCE OF COURSES

The program course sequence is subject to change.

Courses	Semester Credit Hours
Term I	
DSC101 Basic Statistics	3
DSC102 Statistical Programming	3
DSC103 Metrics and Data Processing	3
DSC104 Data Wrangling and Visualization	3
DSC105 Intermediate Statistics	3
Term II	
DSC106 Machine Learning and Modeling	3
DSC107 Introduction to Big Data	3
DSC108 Databases	3
DSC109 Programming Foundations	3
DSC110 Group Project	7

Sterile Processing

Diploma program

PROGRAM DESCRIPTION

The Sterile Processing program is designed to present the advanced concepts and principles for developing skills and competencies required for infection prevention and control in the sterile processing department in a healthcare facility. The program offers knowledge in cleaning, disinfecting, decontamination, sterilization, standard precautions, and universal precautions. The program also introduces students to the concepts of hemostasis, packaging, distributing, storing and inventory control of sterile goods, instruments, trays, and equipment. Upon successful completion of the program, the students will be eligible to sit for a national certification exam with CBSPD (Certification Board for Sterile Processing and Distribution).

PROGRAM INFORMATION

Program Length: **40 weeks**

Clock Hours: **630**

Semester Credit Hours: **28**

Eligibility to sit for the Certified Sterile Processing Tech certification through Certification Board for Sterile Processing and Distribution (CBSPD).

PROGRAM OBJECTIVES

The Sterile Processing program prepares students to:

- Apply the principles of infection control in the decontamination, packaging, and sterilization of instruments and equipment;
- Perform decontamination procedures and practices for patient care equipment and surgical instruments;
- Prepare and assemble sterile packaging of instruments and patient care equipment;
- Demonstrate knowledge of the concepts, techniques, and processes of sterilization;
- Demonstrate knowledge of inventory control and distribution of supplies;
- Perform roles and responsibilities in a competent, professional, and ethical manner.

PROGRAM COURSES/SAMPLE SEQUENCE OF COURSES

The program course sequence is subject to change.

Courses	Semester Credit Hours
Term I	
ALH101 Medical Terminology	3
STP111 Fundamentals of Sterile Processing	4
STP112 Principles of Aseptic Techniques	4
STP113 Sterile Processing Technology I	4
Term II	
PRO110 Professional Development	2
STP115 Sterile Processing Technology II	3
STP116 Quality Assurance, Inventory Management, and Recordkeeping	3
STP117 Sterilization Practices	4
STP118 Sterile Processing Technology III	1

Course Descriptions

ASSOCIATE OF APPLIED SCIENCE IN DIAGNOSTIC MEDICAL IMAGING RADIOGRAPHY

ALH104 Medical Terminology

Course Prerequisite: none

Credit Hours: 2

Medical terminology is the language of medicine. In this course students are introduced to prefixes, suffixes, and word roots so that they can recognize, define, spell, and pronounce medical terms accurately.

ALH102 Anatomy and Physiology

Course Prerequisite: none

Credit Hours: 3

Students are introduced to human anatomy and physiology, the different cells, tissues, organs and organ systems of the body, their functions and how they work together.

PRO115 Professional Development for Medical Imaging

Course Prerequisite: none

Credit Hours: 2

The Professional Development course is designed to improve the soft skills of Medical Imaging students — including its key roles, modalities, and professional settings. The course focuses on enhancing essential soft skills such as communication, teamwork, and professionalism. Students will explore various career paths, research potential employers, and evaluate industry expectations

RAD101 Intro to Diagnostic Medical Imaging Radiography

Course Prerequisite: None

Credit Hours: 3

This course is an introduction to the field of diagnostic medical imaging in radiography. The course will introduce students to the field of radiography and radiation safety along with equipment used in the field. Topics also covered will be all fields of radiology including C.T., M.R.I., Mammography and Radiation Therapy.

RAD104 Principles of Radiography I

Course Prerequisite: None

Credit Hours: 3

The course introduces the beginning radiography student to the nature and properties of x-radiation and its use in diagnostic medical imaging. The course covers safety measures when using radiation, the creation of x-radiation in the tube, the circuitry involved in its production, various types of equipment used in the field and an understanding of both the hardware and software of digital imaging.

RAD114 Principles of Radiography II

Course Prerequisite: RAD104

Credit Hours: 3

The course begins with a review of the fundamentals of digital imaging systems, including terminology, types of digital receptors, and the response of digital detectors to exposure variations. The parameters of image quality are reviewed: IR exposure, contrast, detail and distortion. The need for and use of quality management tools and techniques are discussed. Standard radiographic modalities are studied including mobile radiography, fluoroscopy and tomography/tomosynthesis. The course concludes with a discussion of advanced modalities used in diagnostic imaging.

RAD121 Radiographic Positioning and Procedures I

Course Prerequisite: RAD101 ALH141

Credit Hours: 3

Introduction to the principles of radiography including positioning and radiographic image evaluation of the abdomen, chest, upper extremities, lower extremities, gastrointestinal, bony thorax and biliary systems and also provide appropriate recommendations for improving the diagnostic quality of the radiograph.

RAD122 Radiographic Positioning and Procedures II

Course Prerequisite: RAD121

Credit Hours: 3

This course is designed to enhance the necessary skills needed to accurately position patient and evaluate the radiographic image including special projection and methods of the urinary system, reproductive system, vascular, cardiac, and interventional radiography, mobile, surgical, and pediatric radiography and provide appropriate recommendations for improving the diagnostic quality of the radiograph.

RAD112 Radiation Anatomy

Credit Hours: 3

This course covers the anatomical make-up of the human body – both in form and function. Topics include: a thorough overview of anatomical structures, common fractures and pathologies, and the body's various systems as presented in imaging studies. The course complements the radiographic positioning and procedures courses.

RAD105 Patient Care in Radiography

Course Prerequisite: none

Credit Hours: 3

This course covers the basic concepts of patient care, including personal and physiological needs of the patient, diversity, age-specific patient care and communication and communication with family members. Topics include routine and emergency care procedures, patient assessment, medication information and administration, standard and universal precautions and infection control concepts, biological effects of radiation, source of radiation and radiation exposure. Other topics include fire and workplace safety.

RAD120 Law and Ethics in Imaging Sciences

Course Prerequisite: None

Credit Hours: 2

This course is designed to provide a fundamental background in ethics and healthcare laws in the imaging profession. The course also provides the historical and philosophical basics of ethics, the elements of ethical behavior and ethical issues and dilemmas. Topics include an introduction to legal terminology, concepts and principles, misconduct, malpractice, legal and professional standards, and an emphasis on the importance of proper documentation and informed consent. Other topics include the basic concepts of patient information management, medical records management including privacy and regulatory issues and the role of the technologist in the management of patient information (HIPAA).

RAD140 Radiographic Pathology

Course Prerequisite: RAD110

Credit Hours: 2

This course will familiarize the students with the common pathologies as seen in radiography. It will deal with the etiology and processes of trauma and disease. Emphasis will be placed on radiographic pathology of the body systems and the manifestation of this pathology. Case studies and images of the pathologies will be used to reinforce the lectures.

RAD123 Specialized Procedures in Radiography

Course Prerequisite: RAD122

Credit Hours: 2

An introduction to the use of radiopharmaceuticals for enhancement of various anatomical structures within the human body. Includes coverage of common types of contrast agents, their administration, their physiological effects on various organ systems, and emergent treatment.

RAD125 Radiation Health and Safety

Course Prerequisite: none

Credit Hours: 3

Students are introduced to the principles of, and the reasons for, radiation protection. The responsibilities of the radiographer and protective measures for patients, personnel and the public are studied. Also covered is discussion of the sources of radiation, the units of radiation measurement, molecular and cellular radiation biology and federal and state radiation health and safety regulations.

RAD145 Radiographic Image Analysis

Course Prerequisite: RAD122

Credit Hours: 2

The course reviews and challenges the student to formulate hypotheses and test theories regarding ways in which image quality and accuracy of positioning can be improved in the radiographic imaging of the chest, abdomen, bony thorax, digestive system, lower and upper extremities, shoulder, pelvis, hip and spine.

RAD155 DMIR Registry Review

Course Prerequisite: RAD136

Credit Hours: 2

This course will provide examination preparation and review of the important topics in relation to the American Registry of Radiologic Technologists (ARRT).

RAD161 Clinical Education I

Course Prerequisite: RAD121

Credit Hours: 6

This course provides a supervised clinical experience at a clinical site. Included are application of equipment operation, radiation safety, medico legal and ethical protocols, record keeping and patient care. Additionally, the student will develop and demonstrate a professional work ethic and at the same time learn the necessary skills needed to function as a Radiography Technologist in the clinical environment.

RAD162 Clinical Education II

Course Prerequisite: RAD161, ALH145

Credit Hours: 6

This course provides a supervised clinical experience at a clinical site. Included are application of equipment operation, radiation safety, medico legal and ethical protocols, record keeping and patient care. Additionally, the student will develop and demonstrate a professional work ethic and at the same time learn the necessary skills needed to function as an Radiography Technologist in the clinical environment.

RAD163 Clinical Education III

Course Prerequisite: RAD162

Credit Hours: 6

This course provides a supervised clinical experience at a clinical site. Included are application of equipment operation, radiation safety, medico legal and ethical protocols, record keeping and patient care. Additionally, the student will develop and demonstrate a professional work ethic and at the same time learn the necessary skills needed to function as an Radiography Technologist in the clinical environment.

ASSOCIATE OF APPLIED SCIENCE IN MAGNETIC RESONANCE IMAGING (MRI) TECHNOLOGY**ALH102 Anatomy and Physiology**

Course Prerequisite: none

Credit Hours: 3

This course consists of comprehensive and relevant coverage of the Anatomy and Physiology of Human Body Systems. Students learn about Human body structures and location, body cavities, terms of reference, human organization. Students learn a different type of tissues their functions and location in the body. Coursework includes the Anatomy and physiology of the human body systems and discusses the Integumentary system, Skeletal and Muscular System, Cardiovascular, Digestive, Respiratory, Urinary, Endocrine, Nervous, Blood and Lymphatic, Reproductive System, with an emphasis on the Diseases of the body system and surgical and diagnostic procedures.

ALH104 Medical Terminology

Course Prerequisite: none

Credit Hours: 3

This course introduces students to Medical terminology: suffixes, prefixes, basic word structure, root words, abbreviations and applying the word building process for analyzing medical terms. Emphasis will be placed on defining and spelling anatomic structures and medical terminology related to Body Systems.

ALH125 Venipuncture for Imaging Professionals

Course Prerequisite: none

Credit Hours: 3

This course provides the student with comprehensive and relevant coverage of phlebotomy, medical law and ethics and legal concepts. Other topics include patient confidentiality (HIPAA), OSHA and safety, standard precautions, isolation procedures, equipment, venipuncture complications and specimen handling and transport.

MRI115 MRI Physics and Instrumentation

Course Prerequisite: none

Credit Hours: 3

The course provides an in-depth history of magnetic resonance imaging and clinical practice and an understanding of the principles of this technology. Topics include the physical principles of magnetic resonance imaging, its physics to include electromagnetism, radio frequency system, gradient system, nuclear magnetism, tissue characteristics, instrumentation, and clinical indicators for utilization of magnetic resonance imaging.

MRI119 Laws and Ethics in Imaging Sciences

Previous ID: MRI120 (1 credit)

Course Prerequisite: none

Credit Hours: 1

This course is designed to provide a fundamental background in ethics and healthcare laws in the imaging profession. The course also provides the historical and philosophical basics of ethics, the elements of ethical behavior and ethical issues and dilemmas. Topics include an introduction to legal terminology, concepts and principles, misconduct, malpractice, legal and professional standards, and an emphasis on the importance of proper documentation and informed consent. Other topics include the basic concepts of patient information management, medical records management including privacy and regulatory issues and the role of the technologist in the management of patient information (HIPAA).

MRI125 Patient Care and Safety in MRI

Course Prerequisite: none

Credit Hours: 4

This course covers the basic concepts of patient care, including personal and physiological needs of the patient, diversity, age specific patient care and communication and communication with family members. Topics include routine and emergency care procedures, patient assessment, medication information and administration, standard and universal precautions, and infection control concepts. Other topics include fire and workplace safety.

MRI135 Sectional Anatomy I

Course Prerequisite: ALH102, ALH104

Credit Hours: 3

This course offers the student an introduction to cross-sectional anatomy, anatomic positions, body planes and cavities, terminology, landmarks, and other imaging planes relevant to demonstrating anatomy on MR images. Other topics include the cross-sectional anatomy of the cranium and facial bones, brain, the spine and spinal cord, soft tissue of the neck and the endocrine system.

MRI136 Sectional Anatomy II

Previous ID MRI235 (3 credits)

Course Prerequisite: MRI135

Credit Hours: 2

This is a study of human anatomy as seen in axial, sagittal, and coronal planes. Other imaging planes are studied when relevant for a demonstration of anatomy in specific regions. Correlation to MR images is practiced in this course. A study of normal anatomy and normal variations and its appearance in planes enables the student to better recognize abnormal conditions and thus make the associated changes in imaging requirements to adequately demonstrate the patient's anatomy and pathology. Topics include the thorax-abdomen. Pelvis and the musculoskeletal system will be discussed in this course.

MRI144 MRI Clinical I

Course Prerequisite: MRI119, MRI125

MRI145 MRI Clinical II,

Course Prerequisite: MRI151

MRI146 MRI Clinical III

Course Prerequisite: MRI125, MRI225

Credit Hours: 6 each

This course provides supervised clinical experience at a clinical site. Included are application of equipment operation, MR safety, medicolegal and ethical protocols, record keeping and patient care. Head and neck techniques and procedures, as well as spine and extremity work, will be performed. Additionally, the student will develop and demonstrate a professional work ethic and at the same time learn the necessary skills needed to function as an MRI Technologist in the clinical environment.

MRI151 MRI Clinical Positioning Sim I

Course Prerequisite: ALH102, MRI115

Credit Hours: 3

This course will provide the student with anatomy, position, imaging techniques and suggested protocols related to the head, spine, spinal cord, and soft tissue structures of the neck. Other topics covered are anatomical structures and the plane that best demonstrates the anatomy, coils, and scan sequencing.

MRI152 MRI Clinical Positioning Sim II

Course Prerequisite: MRI151

Credit Hours: 3

This course provides the student with the patient positioning and imaging techniques related to the upper and lower extremities and the pelvic girdle. Other topics include clinical applications such as coils; scan sequencing, protocols, positioning criteria, signal characteristics of normal and abnormal structures and the plane that best demonstrates the anatomy in the production of high-quality images.

MRI153 MRI Clinical Positioning Sim III

Course Prerequisite: MRI152

Credit Hours: 3

This course provides the student with the patient positioning and imaging techniques related to the abdomen and its related structures and organs, pelvis, and the male and female reproductive systems. Other topics include clinical applications such as coils, scan sequencing, protocols, positioning criteria, signal characteristics of normal and abnormal structures, and the plane that best demonstrates the anatomy in the production on high-quality images.

MRI249 Medical Imaging Pathology

Previous ID MRI215 (1 credit)

Course Prerequisite: MRI136

Credit Hours: 2

This course will familiarize the students with the common pathologies as seen in magnetic resonance imaging. Case studies and images of the pathologies will be used to reinforce the lectures. Technologists doing magnetic resonance imaging must be able to recognize the general appearance of pathology and recognize the need for additional sequences, changes in protocols and the need for contrast studies based upon the recognition of pathological changes.

MRI265 MRI Registry Review

Course Prerequisite: none

Credit Hours: 3

This course will provide examination preparation and review of the important topics in relation to the American Registry of Radiologic Technologists (ARRT) and/or American Registry of Magnetic Resonance Imaging Technologists (ARMRIT) national certification.

PRO115 Professional Development for Medical Imaging

Course Prerequisite: none

Credit Hours: 2

The Professional Development course is designed to improve the soft skills of Medical Imaging students — including its key roles, modalities, and professional settings. The course focuses on enhancing essential soft skills such as communication, teamwork, and professionalism. Students will explore various career paths, research potential employers, and evaluate industry expectations

ALH102 Anatomy and Physiology

Course Prerequisite: none

Credit Hours: 3

This course consists of comprehensive and relevant coverage of the Anatomy and Physiology of Human Body Systems. Students learn about Human body structures and location, body cavities, terms of reference, human organization. Students learn a different type of tissues their functions and location in the body. Coursework includes the Anatomy and physiology of the human body systems and discusses the Integumentary system, Skeletal and Muscular System, Cardiovascular, Digestive, Respiratory, Urinary, Endocrine, Nervous, Blood and Lymphatic, Reproductive System, with an emphasis on the Diseases of the body system and surgical and diagnostic procedures.

ALH104 Medical Terminology

Course Prerequisite: none

Credit Hours: 3

This course introduces students to Medical terminology: suffixes, prefixes, basic word structure, root words, abbreviations and applying the word building process for analyzing medical terms. Emphasis will be placed on defining and spelling anatomic structures and medical terminology related to Body Systems.

ALH125 Venipuncture for Imaging Professionals

Course Prerequisite: none

Credit Hours: 3

This course provides the student with comprehensive and relevant coverage of phlebotomy, medical law and ethics and legal concepts. Other topics include patient confidentiality (HIPAA), OSHA and safety, standard precautions, isolation procedures, equipment, venipuncture complications and specimen handling and transport.

MRI115 MRI Physics and Instrumentation

Course Prerequisite: none

Credit Hours: 3

The course provides an in-depth history of magnetic resonance imaging and clinical practice and an understanding of the principles of this technology. Topics include the physical principles of magnetic resonance imaging, its physics to include electromagnetism, radio frequency system, gradient system, nuclear magnetism, tissue characteristics, instrumentation, and clinical indicators for utilization of magnetic resonance imaging.

MRI119 Laws and Ethics in Imaging Sciences

Previous ID: MRI120 (1 credit)

Course Prerequisite: none

Credit Hours: 1

This course is designed to provide a fundamental background in ethics and healthcare laws in the imaging profession. The course also provides the historical and philosophical basics of ethics, the elements of ethical behavior and ethical issues and dilemmas. Topics include an introduction to legal terminology, concepts and principles, misconduct, malpractice, legal and professional standards, and an emphasis on the importance of proper documentation and informed consent. Other topics include the basic concepts of patient information management, medical records management including privacy and regulatory issues and the role of the technologist in the management of patient

information (HIPAA).

MRI125 Patient Care and Safety in MRI

Course Prerequisite: none

Credit Hours: 4

This course covers the basic concepts of patient care, including personal and physiological needs of the patient, diversity, age specific patient care and communication and communication with family members. Topics include routine and emergency care procedures, patient assessment, medication information and administration, standard and universal precautions, and infection control concepts. Other topics include fire and workplace safety.

MRI135 Sectional Anatomy I

Course Prerequisite: ALH102, ALH104

Credit Hours: 3

This course offers the student an introduction to cross-sectional anatomy, anatomic positions, body planes and cavities, terminology, landmarks, and other imaging planes relevant to demonstrating anatomy on MR images. Other topics include the cross-sectional anatomy of the cranium and facial bones, brain, the spine and spinal cord, soft tissue of the neck and the endocrine system.

MRI136 Sectional Anatomy II

Previous ID MRI235 (3 credits)

Course Prerequisite: MRI135

Credit Hours: 2

This is a study of human anatomy as seen in axial, sagittal, and coronal planes. Other imaging planes are studied when relevant for a demonstration of anatomy in specific regions. Correlation to MR images is practiced in this course. A study of normal anatomy and normal variations and its appearance in planes enables the student to better recognize abnormal conditions and thus make the associated changes in imaging requirements to adequately demonstrate the patient's anatomy and pathology. Topics include the thorax-abdomen. Pelvis and the musculoskeletal system will be discussed in this course.

MRI144 MRI Clinical I

Course Prerequisite: MRI119, MRI125

MRI145 MRI Clinical II,

Course Prerequisite: MRI151

MRI146 MRI Clinical III

Course Prerequisite: MRI215, MRI225

Credit Hours: 6 each

This course provides supervised clinical experience at a clinical site. Included are application of equipment operation, MR safety, medicolegal and ethical protocols, record keeping and patient care. Head and neck techniques and procedures, as well as spine and extremity work, will be performed. Additionally, the student will develop and demonstrate a professional work ethic and at the same time learn the necessary skills needed to function as an MRI Technologist in the clinical environment.

MRI151 MRI Clinical Positioning Sim I

Course Prerequisite: ALH102, MRI115

Credit Hours: 3

This course will provide the student with anatomy, position, imaging techniques and suggested protocols related to the head, spine, spinal cord, and soft tissue structures of the neck. Other topics covered are anatomical structures and the plane that best demonstrates the anatomy, coils, and scan sequencing.

MRI152 MRI Clinical Positioning Sim II

Course Prerequisite: MRI151

Credit Hours: 3

This course provides the student with the patient positioning and imaging techniques related to the upper and lower extremities and the pelvic girdle. Other topics include clinical applications such as coils; scan sequencing, protocols,

positioning criteria, signal characteristics of normal and abnormal structures and the plane that best demonstrates the anatomy in the production of high-quality images.

MRI153 MRI Clinical Positioning Sim III

Course Prerequisite: MRI152

Credit Hours: 3

This course provides the student with the patient positioning and imaging techniques related to the abdomen and its related structures and organs, pelvis, and the male and female reproductive systems. Other topics include clinical applications such as coils, scan sequencing, protocols, positioning criteria, signal characteristics of normal and abnormal structures, and the plane that best demonstrates the anatomy in the production on high-quality images.

MRI249 Medical Imaging Pathology

Previous ID MRI215 (1 credit)

Course Prerequisite: MRI136

Credit Hours: 2

This course will familiarize the students with the common pathologies as seen in magnetic resonance imaging. Case studies and images of the pathologies will be used to reinforce the lectures. Technologists doing magnetic resonance imaging must be able to recognize the general appearance of pathology and recognize the need for additional sequences, changes in protocols and the need for contrast studies based upon the recognition of pathological changes.

MRI265 MRI Registry Review

Course Prerequisite: none

Credit Hours: 3

This course will provide examination preparation and review of the important topics in relation to the American Registry of Radiologic Technologists (ARRT) and/or American Registry of Magnetic Resonance Imaging Technologists (ARMRIT) national certification.

PRO115 Professional Development for Medical Imaging

Course Prerequisite: none

Credit Hours: 2

The Professional Development course is designed to improve the soft skills of Medical Imaging students — including its key roles, modalities, and professional settings. The course focuses on enhancing essential soft skills such as communication, teamwork, and professionalism. Students will explore various career paths, research potential employers, and evaluate industry expectations

GENERAL EDUCATION COURSE DESCRIPTIONS

ENG114 English Composition I

Course Prerequisite: None

Credit Hours: 3

This course provides students with rhetorical foundations that prepare them for the demands of academic and professional writing. Accordingly, class discussion and readings will address the function of rhetoric and of composing processes in a variety of contexts, with attention to various audiences. Throughout the course, while engaged in a diversity of composing endeavors, students will learn to respond constructively to their peers' texts and to use peer responses with extensive instructor feedback to improve the quality of their own work.

ENG115 Introduction to Speech Communication

Course Prerequisite: None

Credit Hours: 3

This course will introduce interpersonal skills (perception, listening, verbal and nonverbal communication); public speaking (organization, delivery, and basic speech writing); and small group communication (leadership, assertiveness and listening) with emphasis is on the application of these basic concepts in the personal, academic and professional lives of students.

SYC114 Introduction to Psychology

Course Prerequisite: None

Credit Hours: 3

This is a general overview course focusing on the scientific study of both the behavioral and mental processes of human beings and animals. More specifically, we will be covering: a history of psychology and scientific thought, biological basis of behavior, research methodology, statistics, sensation and perception, states of consciousness, memory, language and intelligence, developmental psychology, personality, and learning.

PHY101 Introduction to Physics

Course Prerequisite: None

Lecture Credit Hours: 3

This course has a classroom lecture & theory component that is composed of two (2) credit hours, and a laboratory component that is composed of one (1) semester hour. The classroom lecture & theory component of the course provides a conceptual study of laws of motion, forces, energy and momentum, properties and states of matter, heat and thermodynamics, wave motion, sound light, and electricity and magnetism. This course's coverage includes systems of units, scientific method, scientific mathematics (including basic trigonometric functions), vectors, friction, forces, and translational equilibrium, torques and rotational equilibrium, uniformly accelerated motion, Newton's Laws, work, energy, power. The laboratory component emphasizes conducting laboratory experiments to enhance problem-solving and critical thinking skills including description, organization, analysis, summarization (report writing), and criticism in accordance with the scientific method.

HUM115 Introduction to Humanities

Course Prerequisite: None

Credit Hours: 3

An interdisciplinary, multi-perspective assessment of cultural, political, philosophical, and aesthetic factors critical to the formulation of values and the historical development of the individual and of society.

MTH113 General Education Mathematics

Course Prerequisite: None

Credit Hours: 3

This course focuses on mathematical reasoning and solving real-life problems. Three topics are to be studied in depth, chosen from the following list: counting techniques and probability, game theory, geometry, graph theory, linear programming, logic/set theory, and statistics. Mathematical modeling must be integrated into any combination of topics selected. Applications involving problem-solving skills are emphasized throughout the course.

BIO101 Introduction to Biology

Course Prerequisite: None

Credit Hours: 3

An introduction to the principles and fundamental concepts in Biology of how they relate to living organisms. Topics include Structure of DNA, DNA replication, Central Dogma, and Mendelian genetics. The course has a lab component and will emphasize topics covered in the lecture.

CLINICAL MEDICAL ASSISTING

CSC101 Student Success

Course Prerequisite: none

Credit Hours: 1

This course is designed to enhance student success and transition into college. It emphasizes self-assessment, goalsetting, effective study habits, campus resources and education planning. Additional topics include diversity, critical thinking, networking, academic honesty, career development, and the use of online tools to aid in academic success.

DMA100 Introduction to Technology and Healthcare

Formerly DMA110

Course Prerequisite: none

Credit Hours: 1

The Introduction to Technology and Health care course is designed to introduce students to the Learning management system of MCC, Use of Computers and Microsoft office (Word, Power point and Excel). The course provides an understanding of role and responsibilities of Medical Assistants in Health care team and introduces to the Medical law and ethics.

ALHT108 Medical Terminology

Course Prerequisite: none

Credit Hours: 3

This course introduces students to Medical terminology: suffixes, prefixes, basic word structure, root words, abbreviations and applying the word building process for analyzing medical terms. Emphasis will be placed on defining and spelling anatomic structures and medical terminology related to Body Systems.

ALHT120 Anatomy & Physiology

Course Prerequisite: none

Credit Hours: 3

This course consists of comprehensive and relevant coverage of the Anatomy and Physiology of Human Body Systems. Students learn about Human body structures and location, body cavities, terms of reference, human organization. Students learn different types of tissues, their functions and location in the body. Coursework includes the Anatomy and physiology of the human body systems and discusses the Integumentary system, Skeletal and Muscular System, Cardiovascular, Digestive, Respiratory, Urinary, Endocrine, Nervous, Blood and Lymphatic, Reproductive System, with an emphasis on the Diseases of the body system and surgical and diagnostic procedures.

PHL115 Phlebotomy Technician

Course Prerequisite: none

Credit Hours: 4

This course consists of comprehensive and relevant coverage of phlebotomy, the role of the phlebotomist, medical laws and ethics and clinical techniques used in the health care field. The student received instruction utilizing a variety of methods to draw blood with an emphasis on proper technique. Other topics include non-blood specimen collection, labeling processing, universal precautions, and requirements of appropriate national certification exams.

EKG115 EKG Technician

Course Prerequisite: none

Credit Hours: 3

This course provides instruction in EKG unit operation and troubleshooting, lead placement utilizing 12-lead EKG, use, and understanding of EKG grid paper, recognizing normal and abnormal EKG patterns in all 12-leads, plotting EKG axis. It is designed to enhance the skills of people currently working in a medical office. Major topics include anatomy and physiology of the heart, the electrical system of the heart, attachment of the leads, vector concepts, predicting the wave shape of the 12-Lead EKG, characteristic of the T-wave, and characteristic of the ST-segment. Development of the Patterns of the Following: Aberrant Conduction, Wave shapes Distortion due to LVH, Concept of Sensitivity, and Hypertrophy Criteria Relating to Age of Patient, and Systematic approach to 12-lead Analysis.

ALHT117 Pathophysiology

Pre-requisite: ALHT108, ALHT120

Credits: 3

This course provides an in-depth study of human pathological processes and their effects on homeostasis. Emphasis is on interrelationships among organ systems in deviations from and complications of commonly occurring diseases and their management, Common disease categories and terminology, diagnostic methodology, Clinical characteristics and effects of inflammation, Basic Immunology, hypersensitivity, and autoimmune disorders, Etiology and diagnosis of neoplastic diseases, Pathogenesis of cardiovascular and circulatory diseases, lymphatic, pulmonary, Gastrointestinal, endocrine, musculoskeletal, urinary, neurological, and reproductive system disorders.

DMA133 Patient Communication and E.H.R.

Course Prerequisite: none

Credit Hours: 3

This course is designed to give the student a working knowledge of the administrative medical office management duties including oral and written communication skills, legal concepts, patient instruction, computers, equipment operation and maintenance, organizational skills, cultural awareness. Students work on Stimulated Electronic Health Records, learn Managing Medical record keeping and schedule management.

DMA134 Medical Insurance, Billing, and Coding

Course Prerequisite: none

Credit Hours: 3

This course is designed to provide the student basic knowledge of Insurance terminology, managed care plans, insurance plans (private and government plans), Claims process, transmitting electronic claims, Patient collections and Financial management, basic accounting, basic procedural, and diagnostic coding for reimbursement. The course includes an overview of EHR - ICD-10- CM codes, Coding guidelines, and Health status codes, maintain ICD-10 Database, Procedural coding, CPT guidelines and EHR - using CPT codes, maintaining the CPT database on HER.

DMA135 Clinical Medical Assisting

Course Prerequisite: ALHT108, ALHT120

Credit Hours: 5

This course is comprehensive coverage of medical assisting clinical procedures. The coursework includes hands-on training on the following: foundations and principles of medical assisting, the medical office environment, assisting with patients, specialty practices and medical emergencies and physician's office laboratory procedures.

ALHT130 Introduction to Pharmacology

Course Prerequisite: ALHT108, ALHT120

Credit Hours: 3

This course will focus on basic mathematical skills related to the medical field. The principles of pharmacology, including the legal aspects of drug administration will be discussed. Emphasis will be placed on drug classifications, dosage calculations, methods of administration, weights and measurements, prescription management utilizing technology, and medical abbreviations utilized in pharmacology.

DMA140 Medical Assistant Comprehensive Review

Course Prerequisite: PHL115, EKG115, DMA135

Credit Hours: 3

This course will prepare students for the various certifications offered to the Medical Assistant, such as NCCT, NHA, AMT and AAMA. The course topics to be covered are pertaining to the clinical and administrative duties of the Medical Assistant introduced in the program curriculum. In addition, this course will prepare students to apply theory to practice upon entering an affiliated externship site. The 160 clinical hours of work-based activities allow students to utilize clinical skills, including medical office management.

ALHT135 Professionalism in Healthcare

Credit Hours: 3.5

This course is designed to prepare students for the career path with a focus on professional standards in the healthcare environment. The course will assist in improving soft skills, communication techniques, including electronically, and demonstrate a professional demeanor, to include attitude, behavior, and work ethic.

DMA130 Medical Assisting Externship

Course Prerequisite: PHL115, EKG115, DMA135

Credit Hours: 3.5

The externship course provides students with an opportunity to apply and integrate knowledge acquired through coursework. In clarifying and broadening career goals, the optional externship experience assists students in discovering, developing, and refining necessary competencies and skills for their proposed career objectives. Participation in and completion of the externship course is contingent on the student meeting all externship registration and participation requirements as defined by the Externship Handbook and is subject to site availability.

DATA SCIENCE

DSC101 Basic Statistics

Prerequisite: none

Credit Hours: 3.0

The Basic Statistics course will help students gain a fundamental understanding of statistical concepts that will be used throughout the Data Science program. Topics covered include probability, data types, common distributions, common descriptive statistics, and statistical inference.

DSC102 Statistical Programming

Prerequisite: none

Credit Hours: 3.0

The Statistical Programming course teaches students how to load R and R Studio onto their PC. Students will then learn basic scripting commands and will be introduced to a vast library of functions to perform various statistical analyses.

DSC103 Metrics and Data Processing

Prerequisite: none

Credit Hours: 3.0

The Metrics and Data Processing course will prepare students to be able to create new metrics that directly answer or monitor business questions. This module will also teach the theory and practice of statistical process control. Upon completion of this module, students will be equipped to help businesses monitor their processes and know when a process is out-of-control and needs to be fixed.

DSC104 Data Wrangling and Visualization

Prerequisite: DSO101, DSO108, & DSO109

Credit Hours: 3.0

The Data Visualization course is designed to help students understand that the heavy lifting in any analysis happens before the analytical procedure starts. Data wrangling is the process of changing the structure and format of raw data until the data is compatible with sometimes rigid requirements for analysis. Data wrangling also includes a quick sanity check of data quality. Data Visualization will give students an understanding and appreciation of the power in representing data graphically.

DSC105 Intermediate Statistics

Prerequisites: DSO101, DSO102, DSO108, & DSO109

Credit Hours: 3.0

The Intermediate Statistics course is designed to teach students about hypothesis testing under multiple scenarios. Students will be able to determine which hypothesis test to utilize and be able to perform that test. Students will also learn to identify and verify the data requirements for each hypothesis test.

DSC106 Machine Learning and Modeling

Prerequisites: DSO102, DSO108, & DSO109

Credit Hours: 3.0

The Machine Learning and Modeling course will introduce students to several commonly used machine learning methods. Students will learn how to determine the best methods for a given set of data, and how to use common software tools to utilize these methods.

DSC107 Introduction to Big Data

Prerequisites: DSO102, DSO104, & DSO109

Credit Hours: 3.0

The Introduction to Big Data course introduces students to Big Data on a conceptual level and gives students exposure and practice with several skills and tools currently in use. These skills will be taught at a manageable level, and then scale up methods will be used to help students grasp the meaning and popularity of analyzing substantial amounts of data. Students will learn the foundational concepts of Big Data and will know how to move from Big Data basics to more business specific needs and requirements.

DSC108 Databases

Prerequisites: None

Credit Hours: 3.0

This course is an introduction to working with and designing databases. Students will develop a foundational knowledge of database concepts, theory, and an overview of the various implementations and architectures.

DSC109 Programming Foundations

Prerequisites: None

Credit Hours: 3.0

This course will give students programming foundations in languages utilized in the industry. This course also provides a secure foundation upon which students can build upon as they progress through the program.

DSC110 Group Project

Prerequisites: none

Credit Hours: 7.0

The Group Project course combines each part of the program into a group project for the student. Each student will work together as a team member for the group project, which includes daily scrum meetings to cover tasks and progress while working separately to complete them. The final group project is due at the end of the course.

CYBERSECURITY**CYS100 Security Foundations*****Credit Hours: 3***

The Security Foundations course will help students gain a fundamental understanding of security concepts that will be used throughout the Cyber Security track. Topics covered include basic security concepts, threat actors and attributes, organizational security, policy, procedures and frameworks, security controls business impact analysis, risk management, incident response and disaster recovery.

CYS101 Networking Foundations***Credit Hours: 3***

The course will provide instruction in technical skills required in network administration and support. This course will include information on media, topologies, protocols and standards, network support, and the knowledge and skills to sit for network certification.

CYS102 System Administration***Credit Hours: 3***

The course will cover System Administration basics and will also provide a security orientated perspective. This course will include general system administration information on installing and configuring network components, OS familiarity and some scripting. Additional topics include threats, vulnerabilities, secure protocols, and secure system design.

CYS103 Network Defense***Credit Hours: 3***

The Network Defense course will give students an overview of the various hardware and software tools available to defend a network against attack. Students will use various tools to assess the security posture of an organization and understand the possible impact of various vulnerabilities. Additionally, this course will cover the concepts of penetration testing and vulnerabilities testing.

CYS104 Cryptography and Access Management***Credit Hours: 3***

The course will cover the different methodologies and concepts of Cryptography and Access management. Students will be exposed to different cryptography algorithms used to ensure safe transmission, storage, and use of sensitive data. Students will also learn how to implement various access management controls and account management practices.

CYS105 Logging and Monitoring***Credit Hours: 3***

The course will give students the knowledge and skills needed to properly analyze and interpret various security related logs produced by different security related technologies. This will focus on standard logs and Intrusion Detection and Prevention Systems. Students will also gain a basic understanding of forensics analysis and presented with such related topics as chain of authority.

CYS106 Programming Foundations

Credit Hours: 3

This course will give students programming foundations in languages utilized in the industry. This course also provides a secure foundation upon which students can build as they progress through the program.

CYS107 Web Application Security and Project Management

Credit Hours: 3

This course will teach students about Web Application Security and Project Management and is intended to be an introduction to these key concepts. Students will learn the mindset, discipline, and methods for securing a software project and traditional project management concepts with a focus on Agile software development methodology. Students will complete this course with both a theoretical model and specific technical knowledge.

CYS108 Threats and Vulnerabilities

Credit Hours: 3

The Threats and Vulnerabilities course will provide students with an in-depth look at the various threats and vulnerabilities faced by every organization and technology user. These will cover those related to hardware, software, and people, including a detailed review of Social Engineering as used by various threat actors. Students will be able to identify and compare several types of attacks and related impacts.

CYS110 Group Project

Credit Hours: 7

The Group Project course combines each part of the program into a group project for the student. Each student will work together as a team member for the group project, which includes daily scrum meetings to cover tasks and progress while working separately to complete them. The final group project is due at the end of the course.

STERILE PROCESSING

ALHT101 Medical Terminology

Course Prerequisite: none

Credit Hours: 3

This course introduces students to medical terminology: suffixes, prefixes, basis word structure, root words, abbreviations and applying the word building process for analyzing medical terms. Emphasis will be placed on defining and spelling anatomic structures and medical terminology related to Body Systems.

STP111 Fundamentals of Sterile Processing

Course Prerequisite: none

Credit Hours: 4

This course is designed for students interested in a health-related career. Foundational Anatomy and Physiology and basic principles of microbiology will be presented. Course competencies include decontamination, preparation and packaging for sterilization, sterilization process, and sterile storage. Basic surgical instrumentation and medical terminology that is necessary for this area of employment in the healthcare setting will also be presented.

STP112 Principles of Aseptic Techniques

Course Prerequisite: none

Credit Hours: 4

The fundamental principle of an aseptic technique/ANTT incorporates protecting key elements of the equipment that should remain free from micro-organisms, for example, the inside of a sterile dressing or the barrel of a sterile needle. During the course, the students will be introduced to the aseptic technique that consists of the following set of processes: creating a microorganism-free environment (sterile field), use of sterilized instruments and dressings, maintaining sterility of sterile field and instruments by preventing microbial contamination by contact with non-sterile

objects, such as the patient's body, the care provider body, non-sterile instruments, equipment, body fluids, etc., and finally antisepsis of point of entry and hands of task performer.

STP113 Sterile Processing Technology I

Course Prerequisite: none

Credit Hours: 4

This course is designed to introduce students to industry regulations and established practices used for central sterile processing which include federal agencies, professional organizations and critical roles and responsibilities associated with sterile processing technicians in healthcare settings. Sterile processing technicians play a crucial role in maintaining the integrity of medical equipment, ensuring patient safety, and preventing the spread of infections. This course will cover key aspects of the profession, including industry standards, best practices, and the essential skills required for success in the field.

PRO110 Professionalism in Healthcare

Course Prerequisite: none

Credit Hours: 2

This course is designed to prepare students for the career path with a focus on professional standards in the healthcare environment. The course will assist in improving soft skills, communication techniques, including electronically, and demonstrate a professional demeanor, to include attitude, behavior, and work ethic.

STP115 Sterile Processing Technology II

Course Prerequisite: ALH101, STP113

Credit Hours: 3

This course is designed to introduce students to industry regulations and established practices used for decontamination practices for point-of-use preparation and equipment transport; cleaning, decontamination, and disinfection practices for common instrumentation and equipment; equipment and tools used for the decontamination process; identification of standard and complex surgical instruments. Basic surgical instrumentation and medical terminology that is necessary for this area of employment in the healthcare setting will also be presented.

STP116 Quality Assurance, Inventory Management, and Recordkeeping

Course Prerequisite: ALH101

Credit Hours: 3

This course is designed to introduce students to monitoring and recordkeeping practices; established quality assurance practices for sterile processing operations; importance of inventory management; common inventory replenishment systems; the role of the central service department in supporting ancillary departments; management of patient care equipment; the use of information management systems in central service departments. Additional topics covered include; workplace safety and disaster preparedness; essentials of workplace communication, human relations, diversity, team collaboration, and customer service skills; importance of personal and professional development. Basic surgical instrumentation and medical terminology that is necessary for this area of employment in the healthcare setting will also be presented.

STP117 Sterilization Practices

Course Prerequisite: ALH101

Credit Hours: 4

This course is designed to introduce students to assembly and packaging guidelines and procedures; point-of-use processing standards and recommended practices; high temperature sterilization procedures; types of steam sterilizers used; low-temperature sterilization requirements; sterile storage and transportation guidelines. Additional topics include; review of standard calculations and solving simple equations encountered in entry-level technical positions. Students will be introduced to measurement systems and conversion concepts related to temperature and volume, English and Metric systems, and converting within and between systems. Basic surgical instrumentation and medical terminology that is necessary for this area of employment in the healthcare setting will also be presented.

STP118 Sterile Processing Technology III

Course Prerequisite: ALH101, STP115

Credit Hours: 1

This course is designed to expand students' exposure to more industry regulations and established practices used for decontamination practices for point of-use preparation and equipment transport; cleaning, decontamination, and disinfection practices for common instrumentation and equipment; equipment and tools used for the decontamination process; identification of standard and complex surgical instruments.

Tuition and Fees Breakdown

Ohio Affiliate Campuses

ADMINISTRATIVE FEES

The college reserves the right to revise any administrative fees without notice, except for tuition and fees defined in the student's Enrollment Agreement. Any refunds of administrative fees will be applied directly towards the student's open balance if any. If the refund results in a credit balance on the student's account, the refund will be issued to the student in the same form of payment. Students may be held responsible for damage to facility, equipment or any other MCC property and will be required to pay any charges or fees associated with the services, repairs and/or replacements.

Externship extension fee (monthly)	\$250
Lecture course audit fee	\$500
Lab course audit fee	\$900
Phlebotomy course audit fee	\$500
CPR Exam fee (includes CPR book)	\$60
Student ID card replacement fee	\$15
Commencement Registration fee	\$75+
Official Transcript fee (per copy) – ordered through Parchment	\$20+ per copy
Urgent Official transcript request fee – ordered through Parchment	\$25+per copy
Additional copies of Certificate of Completion (COC)	\$45 per copy
Urgent COC request fee	Additional \$25
Returned check/check reissuance/failed transaction/cancelled transaction	\$35
Criminal background check fee (payable directly to the vendor)	\$35+
Payment Plan Set-up Fee	\$100
Additional Uniform Scrub Set	\$36
Uniform Exchange Fee	\$10
Replacement 1098T	\$10

FEES FOR LATE OR DELINQUENT PAYMENT

A late or delinquent payment fee charge will be applied to all balances that are still outstanding 10 calendars days after the payment was due. The amount of the fee will be determined by the amount of the balance that is outstanding: 5% of the delinquent payment amount or \$10 whichever is greater.

The college has the right to send all outstanding balances to collections after reasonable efforts have been made to settle the outstanding balance. All amounts sent to collections will include delinquency fees and collection fees that will become an indisputable part of the outstanding balance.

EXTERNAL FEES

External fees are not paid directly to Midwestern Career College (MCC) and are outside of the college's control. All costs are estimated, and prices are subject to change without notice or MCC's knowledge. Examples include, but are not limited to the fees to cover the cost of shipping, vaccination, physical exam, background check, costs for travel to and from school and clinical education site, site-specific vaccination and drug screening requirements, site-specific uniform costs, or any other additional costs imposed by a third-party service, clinical site, certification, and/or credentialing agencies among others.

GENERAL EDUCATION COURSES COST PER CREDIT FOR MCC GRADUATES

MCC graduates who wish to take select General Education classes after completing a certificate or associate level program at MCC will be charged \$250 per credit hour. The discount does not apply to students who completed ESL programs.

PROGRAM TUITION AND FEES – OHIO AFFILIATE CAMPUSES

ASSOCIATE OF APPLIED SCIENCE IN DIAGNOSTIC MEDICAL IMAGING RADIOGRAPHY

Application fee: \$0

Tuition per term:

FT 12+ credits: \$7,425

PT 11-9 credits: \$6,795

PT 8-6 credits: \$6,165

PT 5 or fewer credits: \$625 per attempted credit

Externship (clinical): \$7,425

\$2,475 per 270-hour course with 810 on-site clinical hours total (3 clinical courses) required for the program completion.

Externship/clinical tuition charges are applied in the term in which clinical course(s) are scheduled. Clinical courses 1, 2, and 3 are typically scheduled and charged in Terms 3, 4, and 5 respectively. However, clinical scheduling rules dictate that the credit load of a clinical course must be assigned in the term in which most clinical hours for that course are scheduled to be completed. This stipulation along with clinical site availability may result in more than one clinical course scheduled in any term. Whenever two clinical courses are scheduled in one term, the charges for one of the clinical courses may be shifted to the following term if applicable.

Under normal circumstances, tuition charges plus externship/clinical course(s) charges will not exceed a combined charge of \$7,425 in any single term, unless additional didactic courses are scheduled due to course repeats, retakes, etc.

Learning Management System Fee: \$200 per term

Technology fee: \$450 per term

Castle Branch fee: \$150

Estimated program book cost:

Option 1: 2,863.00 (Cengage Unlimited E-books ,2-year access \$330.00, library database for two (2) book titles, and hard copies \$2,533.00)

Option 2: \$5,774 (hard copies)

Estimated dosimetry badge fee: \$100

Students participating in clinical externship as part of the AAS in Diagnostic Medical Imaging Radiography program may be required to wear dosimetry badges whenever on site. MCC will issue the badges to students as needed, but the students are responsible for covering the costs for the duration of the clinical assignment. The fee is estimated and is subject to change. If the badge is not returned to MCC within 2 weeks of becoming inactive will be charged a non-return fee of \$50.

Additional out-of-pocket program costs:

Additional out-of-pocket program costs may be incurred. Additional external fees are not paid directly to Midwestern Career College (MCC). All costs are estimated, and prices are subject to change without notice or MCC's knowledge. Examples include but are not limited to the fees to cover the cost of vaccination, drug screening, physical exam, and background check, among others that may be applicable. Estimates below do not include costs for travel to and from school and clinical education site, site-specific vaccination and drug screening requirements, site-specific uniform costs, or any other additional costs imposed by clinical sites, certification, and/or credentialing agencies among others. Students should also refer to the catalog and their enrollment agreement for more information on program specific and/or administrative fees.

Estimated additional fees:

Malpractice Insurance: \$40
Cost of physical exam: varies
Cost of immunizations: varies
Criminal background check: \$30-\$55
CPR training: \$60*
Xray Markers: \$20
ARRT Radiography (R): \$225

ASSOCIATE OF APPLIED SCIENCE IN MAGNETIC RESONANCE IMAGING (MRI) TECHNOLOGY

Application fee: \$60

Tuition per term:

FT 12+ credits: \$8,400
PT 11-9 credits: \$7,675
PT 8-6 credits: \$6,975
PT 5 or fewer credits: \$820 per attempted credit

Externship (clinical): \$8,400

\$2,800 per 270-hour course with 810 on-site clinical hours total (3 clinical courses) required for the program completion.

Externship/clinical tuition charges are applied in the term in which clinical course(s) are scheduled. Clinical courses 1, 2, and 3 are typically scheduled and charged in Terms 3, 4, and 5 respectively. However, clinical scheduling rules dictate that the credit load of a clinical course must be assigned in the term in which most clinical hours for that course are scheduled to be completed. This stipulation along with clinical site availability may result in more than one clinical course scheduled in any term. Whenever two clinical courses are scheduled in one term, the charges for one of the clinical courses may be shifted to the following term if applicable.

Under normal circumstances, tuition charges plus externship/clinical course(s) charges will not exceed a combined charge of \$8,400 in any single term, unless additional didactic courses are scheduled due to course repeats, retakes, etc.

Learning Management System Fee: \$200 per term

Technology fee: \$450 per term

Castle Branch fee: \$150

Estimated program book cost:

Option 1: \$442 (Cengage Unlimited E-books, 2-year access \$330.00, free library e-books and one optional hard copie for \$112)

Option 2: \$3,680 (hard copies)

Additional out-of-pocket program costs:

Additional out-of-pocket program costs may be incurred. Additional external fees are not paid directly to Midwestern Career College (MCC). All costs are estimated, and prices are subject to change without notice or MCC's knowledge. Examples include but are not limited to the fees to cover the cost of vaccination, drug screening, physical exam, and background check, among others that may be applicable. Estimates below do not include costs for travel to and from school and clinical education site, site-specific vaccination and drug screening requirements, site-specific uniform costs, or any other additional costs imposed by clinical sites, certification, and/or credentialing agencies among others. Students should also refer to the catalog and their enrollment agreement for more information on program specific and/or administrative fees.

Estimated additional fees:

Malpractice Insurance: \$40
Cost of physical exam: varies
Cost of immunizations: varies
Criminal background check: \$35+
CPR training: \$60
ARRT Magnetic Resonance Imaging (MRI): \$225
NCCT National Certified Phlebotomy Technician (NCPT): \$119
AMT Registered Phlebotomy Technician (RPT): \$125

CLINICAL MEDICAL ASSISTING

Application Fee: \$0

Tuition per term

Terms 1-2: \$3,500 per term

Term 3: \$1,890

Learning Management System Fee: \$0 per term

Technology fee: \$0 per term

Castle Branch fee: \$0 per term

Estimated program book cost

Option 1: \$0 E-books are available through MCC's Education Unlimited Program.

Option 2: \$246 (hard copies)

Education Unlimited Program: as part of MCC's Education Unlimited Program, Clinical Medical Assisting students can receive free 1-year access to e-books (estimated \$180 value).

If a student already owns a laptop, they can choose to receive 1-year e-book access with \$100 credit towards 2nd term tuition and opt out of receiving a laptop. The laptops are typically issued 30 days after the program start date. If a student withdraws from the program for any reason, the laptop must be returned in like-new condition or the student's account will be charged with \$300 fee.

Additional out-of-pocket program costs:

Additional out-of-pocket program costs may be incurred. Additional external fees are not paid directly to Midwestern Career College (MCC). All costs are estimated, and prices are subject to change without notice or MCC's knowledge. Examples include but are not limited to the fees to cover the cost of vaccination, drug screening, physical exam, background check(s), among others that may be applicable. Estimates below do not include costs for travel to and from school and clinical education site, site specific vaccination and drug screening requirements, site-specific uniform costs, or any other additional costs imposed by clinical sites, certification, and/or credentialing agencies, among others. Students should also refer to the catalog and their enrollment agreement for more information on program specific and/or administrative fees.

Estimated additional fees:

Malpractice Insurance: \$40
Cost of physical exam: varies
Cost of immunizations: varies
Criminal background check: \$30-\$55
Stethoscope: \$20
Blood pressure cuff: \$40
CPR training: \$60
NCCT National Certified Phlebotomy Technician (NCPT): \$119*
NCCT National Certified ECG Technician (NCET): \$119
NCCT National Certified Medical Assistant (NCMA): \$119
AMT Registered Phlebotomy Technician (RPT): \$125 (Requires additional 25 (total of 50) venipuncture and 10 skin punctures)

AMT Registered Medical Assistant (RMA): \$135*
CMA American Association of Medical Assistants (AAMA): \$125 AAMA Members; \$250 nonmembers
NHA Certified EKG Technician (CET): \$125
NHA Certified Phlebotomy Technician (CPT): \$125
NHA Medical Assistant (CCMA): \$160

CYBERSECURITY

Application fee: \$60

Tuition per term:

FT 12+ credits: \$7,475
PT 9-11 credits: \$6,975
PT 6-8 credits: \$6,475
PT 5 or fewer credits: \$525 per attempted credit

Estimated program book cost (book options and costs are preliminary and subject to change):

\$650 Cengage Unlimited, & \$0 Library Database E-books

Learning System Management Fee: \$200 per term

Technology fee: \$250 per term

Additional out-of-pocket program costs:

Additional out-of-pocket program costs may be incurred. Additional external fees are not paid directly to Midwestern Career College (MCC). All costs are estimated, and prices are subject to change without notice or MCC's knowledge. Examples may include but are not limited to the fees to cover the cost of vaccination, drug screening, physical exam, and background check, among others that may be applicable.

Estimates below do not include costs for travel to and from school and externship site, site-specific vaccination and drug screening requirements, site-specific uniform costs, or any other additional costs imposed by externship sites, certification, and/or credentialing agencies, among others.

Estimated additional fees:

Criminal background check: \$30-\$55
CompTIA IT Fundamentals (ITF+): \$138.00
CompTIA Security+: \$404.00

DATA SCIENCE

Application fee: \$60

Tuition per term:

FT 12+ credits: \$7,475
PT 9-11 credits: \$6,975
PT 6-8 credits: \$6,475
PT 5 or fewer credits: \$525 per attempted credit

Estimated program book cost (book options and costs are preliminary and subject to change):

\$650 Cengage Unlimited & \$0 Library Database E-books

Learning System Management Fee: \$200 per term

Technology fee: \$250 per term

Additional out-of-pocket program costs:

Additional out-of-pocket program costs may be incurred. Additional external fees are not paid directly to Midwestern Career College (MCC). All costs are estimated, and prices are subject to change without notice or MCC's knowledge. Examples may include but are not limited to the fees to cover the cost of vaccination, drug screening, physical exam, and background check, among others that may be applicable.

Estimates below do not include costs for travel to and from school and externship site, site-specific vaccination and drug screening requirements, site-specific uniform costs, or any other additional costs imposed by externship sites, certification, and/or credentialing agencies, among others.

Students should also refer to the catalog and their enrollment agreement for more information on program-specific and/or administrative fees.

Estimated additional fees:

Criminal background check: \$30-\$55

CompTIA A+: \$253.00

CompTIA Data+: \$253.00

STERILE PROCESSING

Application fee: \$0

Tuition per term: Terms 1-2: \$3,490 per term

Learning Management System Fee: \$0 per term

Technology Fee: \$0 per term

Estimated program book cost (paid by MCC):

Option 1: \$0 E-books and hard copies are available through MCC's Education Unlimited Program. See details below.

Option 2: \$484 (hard copies)

Education Unlimited Program: as part of MCC's Education Unlimited Program, Sterile Processing students can receive free 1-year access to e-books (estimated \$180 value).

Additional out-of-pocket program costs:

Additional out-of-pocket program costs may be incurred. Additional external fees are not paid directly to Midwestern Career College (MCC). All costs are estimated, and prices are subject to change without notice or MCC's knowledge. Examples include but are not limited to the fees to cover the cost of vaccination, drug screening, physical exam, and background check, among others that may be applicable. Estimates below do not include costs for travel to and from school and clinical education site, site specific vaccination and drug screening requirements, site-specific uniform costs, or any other additional costs imposed by clinical sites, certification, and/or credentialing agencies, among others. Students should also refer to the catalog and their enrollment agreement for more information on program specific and/or administrative fees.

Estimated additional fees:

Malpractice Insurance: \$40

Cost of physical exam varies

Cost of immunizations varies

Criminal background check: \$30-\$55

CPR training: \$60

CBSPD Certified Sterile Processing and Distribution Technician (CSPDT): \$125



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