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# Marion

## Technical College

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**ACADEMIC CATALOG 2019-20**

## MTC AT A GLANCE

In 1971, **Marion Technical College (MTC)** began a history of service, opening its doors to 187 students enrolled in four technical programs. To date, over 50,000 students have attended classes in more than 40 associate degree and certificate programs in Arts and Sciences, Business, Engineering, Allied Health, Information, Nursing, and Public Service technologies.

Over the years, MTC has developed courses and programs to meet the educational needs of the community, preparing over 10,000 associate degree graduates for dynamic professional and technical careers. Faculty and staff use national and regional career data and partnerships with employers and other professionals to develop programs that match current and future workplace needs and university transfer opportunities.

Additionally, the College's Workforce Solutions department continues to creatively meet the needs of business and industry - employee testing and evaluation, job analysis, consulting, and customized training.

To support student success among a diverse student body, MTC offers a full range of career services, financial aid counseling, tutoring, recreational activities, a bookstore, computer labs, organizations, technology and publications.

An important part of attending college is making friends and memories. MTC sponsors various clubs and organizations, intramural athletics, unique outdoor pursuit programs, recreational and common areas, a gymnasium, aerobics and weight room facilities, meeting rooms, wireless Internet lounges, and a full-service library.

Throughout the school year, a schedule of fun-filled campus events and activities provides students with opportunities to meet and interact with new and old friends, college staff, and members of the Marion community. Marion Technical College is located on a 180-acre campus just east of the city of Marion on State Route 95, sharing facilities with The Ohio State University at Marion (OSUM).

## Why Choose MTC?

### AFFORDABILITY:

As a state-supported college, MTC offers high quality education at an affordable cost. When compared to other institutions, MTC's average annual cost (tuition and fees) is 57% less than the average cost for Ohio's public four-year universities (main campuses).

To further assist students, MTC offers a variety of financial aid program, providing access to a variety of grants, loans, scholarships, student employment opportunities and other financial aid resources. Last year, the college awarded more than \$6 million in financial assistance to help make college more affordable.

### CONVENIENCE:

MTC is easily accessible from most area communities. For Marion area residents attending MTC, this means avoiding commutes and the expenses of living away from home. MTC also offers convenience with basic services such as parking.

MTC serves students from Marion, Delaware, Crawford, Morrow, Wyandot, Hardin, and Union counties, as well as students who commute from surrounding counties.

MTC offers limited courses at our extension campus at the Crawford County Success Center located at 130 N Walnut St. Bucyrus, OH 44820

### FLEXIBILITY:

Today's students often face the task of balancing education with work and family responsibilities.

Classes at MTC are offered during days, evenings, weekends, online, and at various locations each term to allow students to develop a schedule that matches their needs. MTC also offers one-time-per-week programs tailored to the needs of working adults.

The academic year is divided into two major terms (fall and spring) of 15 weeks plus one exam week each, and a summer term, which is 8 weeks inclusive of exams. Semesters begin in August, January and June; however, an increasing number of courses are flexibly scheduled, beginning and ending at varying times. Add to this the growing number of online classes, concentrated formats, and distance learning options, and you'll see that MTC puts you in the driver's seat of your education.

Marion Technical College is proud of its rich history of serving students and the community. The following sections will help you learn more about the College and what you can expect from a Marion Technical College education.

### QUALITY:

Courses and programs at MTC are designed by faculty in cooperation with employers to equip students with the skills, knowledge and competence they will need in the workplace and/or to transfer to another college or university to continue their education.

All programs use **advisory committees** comprised of education, industry, business and community leaders and practitioners to advise College faculty and staff on employment needs, transfer opportunities, course and program content, learning assessment, facilities, policies and equipment. These advisory committee members ensure that programs are developed and operated in accordance with the needs of the community and reflect the latest employment trends and practices.

Additionally, through the Student Learning Assessment process, faculty continuously improve teaching and learning and ensure that students are assessed in accordance with employers' expectations. MTC students also succeed when they transfer to a four-year university or college.

MTC's programs are approved by and meet or exceed state educational guidelines set by the Ohio Department of Higher Learning (ODHE), the Higher Learning Commission (HLC), and other national accrediting agencies

A major quality focus at MTC is faculty selection and development. The 150 full-time and community faculty members are academically and professionally competent faculty who possess a wealth of professional experience and formal education. They are chosen selectively on the basis of their academic qualifications, professional experience, technical expertise, and commitment to the MTC's educational mission and purpose. Full-time faculty often pursue advanced degrees and credentials that augment their teaching and/or complete externship experiences that put them into the workforce to experience the job environments MTC graduates will face.

#### **PERSONAL ATTENTION:**

Small class sizes at MTC facilitate high levels of interaction between instructors and students. MTC uses an advising system and tutoring program that supports the needs of individual students.

Each year, many students transfer in to MTC from larger colleges to experience smaller class sizes and more personal attention.

#### **WORKPLACE EXPERIENCE:**

Nearly all applied degree programs at MTC incorporate one or more structured workplace experiences to link students' classroom/lab skills to on-the-job experiences. Each experience (clinical, practicum, co-operative education, internship, etc.) is supervised by faculty and participating employers who serve in their role as "workplace mentors."

A number of MTC students have been hired by sponsoring employer sites after graduation.

#### **TRANSFER PROGRAMS:**

Many options for transferring your MTC credits to other colleges and universities are available. See pages 8-9 for details.

#### **VISION AND MISSION:**

**Vision** – *A highly-educated workforce elevates quality of life and contributes to a thriving community.*

**Mission** – *Provide the region's most accessible, supportive, and personal pathway to career success.*

#### **CORE VALUES:**

**Innovation** – **Improve continuously through learning, teaching, technology, and training.**

**Diversity** – **Provide pathways to success for all in a wide range of fields.**

**Integrity** – **Earn trust by doing what we say we will do.**

**Community** – **Shape better places to learn, live, work, and grow.**

**People** – **Commit to the success of each person we teach, engage, and employ.**

#### **ACCREDITATION:**

The process of accreditation consists of a formal external review that assures that the college and individual programs meet stringent national standards of excellence. Individual program accreditation further ensures quality curriculum that enables graduates to qualify for applicable certification examinations and/or licensures.

#### **MTC**

Marion Technical College is accredited by the [Higher Learning Commission](#). In addition, MTC is approved by the Ohio Board of Nursing, Ohio Bureau of Vocational Rehabilitation, the Ohio College Association, the Ohio State Department of Vocational Education, and the State Approving Agency for Veteran Training.

#### **Diagnostic Medical Sonography Program**

The Marion Technical College Diagnostic Medical Sonography Program is currently accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). This accreditation is granted only after recommendation by the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS) based on a programmatic review and site visit. Recognition by CAAHEP qualifies the Program's graduates for eligibility to apply for and take the following certification examinations for the American Registry of Diagnostic Medical Sonography (ARDMS): Sonography Principles and Instrumentation, Abdominal Sonography, Obstetrical and Gynecological Sonography. (CAAHEP, 1361 Park Street, Clearwater, FL 33756, 727-210-2350, 727-210-2354 (fax), [www.caahep.org](http://www.caahep.org)). (JRC-DMS, 2025 Woodlane Dr., St Paul, MN 55125-2998, 651-731-1582, [www.jrcdms.org](http://www.jrcdms.org)). (Certification: Program graduates are eligible to apply for and take certification exams from the following agencies: (ARDMS, 1401 Rockville Pike, Suite 600 Rockville, MD 20852-1402, Tel: 301.738.8401 or 800.541.9754 Fax: 301.738.0312, [www.ardms.org](http://www.ardms.org)) (ARRT, 1255 Northland Dr., St. Paul, MN 55120, 651- 687-0048).

### **Health Information Technology Program**

The Health Information Technology associate degree program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Graduates of the MTC program qualify for accreditation in the health information management field by passing the national certification examination requirements of the American Health Information Management Association (AHIMA). Upon successful completion of the examination, the graduate is awarded the credential of a registered health information technician (RHIT).

### **Medical Assisting Program**

The Medical Assisting program at Marion Technical College is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of Medical Assisting Education Review Board (MAERB). Commission on Accreditation of Allied Health Education Programs, 25400 US Highway 19 North, Suite 158, Clearwater, FL 33763, 727-210-2350, [www.caahep.org](http://www.caahep.org).

### **Medical Laboratory Technology Program**

MTC's Medical Laboratory Technology program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 North River Rd., Suite 720, Rosemont, IL 60018, 773-714-8880, [www.naacls.org](http://www.naacls.org).

### **Nursing Technology Program**

The MTC Nursing Program is approved by the Ohio Board of Nursing and is accredited by the Accreditation Commission for Education in Nursing, Inc. (ACEN, 3343 Peachtree Rd. NE, Suite 850, Atlanta, GA 30326, telephone: 404-975-5000, website: [www.acenursing.org](http://www.acenursing.org)).

### **Occupational Therapy Assistant Program**

The Marion Technical College Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE), ACOTE, c/o Accreditation Department, American Occupational Therapy Association (AOTA), 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449, (301) 652-2682, e-mail: [accred@aota.org](mailto:accred@aota.org), website: [www.acoteonline.org](http://www.acoteonline.org). The MTC OTA Program received accreditation in 2011.

### **Physical Therapist Assistant Program**

The Physical Therapist Assistant program at MTC is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) of the American Physical Therapy Association (CAPTE, 1111 North Fairfax St., Alexandria, VA 22314; telephone: 703-706-3245; e-mail: [accreditation@apta.org](mailto:accreditation@apta.org); web site: [www.capteonline.org](http://www.capteonline.org)).

### **Radiography Program**

The Radiography program is accredited by the Joint Review Commission on Education in Radiologic Technology (JRCERT, 20 North Wacker Dr., Suite 2850, Chicago, IL 60606, 312-704-5300, [www.jrcert.org](http://www.jrcert.org)).

### **Respiratory Therapy**

Marion Technical College, North Central State College and Rhodes State Community College have entered into academic affiliations in order to offer an *associate degree in Respiratory Care* to MTC students. These agreements allow MTC students to take general studies courses at MTC, and a blend of technology courses from North Central or Rhodes State. The plan allows for clinical experiences available close to Marion.

A very important aspect of these programs is that these seats are reserved for qualified MTC students or individuals living in MTC's service area.

## **STUDENT SERVICES:**

### **Admission**

Marion Technical College has an open door admission policy – if you are a high school graduate or have successfully completed your high school equivalency Test (GED®, HiSet, TASC), you are eligible for admission to the college as a General Admission Student. If you do not meet these criteria, you may still be eligible for admission.

Certain academic programs are limited in enrollment. You should submit the MTC Application for Admission to the MTC Office of Admission well in advance of your intended starting date. For programs having available seats, early application is not necessary; however, a timeframe of three months in advance of your intended start date is recommended. High school students should apply early during their senior year, especially if applying for financial aid.

E-mail any questions regarding admission criteria or procedures to [enroll@mtc.edu](mailto:enroll@mtc.edu).

### **Advising**

The College provides you with advising for your major or program throughout your enrollment. After you have met with an admission counselor and selected a major/program, you typically will meet with a department member from your chosen major/program to discuss course and program requirements and a study plan. Your first semester class schedule will usually be developed at this time so that you

may register for classes. You should see your dean, director, or program coordinator for advising until you receive the name of your permanent academic advisor.

Students must meet with their academic advisor at the times listed in the box below. All students are encouraged to meet with their advisors when they have questions, experience problems, or fail to progress satisfactorily in their classes.

You must meet with your academic advisor at the following times:

- Prior to registering for 1st term classes.
- Prior to registering for 2nd term classes.
- After completing 30-40 credit hours.
- Prior to the term you plan to graduate.
- After an absence of one year or longer from MTC.
- If you change your major/program.

### **Registration**

Registration for MTC classes is conducted each term on-campus and at select off-campus locations. Upon request, registration can also be offered at company locations. Online registration is offered for continuing students.

For each term you wish to be enrolled, you must register for courses, complete appropriate paperwork, and pay all required tuition and fees.

It is the student's responsibility to provide updated contact information to the Office of Student Records.

Specific registration dates and details are available in the Student Handbook, the class schedule, from the Office of Student Records and at [www.mtc.edu](http://www.mtc.edu).

### **Selective Service Registration**

Ohio Revised Code, Section 3342.52 requires that all eligible students register for selective service in order to qualify for various benefits. Marion Technical College and other publicly assisted institutions are required to certify eligible students' registrations to the Ohio Department of Higher Education.

If you are a male between the ages of 18 and 26, you must register for selective service. Failure to register will result in the college being required to charge out-of-state tuition and fees. Also, eligible students not registered for selective service are not eligible for state and federal financial aid. You can register for selective service at any area post office or via [www.sss.gov](http://www.sss.gov).

### **Student Resource Center**

Located in Room 183 of the Technical Education Center, the Student Resource Center (SRC) is a hub of support and services for MTC students. It provides students, faculty, and staff with a variety of academic materials, services and equipment. The SRC is your resource for:

- Tutoring
- Audiovisual Equipment
- Educational Materials
- Mentorship Program
- Make-Up Testing
- Study Areas
- Counseling
- Disability Services

Students without ACT scores should meet with SRC personnel to complete placement testing, a requirement for all students before selecting initial English and/or math courses. Placement testing is offered free and is designed to help match you with the appropriate courses for your current academic skill level. Assessments are also made in the areas of writing, reading, and mathematics.

Additionally, students must complete the Technology Skills Test to gauge their general computer and keyboarding skills.

Placement testing and technology skills testing can take up to two hours, so students are encouraged to drop by and discuss testing times and requirements with SRC staff. Students should complete all testing before meeting with an advisor to ensure placement in appropriate classes.

Policies and procedures regarding testing may be found in the Student Handbook.

Additionally, the SRC houses MTC's Office of Disabilities. In order for the College to best meet the needs of students with special requirements, students with disabilities and learning challenges are strongly encouraged to introduce themselves to the SRC personnel prior to their first term of attendance at MTC, or as soon as possible. The SRC personnel will help develop learning strategies and advocate on students' behalf reasonable accommodations as they relate to physical, mental, and/or emotional disabilities.

The Student Resource Center is open Monday through Saturday, including most evenings. Services are free of charge to all MTC students. See the Student Handbook for more details about SRC-sponsored services.

## **Career Services**

MTC's Office of Career Services provides a career planning program to help you make important educational and occupational decisions throughout your academic career ... and beyond.

To explore career fields and set career goals, MTC Works! provides career interest inventory exercises, [Career Coach](#), a variety of employment/career search literature, career counseling services, and computer-assisted career planning services. More and more undecided students are using web-based career information systems and online interest inventories to help match interests with career fields and occupational skills. MTC's Career Services assists students with resources to research virtually any occupational field, academic major, and college in the country.

While attending MTC or once a student nears graduation or completes training, MTC's Career Services can assist with job search and possible placement in a rewarding, challenging job. Although the college cannot guarantee a job, MTC Career Services can assist with résumé development, job search assistance, interview preparation, job opening announcements, and the College Central Network. This online system allows students/alumni to post resumes for employers to search and review job postings from potential employers.

## **ARTS AND SCIENCES DEPARTMENT:**

### **Associate of Arts Degree**

The purpose of these baccalaureate-oriented associate degrees is to enable students: (1) to transfer to colleges and universities and earn baccalaureate degrees; or, (2) to enable students to terminate academic study after two years with recognition of academic achievement by earning an associate degree. This degree will provide students with the opportunity to affordably complete their first two years of the baccalaureate degree and transfer credit to public four-year colleges and universities.

The Associate of Arts (AA) is the first two years of coursework that applies to a Bachelor of Arts (BA) degree. The AA degree is a two-year liberal arts/general education degree comprised of courses that emphasize English, the social and behavioral sciences, arts and humanities, mathematics, and natural sciences. Graduates of this program will have the general education necessary to pursue a bachelor's degree at most four-year colleges and universities as juniors.

### **Associate of Science Degree**

The purpose of these baccalaureate-oriented associate degrees is to enable students: (1) to transfer to colleges and universities and earn baccalaureate degrees; or, (2) to enable students to terminate academic study after two years with recognition of academic achievement by earning an associate degree. This degree will provide students with the opportunity to affordably complete their first two years of the baccalaureate degree and transfer credit to public four-year colleges and universities.

The Associate of Science (AS) is the first two years toward a Bachelor of Science (BS) degree. The AS degree is a two-year, liberal arts/general education degree with an emphasis in English, the social and behavioral sciences, arts and humanities, mathematics, and natural sciences. Graduates of this program will have the general education necessary to pursue a bachelor's degree at most four-year colleges and universities as juniors.

### **Mission**

The mission of MTC's Arts and Sciences Department (A&S) is to provide a foundation for all academic programs. The A&S curricula provide educational support and course development in response to the identified needs of the community, including those of business and industry. Department members do their utmost to stimulate and maintain an environment of respect and encouragement so that optimum learning can occur.

General studies courses are designed not only to give you the necessary foundation, knowledge, and skills for completing courses in a technical specialty, but also to prepare you to be an active, interested, and productive member of the community. Certain general studies courses are required for associate degree and certificate programs, while others may be taken as electives or for personal enrichment. General studies courses are typically transferrable to other colleges and universities. Descriptions of these courses can be found in this catalog.

## **COLLEGE FOUNDATION COURSES:**

Through its Arts and Sciences Department, MTC offers a variety of courses specifically designed to enhance the skills of adults re-entering the academic setting after an extended absence, and to help prepare those who have not taken college preparatory courses in high school or whose performance in high school was inadequate to be successful at the college level.

The college assesses readiness for college-level course work through measures such as placement tests, review of high school experiences, and academic advising conferences. Students who appear to need services beyond those provided by the college will be referred to the appropriate schools, agencies, or other resources in the communities served by the college.

### **College Foundation Courses**

Reading Enrichment (ENG 0970)

Preparation for College Writing (ENG 0991)

Mathematical Literacy (MTH 0910)

Algebraic Literacy (MTH 0920)

#### **CREDIT BY EXAMINATION:**

Students may be permitted to progress to more advanced work in a particular program if they can demonstrate college-level competency. If students have qualifications from previous education, job training, self-study, occupational, or other experiences, they may be able to earn credit in certain courses by successfully completing a proficiency examination.

A maximum of 22 hours of credit may be earned through exam. A per credit hour, nonrefundable fee must be paid to the Business Office before a proficiency examination is taken.

For more information concerning the Arts and Sciences credit-by-exams, contact the administrative assistant at 740.386.4132.

#### **TRANSFER MODULE AND TRANSFER ASSURANCE GUIDE:**

The Ohio transfer program has been authorized under H.B. 95. Individuals who successfully complete the Ohio Transfer Module at one institution will be considered to have met the Transfer Module requirements of the receiving institution. Approved Transfer Module courses, when taken individually, are also guaranteed for transfer among public institutions on a course-by-course basis and are to be applied to the Transfer Module of the receiving institution.

A **Transfer Assurance Guide** (TAG) course is a course that has been matched to a set of learning outcomes (identified by an OAN code) in a specific academic subject area. Approved TAG courses carry the guarantee that the courses and their credits will transfer and apply toward the major at any of Ohio's public institutions of higher education, provided they were taken when the courses were equivalent. Further Ohio transfer information may be obtained at <https://www.ohiohighered.org/transfer>.

#### **Responsibilities of Students**

##### Completing transfer module courses or using transfer services

In order to facilitate transfer with maximum applicability of transfer credit, prospective transfer students should plan a course of study that will meet the requirements of a degree program at the receiving institution. Specifically, students should identify a major and college to which they desire to transfer before they begin scheduling MTC classes, or at the latest, very early in their collegiate studies. For example, students should determine if there are language requirements or any special course requirements that must be met during the freshmen or sophomore year. This will enable students to plan and pursue a course of study that will articulate well with the receiving institution's major. Students are encouraged to seek further information regarding transfer from both their advisor and the college or university to which they plan to transfer.

# APPROVED TRANSFER COURSES

Marion Technical College's  
Guide to Transferring Ohio College Credit

Effective Fall 2016

MTC Course #	MTC Course Name	37 Courses		52 Courses		CTag	CTag Ohio ID #
		OTM	OTM Ohio ID #	TAG	TAG Ohio ID #		
ACC 1400	Financial Accounting			✓	OBU001		
ACC 1700	Managerial Accounting			✓	OBU001		
AET 1000	Intro to Alternative Energy			✓	CRE001		
ALH 1110	Medical Terminology			✓	OHL020		
ALH 1120	Human Diseases			✓	OHL019		
BUS 2150	Legal Environment of Business			✓	OBU004		
BIO 1100	General Biology	✓	TMNS				
BIO 1101Z	Biology 1101 <i>(OSUM course that MTC students can take for OTM transfer)</i>	✓	TMNS				
CHM 1200	Chemistry I	✓	TMNS	✓	OSC008		
CHM 1250	Chemistry II	✓	TMNS	✓	OSC009		
CHM 1200/CHM 1250 <i>Sequence</i>	Chemistry I & Chemistry II <i>(Sequence of 2 courses)</i>			✓	OSCO23 <i>Sequence</i>		
CIT 1351	IT Essentials/A+					✓	CTIT003 & CTIT004
CIT 1610	Networking Fundamentals CISCO I					✓	CTIT007
CIT 1700	Intro to Visual Programming and Databases					✓	CTIT012
CIT 2200	Supporting a Microsoft Server OSMCSE II					✓	CTIT013
CIT 2621	Routing and Switching Essentials/CISCO II					✓	CTIT008
CIT 2631	Scaling Networks/CISCO III					✓	CTIT009
CIT 2641	Connecting Networks/CISCO IV					✓	CTIT010
CRJ 1000	Introduction to Criminal Justice			✓	OSS031		
CRJ 1500	Criminology			✓	OSS034		
CRJ 1600	Introduction to Corrections			✓	OSS033		
ECN 2000	Microeconomics	✓	TMSBS	✓	OSS004		
ECN 2100	Macroeconomics	✓	TMSBS	✓	OSS005		
EET 1210	Digital Circuits			✓	OET002 <i>Sequence</i>	✓	CTEET002 <i>Sequence</i>
EET 1500	Circuit Analysis I			✓	OET001		
EET 1550	Circuit Analysis II			✓	OET003		
EET 2300	Electronics			✓	OET005		
ENG 1000	English Composition I	✓	TME001				
ENG 1100	English Composition II	✓	TME002				
ENG 1200	Business Communications			✓	OBU005		
ENG 1400	Oral Communications	✓	TMCOM	✓	OCM004		
ENG 1500	Interpersonal Communications			✓	OBU002		
ENG 2000	Early American Literature	✓	TMAH	✓	OSH053		
ENG 2100	Modern American Literature	✓	TMAH	✓	OAH054		
ERT 1100Z	Earth Science 1000 <i>(OSUM course that MTC students can take for OTM transfer)</i>	✓	TMNS				
GET 1000	Intro to Engineering			✓	OES001		
GET 2300	Engineering Statistics			✓	OES004		
HIT 1400	Health Care Reimbursement			✓	OHL022		
HIT 2000	HIT Legal Issues			✓	OHL021		
HSS 1010	Intro to Social Welfare			✓	OSS030		
HSS 1040	Intro to Social Work			✓	OSS029		
HSS 1060	Abnormal Psychology	✓	TMSBS	✓	OSS017		
HSS 2020	Ethnic & Cultural Diversity	✓	TMSBS	✓	OSS024		
HST 1500	Early American History	✓	TMSBS	✓	OHS043		
HST 1600	Modern American History	✓	TMSBS	✓	OHS044		
HST 1500/HST 1600 <i>Sequence</i>	Early American History & Modern American History <i>(Sequence of 2 courses)</i>			✓	OHS010 <i>Sequence</i>		
HST 1700	Western Civilization I	✓	TMAH				
HST 1800	Western Civilization II	✓	TMAH				
HUM 1400	Introduction to Logic	✓	TMAH				
MED 1010	Medical Assisting Clinical Procedures I					✓	CTMAT008
MED 1021	Medical Office Procedures					✓	CTMAT011
MED 1021/ MED 1040 <i>Sequence</i>	Medical Office Procedures/Medical Assisting Clinical Procedures II <i>(Sequence of 2 courses)</i>					✓	CTMAT004 & CTMAT005 <i>Sequence</i>
MED 1010/ MED 1040/ MED 1050 <i>Sequence</i>	Medical Assisting Clinical Procedures I & II, and MA Lab Procedures <i>(Sequence of 3 courses)</i>					✓	CTMAT010 <i>Sequence</i>
MED 1050	MA Lab Procedures					✓	CTMAT009
MED 1061	Medical Assisting Ins & Billing					✓	CTMAT006
MET 1200	Computer Aided Drafting (CAD)			✓	OET012	✓	CTMET005



MET 2200	Statics		✓	OET007	
MET 2300	Strength of Materials		✓	OET008	
MFT 1100	Manufacturing Processes		✓	OET010	
MKT 2030	Principles of Marketing		✓	OBU006	
MKT 2150	Principles of Advertising & Promotion		✓	OCCM012	
MLT 1010	Basic Medical Laboratory Techniques		✓	OHL008	
MLT 1020	Body Fluids		✓	OHL010	
MLT 1040	Hematology and Coagulation		✓	OHL009	
MTH 1200	College Algebra	✓	TMM001		
MTH 1215	Excursions in Math	✓	TMM001		
MTH 1200/MTH 1250	College Algebra & Pre-Calculus (Sequence of 2 courses)	✓	TMM002		
MTH 2000	Calculus I	✓	TMM005		
MTH 2050	Calculus II	✓	TMM006		
MTH 2000/MTH 2050	Calculus I & Calculus II (Sequence of 2 courses)	✓	TMM017		
NTR 1100	Nutrition		✓	OHL016	
NUR 1011/ NUR 1030	Foundation of Adult Nursing Care I & Nursing Care of Women and Children (Sequence of 2 courses)				✓ CTADNUR002 Sequence
OIS 1240	Computer Applications (approved for HIT only)		✓	OBU003	
OIS 1500	Web Authoring			CITM004	
OIS 1620	Digital Image Manipulation			CITM002	
PHY 1200/PHY 1210	Physics I & Physics I Lab (Sequence of course & lab)	✓	TMNS	✓	OSCO14 Sequence
PHY 1250/PHY 1260	Physics II & Physics II Lab (Sequence of course & lab)	✓	TMNS	✓	OSCO15 Sequence
PHY 1200/PHY 1210/ PHY 1250/PHY 1260	Physics I & Physics I Lab Physics II & Physics II Lab (Sequence of 2 courses & 2 labs)			✓	OSCO21 Sequence
PSY 1100	General Psychology	✓	TMSBS	✓	OSS015
PSY 1500	Social Psychology	✓	TMSBS	✓	OSS016
PSY 2100	Human Growth & Development	✓	TMSBS	✓	OSS048
SCI 1200	Anatomy & Physiology I & Lab	✓	TMNS		
SCI 1250	Anatomy & Physiology II & Lab	✓	TMNS		
SCI 1300	Microbiology	✓	TMNS		
SCI 2000	Advanced Human Physiology	✓	TMNS		
SOC 1200	Sociology	✓	TMSBS	✓	OSS021
SOC 1400	Personal and Family Relations	✓	TMSBS	✓	OSS023
SOC 2200	Social Problems	✓	TMSBS	✓	OSS025
SOC 2400	Gender Studies	✓	TMSBS		

**Ohio Transfer Module (OTM).** Individuals who successfully complete the **Ohio Transfer Module (OTM)** at one institution will be considered to have met the Transfer Module requirements of the receiving institution. Approved Transfer Module courses, when taken individually, are also **guaranteed for transfer** among public institutions on a course-by-course basis and are to be applied to the Transfer Module of the receiving institution.

**Transfer Assurance Guide (TAG).** Courses are unique in that they have been matched to a set of learning outcomes (identified by an OAN code) in a specific academic subject area. Approved TAG courses carry the **guarantee that the courses and their credits will transfer** and apply toward the major at any of Ohio's public institutions of higher education, provided they were taken when the courses were equivalent.

**Career Technical Credit Transfer (CT<sup>2</sup>).** Legislation directs the Ohio Board of Regents to work collaboratively with the Ohio Department of Education, public adult and secondary career-technical education, and state-supported institutions of higher education to establish criteria, policies, and procedures to transfer agreed-upon technical courses from one system to another.

\* Additional Ohio Transfer information may be obtained at <https://www.ohiohighered.org/transfer>.

## STUDENT APPEALS PROCESS FOR TRANSFER CREDIT

### Step One

- Submit your Marion Technical College transcript to the Registrar of the receiving college or university.
- Request a **written copy** of the credits that have been transferred to your receiving college.
- If, within one month, you have **not** received a response to your request for course transfer, or if credits were **not** accepted, proceed to Step Two.

### Step Two

- If unsatisfied with the transfer decision, ask for a written copy of your receiving college's transfer appeals process and follow those steps within 90 days.
- The receiving college must respond within 30 days of your appeals process request. If you do not receive a copy of the appeals process within 30 days, or if this process is not satisfactory, go to Step Three.

### Step Three

- Contact Marion Technical College's *Dean of Arts & Sciences* at 740.386.4196.

### Appeal Process for Transfer Credit to and from MTC:

Marion Technical College complies with Ohio Transfer and Articulation Policy to accept transfer credit from new students that eliminates the need to repeat courses already successfully completed. While credit transfer among Ohio public colleges and universities is guaranteed for many courses, other courses not guaranteed to transfer will be evaluated for transfer. The steps listed below are provided to guide students who may dispute the outcome of their transcript evaluation when transferring credits to Marion Technical College, or from Marion Technical College to another Ohio public institution.

1. Check the college's published internal appeals process.
2. Student applies for admission.
3. The college evaluates the transcript of accepted student.
4. The college decides on the acceptability and applicability of credit and sends a dated evaluation statement of transfer credit to the student along with a notification of the 90-day period for filing an appeal.
5. If the student accepts the judgment, the process ends.
6. The student challenges the judgment and appeals within the college.
7. The college initiates its multi-level internal appeal process. At each level, the college shall respond to the appeal within 30 days of the receipt of the appeal.
8. The college notifies the student of its judgment.
9. If the student disagrees with the last college decision, he/she may notify the institution at which the credits were earned. That institution may notify the Ohio Department of Higher Education, if in its judgment, there is noncompliance with the Ohio Articulation and Transfer Policy.

If you are transferring **to** MTC and wish to appeal the official evaluation of your transfer credit, the appeal must be typed and submitted within 90 days of the postmark/electronic or other delivery of this communication, preferably through email, to the appropriate academic department dean or director of your program. Students who are undecided about a specific program would appeal to the Dean of Arts and Sciences. For more information, contact the Office of the Registrar.

If you are transferring **from** MTC and wish to appeal the official evaluation of your transfer credit received from the college to which you are transferring, you must follow the appeals process of that institution. If you disagree with the judgment of that college or university concerning the earned MTC credits *after* completion of the appeals process, you may report your dissatisfaction to Marion Technical College's Office of Student Records.

### ARTS AND SCIENCES COURSE LIST

#### Arts and Sciences

ASC 1000	Orientation to College
ASC 1020	Skills for Success
ASC 1100	Conversational Spanish for CJ
ENG 0970	Reading Enrichment II
ENG 0990	Preparation for College Writing II
ENG 1000	English Composition I
ENG 1100	English Composition II
ENG 1200	Business Communication
ENG 1400	Oral Communications
ENG 1500	Interpersonal Communications
ENG 2000	Early American Literature
ENG 2100	Modern American Literature

#### ECONOMICS

ECN 2000	Microeconomics
ECN 2100	Macroeconomics

#### HUMANITIES

HUM 1200	Critical Thinking and Problem Solving
HUM 1400	Introduction to Logic
HST 1500	Early American History
HST 1600	Modern American History
HST 1700	Western Civilization I
HST 1800	Western Civilization II

#### MATHEMATICS

MTH 0910	Mathematical Literacy
MTH 0920	Algebraic Literacy
MTH1230	Quantitative Reasoning
MTH 1240	Statistics

MTH 1245	College Algebra
MTH 1250	Pre-Calculus
MTH 2000	Calculus I
MTH 2050	Calculus II

#### NATURAL SCIENCES

BIO 1100	General Biology
CHM 1000	General and Biological Chemistry
CHM 1200	Chemistry I
CHM 1250	Chemistry II
NTR 1100	Intro Nutrition
HLT 1100	Health Terminology
PHY 1200	Physics I
PHY 1210	Physics I Lab
PHY 1250	Physics II
PHY 1260	Physics II Lab
SCI 1050	Principles of Biology and Chemistry
SCI 1100	Basic Anatomy and Physiology
SCI 1200	Anatomy and Physiology I
SCI 1250	Anatomy and Physiology II
SCI 1300	Microbiology
SCI 2000	Advanced Human Physiology

#### PSYCHOLOGY

PSY 1100	General Psychology
PSY 1500	Social Psychology
PSY 2100	Human Growth and Development

#### SOCIOLOGY

SOC 1200	Sociology
SOC 1400	Personal and Family Relations
SOC 2200	Social Problems

The AA and AS are pre-baccalaureate degrees designed to transfer to bachelor of arts (BA) and bachelor of science (BS) degrees offered at universities and colleges. Completion of the AA or AS means that the student has completed all or nearly all of the freshman and sophomore courses of a BA or BS degree, or about one-half of the total courses required to graduation. The university to which a student transfers may require certain courses in some majors, therefore, MTC advisors will assist students to align their MTC courses to match requirements at the university of their choice.

## **TRANSFERRING TO UNIVERSITIES AND COLLEGES**

Marion Technical College students have many opportunities to explore upon graduation. Most seek direct entry into the job market; however, many MTC graduates also continue their education toward a bachelor's degree directly after they graduate or after starting their careers. Recent statistics show that between 20 and 25 percent of MTC graduates transfer to a four-year institution within six months of graduation.

MTC encourages students who intend to transfer to plan their academic courses carefully in consultation with MTC advisors as well as with advisors at the university to which they want to transfer.

The college participates in an annual area College Night and hosts other special programs/workshops, providing easy access to dozens of well-known colleges and universities, many of which have offered MTC students guaranteed or highly favorable credit transfer.

### **Transfer Agreements**

MTC has entered into transfer agreements with other Ohio colleges and universities. These agreements enable graduates to enter the "transfer college" with junior status so they can, in most cases, complete a bachelor's degree program in as little as two more years.

Please see the **Transfer Brochure** or an Admission representative for specific transfer options.

### **Transfer Guarantees**

In addition to using transfer agreements, MTC students can also complete an individual course or several courses within an academic major that are **guaranteed to transfer** to Ohio public colleges and universities.

The Ohio Department of Higher Education (ODHE) worked with colleges and universities to establish policies that ensure students can begin their college career at any state college or university, including Marion Technical College, and transfer credits earned to other state institutions without unnecessary barriers. This allows students, parents, and advisors to develop viable educational plans using all the resources of the public higher education system – beginning at any point along the pathway from high school through college.

Three (3) key stipulations of Ohio transfer policy mandates that public colleges and universities:

1. Assure transfer of course credits and degrees without unnecessary duplication.
2. Use a universal course equivalency classification system to eliminate inconsistent judgment in transfer credit application.
3. Admit students with associate degrees to state public universities on an equally competitive basis with native students for specific programs and with priority over out-of-state associate degree graduates and out-of-state transfer students.

It is possible for students to complete 50 percent of a bachelor's degree at MTC depending upon their chosen major. According to state policy, students can maximize the transfer of college credit throughout all Ohio public institutions using the following methods:

### **Transfer Assurance Guides (TAGs)**

TAs are groups of foundational and other courses that represent commonly-accepted pathways to bachelor's degrees, including specific majors. TAG courses are guaranteed to transfer and apply to degree/program requirements of each major. Each of the over 35 subject areas found in the Ohio TAGs typically includes introductory or core courses in a major, e.g., business or psychology, and also recommended courses in the Ohio Transfer Module (OTM), e.g., microeconomics or sociology. You may use the **TAGs** course Bulletin Board to explore various course transfer scenarios by linking to: <https://www.ohiohighered.org/transfer/tag>

### **Career-Technical Assurance Guides (CTAGs)**

**CTAG's** are courses students (both high school and adult) take at career-technical schools; these courses can count for college credit providing the student meets the requirements listed in the CTAG. MTC participates in CTAGs for Engineering, Information Technology, Medical Assisting, Criminal Justice and Practical Nursing.

### **Ohio Transfer Module (OTM)**

The Ohio Department of Higher Education (ODHE) has developed a subset of the complete set of a college's or university's general education requirements known as the **Ohio Transfer Module (OTM)**. The OTM represents a body of knowledge and academic skills common across Ohio colleges and universities in: 1) English composition; 2) mathematics; 3) arts and humanities; 4) social and behavioral sciences; and, 5) natural and physical sciences. Similar to the TAG's mentioned above, the OTM provides students the opportunity to easily transfer course credits. Any college's OTM courses are guaranteed to transfer among Ohio public institutions of higher education as a block of courses, or on an individual course-by-course basis for students who do not intend to complete the entire block. Therefore, students can transfer credit for successful completion of only one OTM course if desired. See pages 5-6 for more details on Ohio's Transfer Module.

## Ohio GI Promise

Military training, experience and coursework of student service members will count for credit throughout the University System of Ohio. Under this new standard, Ohio colleges and universities will use the American Council on Education (ACE) Guide to the Evaluation of Educational Experience in the Armed Services to translate military education into credit. Where possible, this credit will count toward a student's major or general education requirements. <http://www.acenet.edu/AM/Template.cfm?Section=Home>

## CLEP - Credit via College Board

CLEP is an external credit-by-exam. Students may take this exam given by the College Board, the same organization that proctors the ACT. Students can now take the CLEP exam on the MTC Campus in the Workforce Development Building. Students can go to the following website and click on CLEP for more details. <http://www.collegeboard.org/>

## Advanced Placement (AP) Credit via College Board

The University System of Ohio (USO) has initiated policies to facilitate the ease of transition from high school to college as well as between and among Ohio's public colleges and universities.

AP tests are offered to high school students through College Board. With a sufficient score on the AP exams, students will be able to earn college credit and/or course equivalencies. High school students take Advanced Placement classes to prepare for the exams, as well as to earn high school credit.

MTC credit awarded for AP exams completed successfully are indicated on the Advanced Placement (AP) And MTC Course Equivalents list on a following page. Elective credit may be awarded for other AP exams completed with a score of 3 or above in accordance with Ohio policy.

Students can visit MTC's website to locate information about Advanced Placement (AP), CLEP and other external credit that may transfer for applicable MTC coursework <https://www.mtc.edu/future-students/credit-by-exam-experience/> or <https://www.mtc.edu/future-students/college-credit-plus/>

<u>AP EXAM</u>	<u>MTC COURSE #</u>	<u>COURSE TITLE</u>	<u>CREDIT HOURS</u>
Art History		Arts and Humanities Elective Credit	3
Biology	BIO 1100	General Biology	3
Calculus AB	MTH 2000	Calculus I	3
Chemistry	CHM 1200	Chemistry I	3
Chinese Language and Culture		General Elective Credit	3
Comp Government & Politics		Social Science Elective Credit	3
English Language	ENG 1100	English Composition I	3
English Literature	ENG 1100	English Composition I	3
Environmental Science		Natural Science Elective Credit	3
European History		Arts and Humanities Elective Credit	3
French Language		General Elective Credit	3
French Literature		General Elective Credit	3
German Language		General Elective Credit	3
Human Geography		Social Science Elective Credit	3
Italian Language and Culture		General Elective Credit	3
Japanese Language and Culture		General Elective Credit	3
Latin Literature		General Elective Credit	3
Latin: Vergil		General Elective Credit	3
Macroeconomics	ECN 2100	Macroeconomics	3
Microeconomics	ECN 2000	Microeconomics	3
Music Theory		General Elective Credit	3
Physics B	PHY 1200	Physics I	4
	PHY 1210	Physics I Lab	1
	PHY 1250	Physics II	4
	PHY 1260	Physics II Lab	1
Physics C:		Science Elective Credit	5
Psychology	PSY 1100	General Psychology	3
Spanish Language		General Elective Credit	3
Spanish Literature		General Elective Credit	3
Studio Art: 2-D Design		General Elective Credit	3
Studio Art: 3-D Design		General Elective Credit	3
Studio Art: Drawing		General Elective Credit	3
U.S. Government & Politics		Social Science Elective Credit	3
U.S. History	HST 1500	Early American History and	3
	HST 1600	Modern American History	3
World History		Arts and Humanities Elective Credit	3

## **Transferology**

Ohio colleges and universities use **Transferology**, an electronic advising system that describes the transfer opportunities for students through a Web-based portal. Transferology is an effective and user-friendly tool that helps students transfer and apply credits to degree requirements through better planning, cohesive advising, and a one-stop clearinghouse of transfer and academic pathway information.

The overall goal of Ohio's transfer policy is to allow students to easily transfer credits between campuses for equivalent courses and be guaranteed that the courses apply to degrees in specific majors. Ohio needs more college educated citizens, and these efforts are aimed to streamline the process, and avoid duplication of effort and costs to students.

## **PROGRAM OPTIONS**

### **Associate Degree**

Associate degrees, the preferred credential for many of the fastest growing occupations, are awarded upon completion of an established MTC two-year program.

MTC offers the Associate of Applied Business (A.A.B.) degree in Business Technologies and Information Technologies. The Associate of Applied Science (A.A.S.) degree is offered in Engineering Technologies, Health Technologies, and Public Services.

**Residency requirements:** To earn a degree from Marion Technical College a student must have: (1) earned a minimum of 21 semester hours of credit through enrollment and attendance in Marion Technical College courses which apply to the curriculum of the degree and (2) at least 12 of the minimum 21 semester credit hours must be earned through technical courses.

### **Associate of Arts Degree**

The Associate of Arts Degree (AA) is the first two years of a Bachelor of Arts degree. The AA degree is a two-year liberal arts/general education degree with an emphasis in English, Social Sciences, Arts and Humanities, Mathematics, and Natural Sciences. Graduates of this program will have the general education necessary to pursue bachelor's degrees that emphasizes non-science majors at most four-year colleges and universities as juniors.

### **Associate of Science Degree**

The Associate of Science (AS) is the first two years of a Bachelor of Science degree. The AS degree is a two-year liberal arts/general education degree with an emphasis in mathematics and natural sciences. Graduates of this program will have the general education necessary to pursue bachelor's degrees that emphasizes science majors at most four-year colleges and universities as juniors.

### **Associate of Technical Study Degree**

Also a two-year option, MTC's **Associate of Technical Study (A.T.S.)** degrees combine existing courses from a minimum of two disciplines to create a unique individually-planned degree that meets a more specialized employment objective.

Individuals interested in pursuing an A.T.S. degree work closely with an academic advisor and must complete a separate A.T.S. application to the college. Individuals have two options: (1) combining portions of established programs to create a hybrid curriculum; or, (2) individually selecting nearly all courses required to qualify for a degree to create a truly unique program.

### **Certificate Programs**

MTC's certificate programs are designed with the advice of employers to provide concise learning opportunities so students can enter the workforce with a technical or professional skill in a compressed period of time. (See [www.mtc.edu](http://www.mtc.edu) for list of Programs and Majors.)

Certificate options often target regional employment needs to prepare students for quick entry into the workforce.

### **Certification Credentials – IT, Health, etc.**

Students can earn one or more certifications in a variety of specialty areas at MTC. Certification documents to an employer that a student has the knowledge, skills, and abilities in a specific professional area. Certification is typically achieved by successfully passing an exam, which may include a demonstration of skills. Through its Testing Center, MTC offers an array of exams that lead to certification for current students and working professionals.

The certification courses that MTC provides qualify a student to sit for a corresponding certification exam, referenced throughout this catalog. In some career areas, certification can be an expected or preferred qualification for initial hiring, internal promotion, or pay increases, including many in the Information Technologies (IT) area.

## **ASSESSMENT**

## What Students Are Expected to Learn and How It Will Be Assessed

Student learning is the cornerstone of Marion Technical College's mission. To determine how well students learn, faculty use a systematic process to assess student academic achievement. This assessment takes place throughout a student's academic career. Assessment results help guide faculty as they continuously improve teaching, learning, courses, programs, and future assessment. Results also help students and others learn about the effectiveness of teaching and learning at MTC.

Assessment begins with a clear understanding of what students are expected to learn. With the advisement of employers, professional associations, and others, faculty have defined two types of core learning goals for MTC students: 1) Student Learning Outcomes (SLOs) which usually apply only to students enrolled in a specific area of study; and, 2) **College Graduate Competencies (CGCs)** which are common to all areas of study and apply to all students. Together, SLOs and CGCs form the complete set of core competencies that all graduates are expected to learn.

The individual sub-skills defined in each CGC and SLO are taught, reinforced, and/or periodically measured in various courses throughout the curriculum. Each course in which a College Graduate Competency is assessed is indicated in the course syllabus. The six CGC areas and statements of competence are:

### **Communications**

Communicate effectively both written and orally.

### **Diversity**

Exhibit respect and sensitivity for individuals and institutional differences.

### **Interpersonal/Professionalism**

Demonstrate good work habits, effective interpersonal and teamwork skills, and a high level of professionalism

### **Math/Computation**

Students will have knowledge applying mathematical and computational skills to interpret numerical data and solve applied problems (program determines the level of competence).

### **Problem Solving/Critical Thinking**

Students will have the skills to recognize and solve problems through analysis, creativity, and synthesis to make informed decisions.

### **Information Technology**

Students will have the skills to use a computer to perform personal and professional tasks. Students will have the skills to locate and use information resources and have the ability to apply methods of inquiry.

Information about each CGC is available in the Student Handbook and at the college website, [www.mtc.edu](http://www.mtc.edu). Through its public disclosure of all learning outcomes, and an ongoing assessment of the extent to which students learn them, Marion Technical College affirms that all graduates will be characterized for their ability to competently practice what they have learned.

## STUDENT CONNECTIONS

### **College Credit Plus**

The College Credit Plus program and other dual credit opportunities give high school students who are academically capable of doing college-level work the opportunity to take college classes while still in high school at no or little cost. MTC courses are taught at many area high schools during regular school hours, and students often commute to campus to complete courses of interest. Contact your school guidance office or MTC's Admission Office for details.

### **College Tech Prep (CTP High School Students)**

Since 1992, Marion Technical College has participated in a partnership called College Tech Prep (CTP) with career centers, secondary schools (high schools), business and industry. CTP is an approach to education that: (1) integrates the teaching and learning of academic and technical skills of students in high school and college, (2) creates a seamless path for earning an associate degree without repeating learning, and (3) affords opportunities for continuing learning toward a bachelor's degree.

CTP students have made a commitment to a pre-college plan of study. CTP courses combine academic and hands-on learning, and provide an opportunity for high school students to earn college credit toward an MTC degree.

For more information, go to [www.techprepcentral.org](http://www.techprepcentral.org), contact your high school guidance counselor, visit the MTC Web site ([www.mtc.edu](http://www.mtc.edu)), or contact The Office of Admission <https://www.mtc.edu/future-students/admissions/>.

## Other Transfer Options

### **Franklin University**

Through a unique partnership with Franklin University, MTC is able to offer 16 distinct bachelor's degree completion options that reflect today's hottest career tracks. Known as the **Community College Alliance**, these programs offer students complete flexibility in their

education through a combination of special MTC on-site classes and dynamic online courses hosted by Franklin. Participants in the alliance can complete a bachelor's degree in an online learning environment.

The alliance is open to all MTC graduates and any individual with an associate degree or educational equivalent. Coursework will utilize processes such as Internet research, chat rooms, news groups, online testing, and more.

### **Nursing Progression**

Marion Technical College's RN nursing program was the first among the four technical colleges that share a regional campus with The Ohio State University to be able to transfer credits. Consequently, the associate degree Registered Nurse graduate from MTC can now transfer to The Ohio State University at Marion to complete the bachelor's degree in nursing.

Students can earn their State-Tested Nurse Aide (STNA) certification and associate's degree in Nursing (RN) at Marion Technical College and transfer to OSU Marion or Ohio University to earn a BSN. MTC also has articulation agreements with several RN to BSN programs throughout Ohio. This allows for a seamless progression from RN to BSN. In addition, MTC has an LPN to RN Transition program that allows LPNs to complete the Associate Degree in 4 semesters and sit for the NCLEX-RN.

Marion Technical College is accredited by the **Higher Learning Commission**, and the nursing program has been accredited by the **Accreditation Commission for Education in Nursing (ACEN)** since shortly after the program's inception. Accreditation enables students to transfer credits to other colleges and universities and signifies the excellence in education at MTC.

As a bonus, Marion Technical College's nursing graduates have a history of excellence in State Board of Nursing Exam (NCLEX-RN exam pass rates).

To find out more about this option, check out the Nursing program at [www.mtc.edu](http://www.mtc.edu) or contact the Office of Admission at 740.389.4636 to get started.

### **Aspire Program**

The Aspire Program <https://www.mtc.edu/aspire/> is a free service for students who want to work on basic math, reading, or writing skills that help them transition into, and be more successful in, their college courses. These College Readiness classes are a unique blend of individual study and small group lecture focusing on each student's academic needs. There is a limit to the amount of financial aid college students may receive, so these fee-free classes are an excellent "first step" in pursuing your dreams and stretching your college dollars. Students wishing to work on basic academic skills to improve their chances for employment or to be eligible for better jobs at their place of employment will find the help they need in Aspire classes.

Because Aspire instruction is individualized and self-paced, many people join these classes to prepare for High School Equivalency Testing (GED, HiSET, TASC). Our instructors are familiar with a wide range of academic materials and knowledgeable about the demands of these tests making Aspire classes a perfect match for students wanting to attain their High School Equivalency (HSE) credential.

### **Sixty Plus Program**

If you are an Ohio resident age sixty or older, you may enroll in MTC courses on a space-available, **non-credit, tuition-free** basis. (You will, however, purchase your own books and pay laboratory fees, if applicable.) See the Office of Admission for details.

## **CAMPUS RESOURCES**

### **Marion Campus Library**

(Refer to the MTC Student Handbook or go to: <https://www.mtc.edu/library> for additional information.)

### **Alber Student Center**

Serving MTC and OSUM students, the George H. Alber Student Center houses the Office of Student Activities and Recreational Sports, as well as recreational and common areas, a gymnasium, facilities for wellness and fitness programming, a 384 square-foot climbing wall, multipurpose room, game room and lounge/study areas.

The campus organizes a variety of activities for students, including dances, movies, concerts, lectures, recreational sports activities (flag football, soccer, whiffle ball, coed volleyball, basketball, racquetball and badminton), and outdoor adventure activities (stargazing/trips to Perkins observatory, paintball, geo-trekking) and art shows.

A student activities handout as well as a student ID discount flyer is available in the Office of Student Activities in the Student Center.

## WORKFORCE SOLUTIONS

### Tami Galloway

Job Development Coordinator  
740.386.4138 – [gallowayt@mtc.edu](mailto:gallowayt@mtc.edu)  
FAX 740.725.4012

### Other contact information for

Marion Technical College  
1467 Mt. Vernon Avenue,  
Marion, OH 43302-5694  
[www.mtc.edu/workforce](http://www.mtc.edu/workforce)  
General E-mail:  
[workforcesolutions@mtc.edu](mailto:workforcesolutions@mtc.edu)

## VISION

Through the efforts of the Workforce Solutions, Marion Technical College will become the preferred provider of workforce development services in Marion and the surrounding seven-county area.

Workforce Solutions at Marion Technical College serves as a liaison between the college and its corporate and individual customers. The center identifies and applies resources of educational, governmental, and private organizations to provide training and assessment services in order to enhance productivity and help develop a well-trained workforce.

MTC's Office of Career Services and Workforce Solutions collaborated to develop a program of services to pro-actively recruit employers and individuals, and create job matches between employers and qualified individuals. The partnership has produced 165 matches and provides follow-up at one month, two-month and three-month intervals.

Part of MTC's overall goals is to produce "lifelong learners." This philosophy extends into all facets of individuals' lives, including the workplace. To accomplish this, the college relies on the expertise and resources of its **Workforce Solutions (WS)**.

Workforce Solutions serves as a liaison between the college and its corporate and individual workforce-related customers. Personnel work closely with customers, identifying and applying resources from educational, governmental, and private sector sources to provide training and assessment services. These services help employers build and maintain a world-class workforce, keep pace with rapid technological change, and meet the evolving challenges of a world economy.

Since 1985, Workforce Solutions has trained thousands of individuals in Marion and surrounding counties to move into growing occupational fields or to improve the workplace skills that modern companies need to stay competitive. Customized training has workshops, credit associate degree programs, non-credit courses, programs, and more. Instruction has been provided both at MTC and on-site when it is more convenient for the employer/employees. These training activities have generated more than 43,000 enrollments.

Workforce Solutions staff work with customers to understand their business. That means interviewing employees, looking over data, and analyzing the company from several vantage points ultimately to improve their bottom line.

Over the years, the Workforce Solutions at Marion Technical College has worked with a number of companies to meet their goals for improving profit, quality, and productivity, as well as embracing lean manufacturing concepts, computer software upgrades, leadership development initiatives, and more.

Assessment and testing services also play a large role in department activities. In the past two years, Workforce Solutions conducted more than 13,782 assessments/tests to more than 3,011 individuals in the surrounding states. Assessments were administered to existing employees as well as those who were external candidates for positions, and included both online tests as well as "pen-and-paper" forms.

In addition, Workforce Solutions houses a VUE Testing Center which offers Pearson VUE testing services including GED, Microsoft, CompTIA, and Cisco as well a CLEP testing center.



## WORKFORCE SOLUTIONS

### **When You Want to Identify and Develop the Best People for Job Positions, Workforce Solutions Gets Results.**

Workforce Solutions connects workers and employers through affordable assessments, certifications, and training services designed to maximize individual skill development and career success, along with employee selection, development, and training.

The goal of Workforce Solutions is to stimulate economic growth through workforce development – specifically by closing Ohio’s **skills gap**, the difference between the skills being sought by companies and the skills actually held by current or potential area employees. To accomplish this goal, Workforce Solutions uniquely bundles and delivers to employers and individuals a tailored set of technology-based learning, training, testing, and assessment solutions provided by a consortium of vendors comprised of today’s leading suppliers.

Workforce Solutions has access to more than 1,400 standardized testing/assessment tools to meet a variety of needs. Through client consultation, processes analysis, and project planning, the professionals at WS can help companies acquire the data needed to take workforce development to the next level.

Put us to the test – contact Tami Galloway at the Workforce Solutions at Marion Technical College (**740.386.4138**, or **gallowayt@mtc.edu**) and see how our assessment, testing, and training tools can support your critical human resources decisions.

### **Job-Position Candidate Selection**

Whether you are hiring new workers or promoting current employees, Workforce Solutions can help you find the best person for the job with a wide range of assessment and testing tools:

- Define specific knowledge, skills, and abilities needed for the job
- Test job candidates according to position requirements
- Provide post-testing analysis and training

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## Associate of Arts Degree

The AA degree is a two year liberal arts/general education degree comprised of courses that emphasize English, social sciences, arts and humanities. It also offers components of mathematics and natural sciences, including one lab science. Graduates of this program will have the general education necessary to pursue a bachelor's degree at most four-year colleges and universities as juniors.

## Associate of Science Degree

The AS degree is a two-year liberal arts/general education degree comprised of courses that emphasize mathematics, and the natural sciences including lab sciences. The AS also has components of English, the social sciences and the arts and humanities. Graduates of this program will have the general education necessary to pursue a bachelor's degree at most four-year colleges and universities as juniors.

## PRACTICUM AND FIELD EXPERIENCE

The Human and Social Services Program has designed agency experiences that will allow the student to put into practice the things that are learned in the classroom. Practicums allow the student to go to an agency and do a variety of tasks. Sometimes the student will shadow a social worker. Many agencies will allow the student to do all the tasks that social workers do but under supervision. Students may get experience doing home visits, documentation, co-facilitating groups, psychosocial histories, and interacting with families, all under the supervision of the social worker. Practicum is where the principles learned in the classroom become the actions that are practiced in the agencies.

### Application Process

- MTC Application for Admission and nonrefundable application fee.
- Final high school transcript (or GED results) and college transcripts (if applicable).
- Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses suggested by placement results are highly recommended.

### The Program – Associate of Arts

The Associate of Arts (AA) Degree at Marion Technical College is designed to be a cost-effective option for someone who is ultimately seeking a four-year degree. The AA degree includes the core curriculum that most bachelor of arts programs require.

The Ohio Department of Higher Education has guaranteed that the AA degree will transfer to all of Ohio’s public colleges and universities. The purposes of this associate’s degree are to: (1) provide students with the opportunity to affordably complete the first two years of a bachelor’s degree; (2) enable students to transfer (often as a junior) to colleges and universities and earn a bachelor’s degree; and, (3) demonstrate to employers a student who successfully completed a degree program and possesses a well-rounded education.

### Did You Know?

By starting your bachelor’s degree at MTC with the AA, you can save thousands of dollars on tuition. Note the cost comparison chart below.

College/University	# of Credit Hours	Cost*
<b>Marion Technical College</b>	<b>12 CREDIT HOURS OR LESS</b>	<b>\$180/CREDIT HOUR</b>
Bowling Green State University	11 credit hours or less	\$379/credit hour
Toledo	undefined	\$335/credit hour
Akron	12 credit hours or less	\$359/credit hour

\*All amounts were found on each university’s website.

### What Can I Do With This Degree?

The AA degree is a two year liberal arts/general education degree comprised of courses that emphasize English, Social Sciences, Arts and Humanities. It also offers components of Mathematics and Natural Sciences. Graduates of this program will have the general education necessary to pursue a bachelor’s degree at most four-year colleges and universities as juniors.

### Flexible Option

The possibilities of this degree are endless! Once you transfer your credits, you can choose to complete a bachelor’s degree in almost any field of study. The degree is designed to get the general courses completed so you can focus on a career path that interests you during your bachelor’s program.

There are numerous courses within the AA degree that can be completed online, which will maximize your flexibility. Thus, you can fit many classes into your busy schedule! To see a list of courses that will apply toward the AA or AS degree, go to [www.mtc.edu](http://www.mtc.edu)

### For More Information, Contact:

Admission Office  
Marion Technical College  
1467 Mt. Vernon Ave.  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636

# Associate of Arts

## Ohio Transfer Module (OTM) and Transfer Assurance Guide (TAG) Courses

Course No	Course Title	Cr Hr	Course No	Course Title	Cr Hr
<b>ENGLISH, LITERATURE, COMMUNICATIONS</b>			<b>NATURAL SCIENCE</b>		
<i>Minimum of 9 OTM<sup>1</sup> credits</i>			<i>Minimum of 8 OTM<sup>1</sup> credits</i>		
ENG1000	English Composition I	3	BIO1100	General Biology	4
ENG1100	English Composition II	3	CHM1200	Chemistry I	4
ENG1400	Oral Communications	3	CHM1250	Chemistry II	4
ENG2000	Early American Literature	3	PHY1200	Physics I	4
ENG2100	Modern American Literature	3	PHY1250	Physics II	4
			SCI1200	Anatomy & Physiology I	4
			SCI1250	Anatomy & Physiology II	4
			SCI1300	Microbiology	4
			SCI2000	Advanced Human Physiology	4
<b>SOCIAL &amp; BEHAVIORAL SCIENCES</b>			<b>OTM<sup>1</sup> Electives</b>		
<i>Minimum of 6 OTM<sup>1</sup> credits</i>			<i>Choose additional OTM<sup>1</sup> courses to complete the requirement of 36 OTM<sup>1</sup> credits.</i>		
ECN2000	Microeconomics	3			
ECN2100	Macroeconomics	3			
HSS1060	Abnormal Psychology	3			
PSY1100	General Psychology	3			
PSY1500	Social Psychology	3			
PSY2100	Human Growth & Development	3			
SOC1200	Sociology	3			
SOC1400	Personal & Family Relations	3			
SOC2200	Social Problems	3			
					<i>Total OTM Credits</i>
<b>ARTS &amp; HUMANITIES</b>			<b>Electives (Transfer Assurance Guides<sup>2</sup>)</b>		
<i>Minimum of 6 OTM<sup>1</sup> credits</i>			<i>Choose an additional 24 credits to equal the 60 credits needed for an AA degree.</i>		
HSS2020	Ethnic & Cultural Diversity	3	ALH1110	Medical Terminology	3
HST1500	Early American History	3	ALH1120	Human Diseases	3
HST1600	Modern American History	3	ACC1400	Financial Accounting	4
HST1700	Western Civilization I	3	BUS2150	Legal Environment of Business	3
HST1800	Western Civilization II	3	CRJ1000	Introduction to Criminal Justice	3
SOC2400	Gender Studies	3	CRJ1500	Criminology	3
HUM1400	Introduction to Logic	3	ENG1200	Business Communications	3
			ENG1500	Interpersonal Communication	3
			HSS1040	Introduction to Social Work	3
			MKT2030	Principles of Marketing	3
			NTR1100	Nutrition	3
			OIS1240	Computer Applications	3
<b>MATHEMATICS, STATISTICS &amp; LOGIC</b>					
<i>Minimum of 3 OTM<sup>1</sup> credits</i>					
MTH1230	Quantitative Reasoning	3			
MTH1240	Statistics	3			
MTH1245	College Algebra	3			
MTH1250	PreCalculus	3			
MTH2000	Calculus I	5			
MTH2050	Calculus II	5			
					<i>Total Degree Credits</i>

**60 Total Credits**

<sup>1</sup> Required Ohio Transfer Module (OTM) courses (36-40 credits)

<https://www.ohiohighered.org/transfer/transfermodule>

<sup>2</sup> Transfer Assurance Guides (TAG)

<https://www.mtc.edu/wp-content/uploads/TransferInfo/ApprovedCourseList.pdf>

Effective 2019-20

### Application Process

- MTC Application for Admission and nonrefundable application fee.
- Final high school transcript (or GED results) and college transcripts (if applicable).
- Successful completion of Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses suggested by placement results are highly recommended.

### For More Information, Contact:

Admission Office  
Marion Technical College  
1467 Mt. Vernon Ave.  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636

### The Program – Associate of Science

The Associate of Science (AS) Degree at Marion Technical College is designed to be a cost-effective option for someone who is ultimately seeking a four-year degree. The AS degree includes the core curriculum that most bachelor of science programs require.

The Ohio Department of Higher Education has guaranteed that the AS degree will transfer to all of Ohio’s public colleges and universities. The purposes of this associate’s degree are to: (1) provide students with the opportunity to affordably complete the first two years of a bachelor’s degree; (2) enable students to transfer (often as a junior) to colleges and universities and earn a bachelor’s degree; (3) demonstrate to employers a student who successfully completed a degree program and possesses a well-rounded education.

### Did You Know?

By starting your bachelor’s degree at MTC with the AS, you can save thousands of dollars on tuition. Note the cost comparison chart below:

College/University	# of Credit Hours	Cost*
<b>Marion Technical College</b>	<b>12 CREDIT HOURS OR LESS</b>	<b>\$180/CREDIT HOUR</b>
Bowling Green State University	11 credit hours or less	\$379/credit hour
Toledo	undefined	\$335/credit hour
Akron	15 credit hours or less	\$359/credit hour

\*All amounts were found on each university’s web site.

### What Can I Do With This Degree?

The AS degree is a two year liberal arts/general education degree comprised of courses that emphasize English, Mathematics, and the Natural Sciences. The AS also has components of the Social Sciences and the Arts/Humanities. Graduates of this program will have the general education necessary to pursue a bachelor’s degree at most four-year colleges and universities as juniors.

### Flexible Option

The possibilities of this degree are endless! Once you transfer your credits, you can choose to complete a bachelor’s degree in almost any field of study. The degree is designed to get the general courses completed so you can focus on a career path that interests you during your bachelor’s program.

There are numerous courses within the AS degree that can be completed online, which will maximize your flexibility. Thus, you can fit many classes into your busy schedule! To see a list of courses that will apply toward the AA or AS degree, go to [www.mtc.edu](http://www.mtc.edu).

# Associate of Science

## Ohio Transfer Module (OTM) and Transfer Assurance Guide (TAG) Courses

Course No	Course Title	Cr Hr	Course No	Course Title	Cr Hr
<b>ENGLISH, LITERATURE, COMMUNICATIONS</b>			<b>NATURAL SCIENCE</b>		
<i>Minimum of 6 OTM<sup>1</sup> credits</i>			<i>Minimum of 8 OTM<sup>1</sup> Natural Science credits, OR 3 OTM<sup>1</sup> Math credits and 12 OTM<sup>1</sup> Natural Science credits</i>		
ENG1000	English Composition I	3	BIO1100	General Biology	4
ENG1100	English Composition II	3	CHM1200	Chemistry I	4
ENG1400	Oral Communications	3	CHM1250	Chemistry II	4
ENG2000	Early American Literature	3	PHY1200	Physics I	4
ENG2100	Modern American Literature	3	PHY1250	Physics II	4
			SCI1200	Anatomy & Physiology I	4
			SCI1250	Anatomy & Physiology II	4
			SCI1300	Microbiology	4
			SCI2000	Advanced Human Physiology	4
<b>SOCIAL &amp; BEHAVIORAL SCIENCES</b>			<b>OTM<sup>1</sup> Electives</b>		
<i>Minimum of 6 OTM<sup>1</sup> credits</i>			<i>Choose additional OTM<sup>1</sup> courses to complete the requirement of 36 OTM<sup>1</sup> credits.</i>		
ECN2000	Microeconomics	3			
ECN2100	Macroeconomics	3			
HSS1060	Abnormal Psychology	3			
PSY1100	General Psychology	3			
PSY1500	Social Psychology	3			
PSY2100	Human Growth & Development	3			
SOC1200	Sociology	3			
SOC1400	Personal & Family Relations	3			
SOC2200	Social Problems	3			
					<i>Total OTM Credits</i>
<b>ARTS &amp; HUMANITIES</b>			<b>Electives (Transfer Assurance Guides<sup>2</sup>)</b>		
<i>Minimum of 6 OTM<sup>1</sup> credits</i>			<i>Choose an additional 24 credits to equal the 60 credits needed for an AS degree.</i>		
HSS2020	Ethnic & Cultural Diversity	3	ALH1110	Medical Terminology	3
HST1500	Early American History	3	ALH1120	Human Diseases	3
HST1600	Modern American History	3	ACC1400	Financial Accounting	4
HST1700	Western Civilization I	3	BUS2150	Legal Environment of Business	3
HST1800	Western Civilization II	3	CRJ1000	Introduction to Criminal Justice	3
SOC2400	Gender Studies	3	CRJ1500	Criminology	3
HUM1400	Introduction to Logic	3	ENG1200	Business Communications	3
			ENG1500	Interpersonal Communication	3
			HSS1040	Introduction to Social Work	3
			MKT2030	Principles of Marketing	3
			NTR1100	Nutrition	3
			OIS1240	Computer Applications	3
<b>MATHEMATICS, STATISTICS &amp; LOGIC</b>					
<i>Minimum of 6 OTM<sup>1</sup> credits, OR 3 OTM<sup>1</sup> Math credits and 12 OTM<sup>1</sup> Natural Science credits</i>					<i>Total Degree Credits</i>
MTH1230	Quantitative Reasoning	3			
MTH1240	Statistics	3			
MTH1245	College Algebra	3			
MTH1250	PreCalculus	3			
MTH2000	Calculus I	5			
MTH2050	Calculus II	5			

**60 Total Credits**

<sup>1</sup> Required Ohio Transfer Module (OTM) courses (36-40 credits)

<https://www.ohiohighered.org/transfer/transfermodule>

<sup>2</sup> Transfer Assurance Guides (TAG)

<https://www.mtc.edu/wp-content/uploads/TransferInfo/ApprovedCourseList.pdf>

Effective 2019-20

## BUSINESS TECHNOLOGIES

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## Associate of Applied Business Degrees

### Business Management

- Accounting Option
- Adult Student Accelerated Program (ASAP)
- Agribusiness Option
- Business Management *Online*
- Human Resource Management Option
- Human Resource Management Option *Online*
- Marketing Media Major
- Real Estate Management Option *Online*
- Supply Chain/Logistics Option

### Office Administration Technology

- Office Administration Technology *Online*
- Office Administration Technology (Medical Option)

## Associate of Technical Study Degrees

Individually Planned ATS - Business  
(special application required)

## Certificates

Accounting  
Business Management  
Office Administration Certificate

## COOPERATIVE EDUCATION

Marion Technical College believes that maximum benefit is derived from integrating cooperative education (workplace) experiences into academic programs. Securing Co-op employment that is related to the student's academic program is an ideal method for bringing classroom and lab experiences "to life." Business Technologies programs at MTC include a cooperative experience.

The cooperative program was established based upon need for graduates to have practical experience in the work environment as identified through assessment of advisory committees. These committees are comprised of area and regional employers whose input helps shape MTC's program and course development.

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement results are also required.

### Degree Received – Credential Certificate

Two-semester full-time schedule; mixture of accounting, business, and computer courses; program can be completed on a part-time basis.

### For More Information, Contact:

Admission Office  
Marion Technical College  
1467 Mt Vernon Avenue  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636  
www.mtc.edu

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu).

*Information subject to change without notice.*

### The Program – Accounting Certificate

Prepare, analyze, and verify financial records; maintain systematic records utilizing computerized data management systems.

### Projections U.S. Department of Labor

Employment of accountants and auditors is projected to grow 11 percent from 2014 to 2024, faster than the average for all occupations.

Globalization, a growing overall economy, and an increasingly complex tax and regulatory environment are expected to lead to strong demand for accountants and auditors. Accountants and auditors held about 1.3 million jobs in 2014. The industries that employed the most accountants and auditors were as follows: Accounting, tax preparation, bookkeeping, and payroll services 26%; Government 8%; Finance and insurance 8%; Management of companies and enterprises 7%; and Manufacturing 6%. The U.S. Department of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook* is a useful tool for career research on a variety of positions. <http://www.bls.gov/ooh/>

### Students in the Accounting Certificate program will learn to...

- Prepare financial reports.
- Compare and use financial statements for decision-making purposes.
- Identify, analyze, and summarize financial data.
- Prepare budgets and forecasts for financial decisions.
- Apply generally-accepted accounting principles, concepts, methods, and processes that provide for the accuracy and integrity of financial data.
- Exhibit ethical behavior in performing accounting functions.
- Analyze and utilize cost information for job order and process cost control.
- Evaluate business problems and apply software applications to record, analyze, and present information.
- Demonstrate an understanding of business and commercial law.
- Write and speak clearly and effectively using standard English.



**Accounting Certificate**  
**One-Year Technical Certificate**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			Gen Ed	Applied Gen Ed (Basic)	Gen Ed			
<b>FIRST SEMESTER (Fall)</b>								
ACC1400	Financial Accounting	4	4			[OBU010]	FA, SP	Placement requirements or MTH0910; and OIS1200
BUS2150	Legal Environment of Business	3			3	[OBU004]	FA, SP	None
BUS2100	Ethics	3		3			ALL	Placement requirements or ENG0990
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
<b>SECOND SEMESTER (Spring)</b>								
ACC1500	Microcomputer Applications in Accounting	3	3				SP	ACC1400, OIS1240
ACC1700	Managerial Accounting	4	4			[OBU011]	SP	ACC1400
ACC2600	Payroll Accounting	1	1				SP	ACC1400
FIN1000	Personal Finance	3			3		SP	Placement requirements or OIS1200
ACC2300	Federal Taxation	3	3				SP	ACC1400
<b>Credit Hour Total</b>			<b>30</b>	<b>15</b>	<b>6</b>			<b>9</b>
					<b>30</b>			

**Occupational Certification Opportunities:**

**American Institute of Professional Bookkeepers**  
 Certified Bookkeeper Designation

**American Payroll Association**  
 Certified Payroll Professional  
 Fundamental Payroll Certification

**National Bookkeepers Association/National Association of Certified Professional Bookkeepers**  
 Accounting Certification  
 Bookkeeper Certification  
 REORDER/RENAME Excel Certification  
 REORDER Payroll Certification  
 QuickBooks Certification  
 Tax Certification

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### Career Opportunities

Accounts Receivable  
Accounts Receivable/Payable Clerk  
Assistant School Treasurer  
Auditor  
Bank Management Trainee  
Billing Specialist  
Bookkeeper  
Budget Accountant  
Collections Worker  
Inventory Clerk  
Loan Officer Trainee  
Payroll Clerk  
Tax Preparer  
Office Manager  
Sales Manager  
Bank Manager

Check out more career choices at Career Coach

<https://mtc.emsicc.com/>

### Degree Received Associate of Applied Business

Two-year full-time degree schedule; mixture of management, accounting, core business, computer, and communication courses with emphasis on management in a variety of organizational settings; program can be completed on a part-time basis.

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

### The Program – Business Management – Accounting

MTC's Associate of Applied Business (AAB) degree program prepares students for the diverse challenges of business management. The business management program reflects contemporary employer needs and equips students with essential business knowledge and skills. Students will learn how to develop and execute business management plans from both the strategic and tactical perspectives to maximize organizational resources. MTC's business management curriculum places a strong emphasis on developing graduates who are prepared to help organizations be successful in the face of everyday marketplace challenges. The Accounting options prepares students to create, analyze, and verify financial records; maintain systematic records utilizing computerized data management systems.

### Upon completion of the Accounting option within MTC's Business Management degree, students will be able to...

- Identify, analyze, and summarize financial data.
- Utilize computerized accounting software
- Prepare individual and corporate federal, state, and local income tax returns and reports.
- Use the problem solving method to solve customer concerns and business problems
- Use technology to present a project
- Apply business concepts to create a business plan
- Manage finances including bookkeeping, accounts payable, accounts receivable, and banking.
- Obtain employment in the Business Management or Accounting field
- Develop a marketing and/or sales plan incorporating new product ideas and strategies
- Understand legal requirements and ethical considerations pertaining to organizations.
- Demonstrate skills necessary for effective participation in or leadership in workplace teams
- Communicate effectively both in writing and orally with co-workers, customers, and managers.
- Manage finances including bookkeeping
- Perform mathematical calculations related to the office environment.

### Projections U.S. Department of Labor

The U.S. Department of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook* is a useful tool for career research on a wide variety of management, marketing, and human resources positions. <https://www.bls.gov/ooh/>

The Small Business Administration is an excellent source of information for anyone contemplating going into business. <http://www.sba.gov>

The Business Management Accounting Option is offered in a variety of traditional day/evening, blended and online.

**BUSINESS MANAGEMENT**  
**• ACCOUNTING OPTION •**  
**Associate of Applied Business Degree**  
**(Effective Academic Year 2019-20)**

Course Title	Credits	TECHNICAL			NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
					Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>									
MGT1400	Introduction to Management	3	3					ALL	None
ACC1400	Financial Accounting	4	4			[OBU010]	FA, SP		Placement requirements or MTH0910; and OIS1200
MTH1230	Quantitative Reasoning	3		3				ALL	Placement requirements or MTH0910.
OIS1240	Computer Applications	3			3	[OBU003]	ALL		Placement requirements or OIS1200
ENG1000	English Composition I	3		3		[TME001]	ALL		Placement requirements or ENG0991
<b>SECOND SEMESTER (Spring)</b>									
MKT2030	Principles of Marketing	3	3			[OBU006]	FA, SP		OIS1240 and ECN2000 must be taken before or concurrently with this course.
ACC1700	Managerial Accounting	4	4			[OBU011]	SP		ACC1400
BUS2100	Ethics	3	3				ALL		Placement requirements or ENG0990
ACC1500	Microcomputer Applications in Accounting	3	3				SP		ACC1400, OIS1240
ENG1100	English Composition II	3		3			ALL		ENG1000
<b>THIRD SEMESTER (Fall)</b>									
MGT2210	Human Resource Management	3		3			FA		MGT1400 must be taken before or concurrently with this course.
ECN2000	Microeconomics	3	3			[TMSBS] [OSS004]	ALL		None
ENG1400	Oral Communications	3			3	[TMCOM] [OCM004] [OBU004]	ALL		None
BUS2150	Legal Environment of Business	3		3			FA, SP		None
BUS2800	Cooperative Education Preparation	1		1			FA, SP		ENG1000 and 16 credits
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL		None
<b>FOURTH SEMESTER (Spring)</b>									
FIN1000	Personal Finance	3	3				SP		Placement requirements or OIS1200
MGT2500	Entrepreneurship & Small Business	3	3				SP		MGT1400, MKT2030, ACC1400
ACC2600	Payroll Accounting	1	1				SP		ACC1400
ACC2300	Federal Taxation	3		3			SP		ACC1400
BUS2901	Cooperative Education Experience	1	1				ALL		BUS2800
ENG1200	Business Communications	3			3	[OBU005]	ALL		ENG1000
<b>Credit Hour Total</b>		<b>62</b>	<b>31</b>	<b>22</b>	<b>9</b>				

Note: MGT2540, Leadership, can be substituted for BUS2800 and BUS2901 with Director Approval.

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### Career Opportunities

Buyer/Purchasing Agent  
Agricultural Technician  
Agricultural Management  
Crop Soil Sampler  
Environmental Resources Management  
Crop Insurance Account Specialist  
Grader/Sorter  
Product Manager

Check out more career choices at <https://mtc.emsicc.com/>

### Degree Received

#### Associate of Applied Business

Two-year full-time degree schedule; mixture of management, core business, computer, engineering, science, and communication courses with emphasis on management in a variety of organizational settings; program can be completed on a part-time basis.

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

### The Program – Business Management – Agribusiness

Students who select the Agribusiness option within MTC's Associate of Applied Business (AAB) business management program will develop knowledge and skills that facilitate practical application as it applies to the business of farming. Strong foundation in decision-making principles plus the option to customize agricultural focus through technical courses, strengthens the connection in preparing students for employment in commercial agriculture and businesses serving agriculture. MTC's business management curriculum places a strong emphasis on developing graduates who are prepared to help organizations be successful in the face of everyday business challenges.

### Upon completion of the Agribusiness option within MTC's AAB degree, students will be able to...

- Demonstrate knowledge of the issues and environmental factors involved in making agribusiness decisions.
- Apply administrative skills to effectively organize work, manage time, and set priorities.
- Effectively use interpersonal skills to communicate and work with a diverse group of people.
- Use appropriate computer software to solve business problems and to create documents that enhance effective communications.
- Use the problem-solving method to solve ethical dilemmas, customer concerns, and business problems.
- Use technology to develop and effectively communicate information related to a project or marketing plan.
- Develop a marketing plan incorporating new product ideas and strategies.
- Understand ecological foundation of environmental systems and strategies for sustainable management of environment and natural resources.
- Troubleshoot computer hardware and software to repair systems including virtualization.

### Projections U.S. Department of Labor

The U.S. Department of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook* is a useful tool for career research on a wide variety of management, business, and agriculture positions. [www.bls.gov/ooh/](http://www.bls.gov/ooh/)

The Small Business Administration is an excellent source of information for anyone contemplating going into business. [www.sba.gov](http://www.sba.gov)

**BUSINESS MANAGEMENT**  
**• AGRIBUSINESS OPTION •**

**Associate of Applied Business Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>								
MGT1400	Introduction to Management	3	3				ALL	None
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
ECN2000	Microeconomics	3		3		[TMSBS] [OSS004]	ALL	None
<b>SECOND SEMESTER (Spring)</b>								
MKT2030	Principles of Marketing	3	3			[OBU006]	FA, SP	OIS1240 and ECN2000 must be taken before or concurrently with this course.
ACC1400	Financial Accounting	4	4			[OBU010]	FA, SP	Placement requirements or MTH0910; and OIS1200
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
OIS1340	Excel Advanced	3	3				SP	Placement requirements or MTH0910; and OIS1240.
ENG1100	English Composition II	3		3			ALL	ENG1000
PSY1100	General Psychology	3			3	[TMSBS] [OSS015]	ALL	None
<b>THIRD SEMESTER (Fall)</b>								
MGT2210	Human Resource Management	3	3				FA	MGT1400 must be taken before or concurrently with this course.
MGT2540	Leadership	3	3				FA	MGT1400
BUS2800	Cooperative Education Preparation	1			1		FA, SP	ENG1000 and 16 credits
ENR2100Z	Introduction to Environmental Science	3		3			ALL	None
<b>OR</b>								
CHM1200	Chemistry I					[TMNS] [OSC008] [OSC023]	ALL	High School Chemistry or SCI1050
TEC0000	Technical Elective**	3	3					Course requirements
TEC0000	Technical Elective**	3	3					Course requirements
<b>FOURTH SEMESTER (Spring)</b>								
MGT2410	Organizational Behavior	3	3				SP	MGT1400
BUS2901	Cooperative Education Experience	1	1				ALL	BUS2800
ENG1200	Business Communications	3			3	[OBU005]	ALL	ENG1000
BUS2100	Ethics	3		3			ALL	Placement requirements or ENG0990
BUS2150	Legal Environment of Business	3	3			[OBU004]	FA, SP	None
<b>Credit Hour Total</b>			<b>63</b>	<b>32</b>	<b>21</b>	<b>10</b>		
			<b>63</b>					

\* **Technical Electives** (must meet with advisor)

Note: MGT2500, Entrepreneurship & Small Business, can be substituted for BUS2800 and BUS2901 with Director Approval.

### Application Process Limited Enrollment

1. MTC Application for Admission and non-refundable application fee.
2. Complete the **Adult Student Accelerated Program (ASAP) Application**.
  - Document two years of full-time work experience.
  - Submit a commitment essay detailing personal goals for pursuing this program.
3. Provide official transcripts—required to have a 2.50/4.00 overall grade point average.
  - Official high school transcript or GED results.
  - Official college transcript(s), if applicable.
4. Complete the Basic Skills Assessment (ACCUPLACER) or successfully complete any required college foundation courses prior to beginning the accelerated program.
5. Pass the Technology Skills Test (TST) or completion of Computer Basics (OIS1200) prior to beginning the accelerated program.
  - Any ASAP applicant who needs foundation courses (reading, writing, math) based on placement testing, must successfully complete these courses before the ASAP begins.
6. Participate in an Adult Student Accelerated Program (ASAP) interview, which will be scheduled with applicants who meet the criteria listed above.

**To Learn More Visit**  
[www.mtc.edu](http://www.mtc.edu)

### The Program - Business Management (ASAP)

The **MTC Business Management Adult Student Accelerated Program (ASAP)** offers a unique way for working adults to fit earning a college degree into their busy lives. By attending class one evening per week and taking two online courses, students can earn an associate degree in Business Management. Between weekly classes, students complete coursework online, on their own schedule. The curriculum is taught one course at a time in an interactive, team-based learning environment. This program enables students to connect with their peers and establish a network of friends who provide support throughout the degree program.

### What Will It Take to Succeed?

To be successful, a student must make a personal commitment to attend each weekly class, work independently between class sessions, and complete all assignments on time.

### Students in the Business Management ASAP will learn to...

- Use the problem solving method to solve customer concerns and business problems.
- Identify individual and organizational behavioral strategies.
- Use technology to present a project.
- Manage finances including bookkeeping, accounts payable, accounts receivable, and banking.
- Obtain employment in the Business Management field.
- Develop a marketing and/or sales plan incorporating new product ideas and strategies.
- Understand legal requirements and ethical considerations pertaining to organizations.
- Apply business concepts to create a business plan.
- Demonstrate good work habits, effective interpersonal and virtual team work skills, and a high level of professionalism.
- Communicate effectively both in writing and orally with co-workers, customers, and managers.
- Perform mathematical calculations related to the office environment.

**Career Opportunities** Check out more careers choices at Career Coach  
<https://mtc.emsicc.com>

Office Manager	Sales Manager
Bank Manager	First-line Supervisor
Assistant Manager	Project Coordinator
Marketing Supervisor	

### Degree Received Associate of Applied Business

Mixture of core business, communications, management, and IT courses; program is completed by attending class one evening per week, one course at a time, in an accelerated format.

The U.S. Department of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook* is a useful tool for career research on a variety of management, marketing, and human resources positions <https://www.bls.gov/ooh/>

The Small Business Administration is an excellent source of information for anyone contemplating going into business. <http://www.sba.gov>

**BUSINESS MANAGEMENT**  
**• ASAP •**  
**Associate of Applied Business Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Spring)</b>								
MGT1400	Introduction to Management	3	3				ALL	None
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
<b>SECOND SEMESTER (Summer)</b>								
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
ENG1100	English Composition II	3		3			ALL	ENG1000
<b>THIRD SEMESTER (Fall)</b>								
OIS1340	Excel Advanced	3	3				SP	Placement requirements or MTH0910; and OIS1240.
MGT2410	Organizational Behavior	3	3				SP	MGT1400
BUS2150	Legal Environment of Business	3	3			[OBU004]	FA, SP	None
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
<b>FOURTH SEMESTER (Spring)</b>								
ECN2000	Microeconomics	3		3		[TMSBS] [OSS004]	ALL	None
ENG1200	Business Communications	3			3	[OBU005]	ALL	ENG1000
MGT2510	Project Management	3			3		FA	OIS1240
<b>FIFTH SEMESTER (Summer)</b>								
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
ACC1400	Financial Accounting	4	4			[OBU010]	FA, SP	Placement requirements or MTH0910; and OIS1200
<b>SIXTH SEMESTER (Fall)</b>								
MGT2210	Human Resource Management	3	3				FA	MGT1400 must be taken before or concurrently with this course.
ACC1700	Managerial Accounting	4	4			[OBU011]	SP	ACC1400
MKT2030	Principles of Marketing	3	3			[OBU006]	FA, SP	OIS1240 and ECN2000 must be taken before or concurrently with this course.
<b>SEVENTH SEMESTER (Spring)</b>								
BUS2100	Ethics	3		3			ALL	Placement requirements or ENG0990
MGT2540	Leadership	3	3				FA	MGT1400
MGT2500	Entrepreneurship & Small Business	3	3				SP	MGT1400, MKT2030, ACC1400
<b>Credit Hour Total</b>			<b>62</b>	32	21	9		
				62				

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### Career Opportunities

Office Manager  
Sales Manager  
Bank Manager  
First-line Supervisor  
Assistant Manager  
Project Coordinator  
Marketing Supervisor

Check out more career choices at Career Coach. <https://mtc.emsicc.com/>

### Degree Associate of Applied Business

Two-year full-time degree schedule; mixture of core business, management, computer, and communications courses; program can be completed on a part-time basis.

Students may earn an Associate of Applied Business degree 100% online at Marion Technical College. The required courses in the Business curriculum are offered online spring and fall semesters and a student who enrolls full-time may complete the degree in two years. This program is offered to qualified students who must be college ready in reading, writing, math; have Internet access, and Microsoft Office ®.

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

### The Program – Business Management

MTC's Associate of Applied Business (AAB) degree program prepares students for the diverse challenges of business management. The business management program reflects contemporary employer needs and equips students with essential business knowledge and skills. Students will learn how to develop and execute business management plans from both the strategic and tactical perspectives to maximize organizational resources. MTC's business management curriculum places a strong emphasis on developing graduates who are prepared to help organizations be successful in the face of everyday marketplace challenges.

### Students in the Business Management program will learn to...

- Use the problem solving method to solve customer concerns and business problems.
- Identify individual and organizational behavioral strategies.
- Use technology to present a project.
- Manage finances including bookkeeping, accounts payable, accounts receivable, and banking.
- Obtain employment in the Business Management field.
- Develop a marketing and/or sales plan incorporating new product ideas and strategies.
- Understand legal requirements and ethical considerations pertaining to organizations.
- Apply business concepts to create a business plan.
- Demonstrate good work habits, effective interpersonal and virtual team work skills, and a high level of professionalism.
- Communicate effectively both in writing and orally with co-workers, customers, and managers.
- Perform mathematical calculations related to the office environment.

### U.S. Department of Labor Projections

The U.S. Department of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook* is a useful tool for career research on a variety of management, marketing, and human resources positions <https://www.bls.gov/ooh/>

The Small Business Administration is an excellent source of information for anyone contemplating going into business <http://www.sba.gov>

The Business Management Program is offered in a variety of formats: traditional day/evening, blended, one night per week (ASAP), and online.



**BUSINESS MANAGEMENT**  
**Associate of Applied Business Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>								
MGT1400	Introduction to Management	3	3				ALL	None
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
ECN2000	Microeconomics	3		3		[TMSBS] [OSS004]	ALL	None
<b>SECOND SEMESTER (Spring)</b>								
MKT2030	Principles of Marketing	3	3			[OBU006]	FA, SP	OIS1240 and ECN2000 must be taken before or concurrently with this course.
ACC1400	Financial Accounting	4	4			[OBU010]	FA, SP	Placement requirements or MTH0910; and OIS1200
BUS2100	Ethics	3		3			ALL	Placement requirements or ENG0990
OIS1340	Excel Advanced	3	3				SP	Placement requirements or MTH0910; and OIS1240.
ENG1100	English Composition II	3		3			ALL	ENG1000
<b>THIRD SEMESTER (Fall)</b>								
MGT2210	Human Resource Management	3	3				FA	MGT1400 must be taken before or concurrently with this course.
MGT0000	Management Elective	3	3				0	Course requirements
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004] [OBU004]	ALL	None
BUS2150	Legal Environment of Business	3	3				FA, SP	None
BUS2800	Cooperative Education Preparation	1			1		FA, SP	ENG1000 and 16 credits
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
<b>FOURTH SEMESTER (Spring)</b>								
MGT2410	Organizational Behavior	3	3				SP	MGT1400
MGT2500	Entrepreneurship & Small Business	3	3				SP	MGT1400, MKT2030, ACC1400
ACC1700	Managerial Accounting	4	4			[OBU011]	SP	ACC1400
BUS2901	Cooperative Education Experience	1	1				ALL	BUS2800
ENG1200	Business Communications	3			3	[OBU005]	ALL	ENG1000
<b>Credit Hour Total</b>			<b>61</b>	<b>33</b>	<b>21</b>	<b>7</b>		
				<b>61</b>				

Note: MGT2540, Leadership, can be substituted for BUS2800 and BUS2901 with Director Approval.

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### Degree Received – Credential Certificate

The two semester curriculum is comprised of established core courses that provide direct training for management support position; the curriculum is comprised of management, business, computer, and communication courses.

### For More Information, Contact:

Admission Office  
Marion Technical College  
1467 Mt Vernon Avenue  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636  
www.mtc.edu

To Learn More Visit  
[www.mtc.edu](http://www.mtc.edu)

### The Program – Business Management Certificate

Provide business support services to managers, utilizing concepts of accounting, personnel and resource management, awareness of consumer behavior, and business planning.

### Students in the Business Management certificate program will learn to...

- Apply interviewing skills to employ and leadership skills to train, supervise, evaluate, and motivate employees.
- Apply administrative skills to effectively organize work, manage time, and set priorities.
- Effectively use interpersonal skills to lead and manage a diverse group of people.
- Use appropriate computer software to solve business problems and to create documents that enhance effective communications.
- Use the problem-solving method to solve business problems.
- Develop a marketing plan incorporating new product ideas and strategies.
- Demonstrate methods for effectively leading a workplace team, and for being an effective team member.

The Business Management Certificate Program is offered in a variety of formats: traditional day/evening, blended and online.

**Business Management Certificate**  
**One-Year Technical Certificate**  
*(Effective Academic Year 2019-20)*

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			Gen Ed	Applied Gen Ed (Basic)	Gen Ed			
<b>FIRST SEMESTER (Fall)</b>								
MGT1400	Introduction to Management	3	3				ALL	None
BUS2100	Ethics	3			3		ALL	Placement requirements or ENG0990
BUS2150	Legal Environment of Business	3	3			[OBU004]	FA, SP	None
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ENG1000	English Composition I	3			3	[TME001]	ALL	Placement requirements or ENG0991
ECN2000	Microeconomics	3			3	[TMSBS] [OSS004]	ALL	None
<b>SECOND SEMESTER (Spring)</b>								
MGT2410	Organizational Behavior	3	3				SP	MGT1400
MGT0000	Management Elective	3	3				0	Course requirements
ACC1400	Financial Accounting	4	4			[OBU010]	FA, SP	Placement requirements or MTH0910; and OIS1200
MKT2030	Principles of Marketing	3	3			[OBU006]	FA, SP	OIS1240 and ECN2000 must be taken before or concurrently with this course.
ENG1100	English Composition II	3			3		ALL	ENG1000
<b>Credit Hour Total</b>			<b>34</b>	<b>19</b>	<b>12</b>	<b>3</b>		
				<b>34</b>				

Occupational Certification Opportunity:  
Certified Professional Salesperson (SCPS)

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. High school transcript (or GED results) and college transcripts (if applicable).

### Career Opportunities

Real Estate Sales  
Agent  
Agent Assistant  
Real Estate Agent/Broker  
Broker Specialist  
Property Manager  
Title Researcher

Check out more career choices at Career Coach  
<https://mtc.emsicc.com/>

### Credential

Becoming a licensed **Real Estate Salesperson in the State of Ohio** requires completing required coursework, meeting contract hour requirements, and passing the Real Estate Salesperson examination.

### To Learn More Visit

Admission Office  
Marion Technical College  
1467 Mt. Vernon Avenue  
Marion, OH 43302  
[www.mtc.edu/Admission](http://www.mtc.edu/Admission)  
[enroll@mtc.edu](mailto:enroll@mtc.edu)  
740.389.4636  
[www.mtc.edu](http://www.mtc.edu)

### Will the Real Estate Credits Apply Towards an Associate Degree?

Students who complete MTC's Real Estate sales courses and wish to become a licensed real estate broker in the State of Ohio can apply the 10 credit hours towards an Associate of Applied Business Degree in Real Estate Management.

Course No	Course Title	Credit Hours*
REA 1010	Real Estate Principles and Practices	3
REA 1300	Real Estate Appraisal	2
REA 1200	Real Estate Finance	2
REA 1100	Real Estate Law	3
<b>Credit Hour Total</b>		<b>10</b>

Go to <http://www.com.ohio.gov/real/default.aspx> to view the State of Ohio Requirements to become a Licensed Real Estate Salesperson

### Salesperson Pre-Licensing Requirements

To be eligible to take the Salesperson Examination, you must fulfill two requirements: 1) Pass each course listed above; and, 2) Meet the state's contact hour attendance requirements. Class attendance is mandatory.

### Salesperson Post-Licensing Requirements

Not earlier than the date of issue of a real estate salesperson's license to a licensee, but not later than twelve months after the date of issue of a real estate salesperson license to a licensee, the licensee shall submit proof satisfactory to the superintendent, on forms made available by the superintendent, of the completion of ten hours of classroom instruction that shall be completed in schools, seminars, and educational institutions approved by the commission.

Marion Technical College's Associate of Applied Business degree in Real Estate Management includes the coursework required to become a licensed **Real Estate Broker** in the State of Ohio.

### Broker License Requirements

Course No	Course Title	Credit Hours	State Required Contact Hours*
REA 1010	Real Estate Principles and Practices	3	40
REA 1300	Real Estate Appraisal	2	20
REA 1200	Real Estate Finance	2	20
REA 1100	Real Estate Law	3	40
ACC 1700	Managerial Accounting	4	Prereq: ACC1400, BUS1100
MGT 2210	Human Resource Management	3	Prereq: MGT1400 or concurrent
ECN 2000	Microeconomics	3	Prereq: None
BUS 2150	Legal Environment of Business	3	Prereq: None

The credits in this degree fulfill the state's two-year (60 semester hours) post secondary education requirement for any salesperson (licensed after January 3, 1984) who wants to take the Broker's Examination. The requirements do not apply to those licensed before January 2, 1972. Go to <http://www.com.ohio.gov/real/default.aspx> to view the State of Ohio's requirements to obtain a Real Estate Broker's License.

### Broker Post-Licensing Requirements

Within one year after issuance of a Broker's License, the licensee must complete a 10-hour post licensure course in real estate brokerage. This course may be completed at other institutions approved by the Ohio Real Estate Commission. If this requirement is not met, the license will be suspended and the broker has a 1-year grace period to complete the course.

### Application Process

MTC Application for Admission and nonrefundable applicable fee.

1. Final high school transcript (or GED results) and college transcripts (if applicable).
2. Successful completion of the Placement Assessment and Technology Skills Test is required. Any College Foundation courses recommended by Placement Assessment results are also required.

### Career Opportunities

Benefits Specialist  
Employment Specialist  
Human Resource Generalist  
Human Resource Assistant  
Payroll Specialist  
Training Coordinator  
Employment Recruiter

Check out more career choices at Career Coach

<https://mtc.emsicc.com/>

### Degree Received Associate of Applied Business

Two-year full-time degree schedule; mixture of management, core business, computer, and communication courses with emphasis on management in a variety of organizational settings; program can be completed on a part-time basis.

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

### The Program – Business Management – Human Resource Management

Students who select the Human Resource Management option within MTC's Associate of Applied Business (AAB) Management program will develop knowledge and skills that facilitate practical application in the field of human resource management (HRM). As HRM is a dynamic part of any business environment, MTC's HRM curriculum reflects the latest trends for local and regional employers, and national trends as reflected by HRM professional organizations such as The Society for Human Resource Management. HRM students will learn how to work with diverse groups of employees in functions such as recruiting, staffing, compensation and benefits administration, training and development, and talent management.

### Upon completion of the HRM option within MTC's Business Management degree, students will be able to...

- Conduct a training session using a variety of training methods
- Use the problem-solving method to solve customer concerns and business problems
- Identify individual and organizational behavioral strategies
- Use technology to present a project
- Manage finances including bookkeeping, accounts payable, accounts receivable, and banking.
- Obtain employment in the Business Management field
- Develop a marketing and/or sales plan incorporating new product ideas and strategies
- Understand legal requirements and ethical considerations pertaining to organizations.
- Demonstrate knowledge of how compensation and benefit plans are structured and administered.
- Apply HRM principles to effectively organize work, manage time, and establish priorities.
- Communicate effectively both in writing and orally with co-workers, customers, and managers.
- Manage finances including bookkeeping
- Perform mathematical calculations related to the office environment.

### Projections U.S. Department of Labor

The U.S. Department of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook* is a useful tool for career research on a wide variety of management, marketing, and human resources positions.

<https://www.bls.gov/ooh/>

The Small Business Administration is an excellent source of information for anyone contemplating going into business. <http://www.sba.gov>

The Business Management Human Resource Management Option is offered in a variety of: traditional day/evening, blended and online.

**BUSINESS MANAGEMENT**  
**• HUMAN RESOURCE OPTION •**  
**Associate of Applied Business Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>								
MGT1400	Introduction to Management	3	3				ALL	None
MGT2210	Human Resource Management	3	3				FA	MGT1400 must be taken before or concurrently with this course.
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
<b>SECOND SEMESTER (Spring)</b>								
MKT2030	Principles of Marketing	3	3			[OBU006]	FA, SP	OIS1240 and ECN2000 must be taken before or concurrently with this course.
MGT2400	Training & Development	3	3				SP	MGT2210, OIS1240
ACC1400	Financial Accounting	4	4			[OBU010]	FA, SP	Placement requirements or MTH0910; and OIS1200
OIS1340	Excel Advanced	3	3				SP	Placement requirements or MTH0910; and OIS1240.
ECN2000	Microeconomics	3		3		[TMSBS] [OSS004]	ALL	None
<b>THIRD SEMESTER (Fall)</b>								
ENG1100	English Composition II	3		3			ALL	ENG1000
BUS2150	Legal Environment of Business	3	3			[OBU004]	FA, SP	None
BUS2800	Cooperative Education Preparation	1			1		FA, SP	ENG1000 and 16 credits
BUS2100	Ethics	3		3			ALL	Placement requirements or ENG0990
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
<b>FOURTH SEMESTER (Spring)</b>								
MGT2410	Organizational Behavior	3	3				SP	MGT1400
MGT0000	Management Elective	3	3				0	Course requirements
ACC2600	Payroll Accounting	1	1				SP	ACC1400
ACC1700	Managerial Accounting	4		4		[OBU011]	SP	ACC1400
BUS2901	Cooperative Education Experience	1	1				ALL	BUS2800
ENG1200	Business Communications	3			3	[OBU005]	ALL	ENG1000
<b>Credit Hour Total</b>			<b>62</b>	30	25	7		

Note: MGT2540, Leadership, can be substituted for BUS2800 and BUS2901 with Director Approval.

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final High school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### Career Opportunities

Advertising Account Representative  
Assistant Buyer  
Customer Service Supervisor  
Market Research Assistant  
Management Trainee  
Marketing Supervisor  
Public Relations Specialist  
Advertising Coordinator  
Events/Promotion Coordinator  
Sales Manager  
Web Designer

Check out more career choices at Career Coach  
<https://mtc.emsicc.com/>

### Degree Received

#### Associate of Applied Business

Two-year full-time degree schedule; mixture of marketing, core business, computer, and communication courses; this program can be completed on a part-time basis. Most second-year marketing courses are offered in an online format. See your academic advisor to confirm the schedule.

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

### The Program – Business Management – Marketing Media

Coordinate various sales and promotional activities that help a business or organization take advantage of opportunities that assist in maintaining a competitive edge; utilize Internet and other computer technology to accomplish business growth.

### Projections U.S. Department of Labor

The U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook is a useful tool for career research on a variety of management, marketing, and human resources positions. <https://www.bls.gov/ooh/>

The Small Business Administration is an excellent source of information for anyone contemplating going into business. <http://www.sba.gov>

### Students in Marketing Media will learn to...

- Use the problem solving method to solve customer concerns and business problems
- Identify individual and organizational behavioral strategies
  - Use technology to present a project
  - Manage finances including bookkeeping, accounts payable, accounts receivable, and banking.
  - Obtain employment in the Business Management field
  - Develop a marketing and/or sales plan incorporating new product ideas and strategies
  - Understand legal requirements and ethical considerations pertaining to organizations.
  - Identify & demonstrate various types of advertising
  - Effectively utilize hardware, software, camera, digital recorders, and software to create photographs, and video and audio productions
  - Develop, design and maintain Web pages, Web applications, and Web sites
  - Communicate effectively both in writing and orally with co-workers, customers, and managers.
  - Manage finances including bookkeeping
  - Perform mathematical calculations related to the office environment.

#### Note:

The Business Management Marketing Media Option courses are offered in a variety of formats including traditional, day/evening, blended, and online.



**BUSINESS MANAGEMENT**  
**●MARKETING MEDIA OPTION●**  
**Associate of Applied Business Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>								
MGT1400	Introduction to Management	3	3				ALL	None
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
ECN2000	Microeconomics	3		3		[TMSBS] [OSS004]	ALL	None
<b>SECOND SEMESTER (Spring)</b>								
MKT2030	Principles of Marketing	3	3			[OBU006]	FA, SP	OIS1240 and ECN2000 must be taken before or concurrently with this course.
ACC1400	Financial Accounting	4	4			[OBU010]	FA, SP	Placement requirements or MTH0910; and OIS1200
BUS2100	Ethics	3		3			ALL	Placement requirements or ENG0990
ASC0000	Arts and Science Elective	3			3		0	Course requirements
ENG1100	English Composition II	3		3			ALL	ENG1000
<b>THIRD SEMESTER (Fall)</b>								
MGT2210	Human Resource Management	3	3				FA	MGT1400 must be taken before or concurrently with this course.
<b>OR</b>								
MGT2410	Organizational Behavior						SP	MGT1400
MKT2150	Principles of Advertising & Promotion	3	3			[OCM012]	FA	MKT2030 must be taken before or concurrently with this course.
OIS2011	Video & Photography Technologies	3	3				FA	OIS1240 must be taken before or concurrently with this course.
BUS2800	Cooperative Education Preparation	1			1		FA, SP	ENG1000 and 16 credits
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
<b>FOURTH SEMESTER (Spring)</b>								
MKT2200	Public Relations & Social Media	3	3				SP	MKT2030 must be taken before or concurrently with this course.
BUS2150	Legal Environment of Business	3	3			[OBU004]	FA, SP	None
BUS2901	Cooperative Education Experience	1	1				ALL	BUS2800
OIS1500	Web Page Authoring I	3	3				SP	OIS1240
OIS1620	Digital Image Manipulation	3	3				SP	OIS1240 must be taken before or concurrently with this course.
ENG1200	Business Communications	3			3	[OBU005]	ALL	ENG1000
<b>Credit Hour Total</b>			<b>63</b>	<b>32</b>	<b>21</b>	<b>10</b>		
				<b>63</b>				

Note: MGT2540, Leadership, can be substituted for BUS2800 and BUS2901 with Director Approval.

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Placement Assessment and Technology Skills Test is required. Any College Foundation courses recommended by Placement Assessment results are also required.

### Career Opportunities

Accounts Coordinator  
Medical Office Assistant  
Billing Specialist  
Medical Records Clerk  
Scribe

Check out more career choices at Career Coach  
<https://mtc.emsicc.com/>

### Degree Received

#### Associate of Applied Business

A two-year, full-time or part-time degree schedule. This curriculum includes computer, business, communications, and medical courses.

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

### Admission Office

Marion Technical College  
1467 Mt. Vernon Avenue  
Marion, OH 43302  
[www.mtc.edu/Admission](http://www.mtc.edu/Admission)  
[enroll@mtc.edu](mailto:enroll@mtc.edu)  
740.389.4636

### The Program – Office Administration – Medical Option

Perform administrative and managerial functions within a healthcare environment including physician's offices, clinics, health departments, hospitals, insurance companies, and social service agencies.

### Students in the Office Administration Medical Option program will learn to....

- Apply administrative skills to effectively organize and manage work time and priorities.
- Use e-technologies to evaluate business problems and apply software applications to record, analyze, and present information.
- Demonstrate good work habits, effective interpersonal and team work skills, and a high level of professionalism.
- Communicate effectively both in writing and orally with co-workers, customers, and managers.
- Manage finances including bookkeeping, accounts payable, accounts receivable, and banking.
- Perform mathematical calculations related to the office environment.
- Use record control systems to streamline information management.
- Integrate administrative and technology skills in making business decisions and performing business functions.
- Demonstrate professional conduct and apply legal, social, and ethical responsibilities within the health care environment.
- Showcase organizational skills by producing a professional portfolio.
- Prepare for employment in office administration career.
- Perform administrative duties such as maintaining medical records, scheduling appointments, document production, and apply computer management tools and equipment to achieve them.
- Review and interpret medical records for disease processes, surgical procedures, and other medical treatments code, classify, and index diagnoses and procedures for reimbursement by Medicare, Medicaid, and medical insurances using ICD-10-CM and CPT-4 coding.
- Perform in a safe manner that minimizes risk to patients, self, and others.

**Note:** Employment in the health care industry may require a criminal background check facilitated by the Ohio Bureau of Criminal Investigation and Identification in accordance with Senate Bill 38 and House Bill 160. Additionally, a credit check and/or drug screening may be requested by companies in accordance with their policies. Individuals who have been convicted of a crime, including felony, gross misdemeanor, misdemeanor, or drug-related arrests may be ineligible for employment. **Students will not complete the co-op experience within the health care industry.**

**OFFICE ADMINISTRATION**  
**• MEDICAL OPTION •**  
**Associate of Applied Business Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			(30-35 CrHr)	Applied Gen Ed (Basic) (15 CrHr)	Gen Ed (15 CrHr)			
<b>FIRST SEMESTER (Fall)</b>								
OIS1240	Computer Applications	3	3			[OBU003]	ALL	Placement requirements or OIS1200
BUS1010	Business English Skills	3			3		FA	OIS1240 must be taken before or concurrently with this course.
ALH1110	Medical Terminology	3			3	[OHL020]	ALL	None
MGT1400	Introduction to Management	3			3		ALL	None
BUS2150	Legal Environment of Business	3	3			[OBU004]	FA, SP	None
<b>SECOND SEMESTER (Spring)</b>								
OIS1320	Word Advanced	3	3				SP	OIS1240
OIS1340	Excel Advanced	3	3				SP	Placement requirements or MTH0910; and OIS1240.
OIS1255	Business Integrated Technologies	3	3				SP	OIS1240 and BUS1010
BUS2100	Ethics	3		3			ALL	Placement requirements or ENG0990
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
<b>THIRD SEMESTER (Fall)</b>								
OIS1260	PowerPoint	1			1		FA	OIS1240 must be taken before or concurrently with this course.
MGT2510	Project Management	3	3				FA	OIS1240
OIS1280	Records & Data Management	2	2				FA	OIS1240
ACC1400	Financial Accounting	4			4	[OBU010]	FA, SP	Placement requirements or MTH0910; and OIS1200
BUS2800	Cooperative Education Preparation	1			1		FA, SP	ENG1000 and 16 credits
MED1021	Medical Office Procedures	4	4				FA	Dept Approval
<b>FOURTH SEMESTER (Spring)</b>								
ECN2000	Microeconomics	3		3		[TMSBS] [OSS004]	ALL	None
CIT2750	Information Technology Capstone	3	3				SP	CIT2551 or OIS1255; and, OIS1320 or OIS1520
MED1061	Medical Assisting Insurance & Billing	3	3				SP	ALH1110 and Dept Approval
BUS2901	Cooperative Education Experience	1	1				ALL	BUS2800
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
<b>Credit Hour Total</b>			<b>61</b>	31	15			15

Note: MGT2540, Leadership, can be substituted for BUS2800 and BUS2901 with Director Approval.

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. High school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### Career Opportunities

Administrative Assistant  
Executive Assistant  
Help Desk Technician  
Information Coordinator  
Office Manager  
Project Coordinator  
Receptionist  
Software Support Specialist  
Technical Office Assistant

Check out more career choices at Career Coach. <https://mtc.emsicc.com/>

### Degree Received Associate of Applied Business

Two-year full-time degree schedule; mixture of computer skills courses with studies in business management, marketing, and communications.

Students may earn an Associate of Applied Business in Office Administration Technology degree 100% online at Marion Technical College. The required courses in the Office Administration curriculum are offered online spring and fall semesters and a student who enrolls full-time may complete the degree in two years. This program is offered to qualified students who must be college ready in reading, writing, math; have Internet access, and Microsoft Office®.

To Learn More Visit [www.mtc.edu](http://www.mtc.edu)

### The Program – Office Administration

The **MTC Office Administration** program focuses on today's multi technology-enhanced office environment and offers students the opportunity to focus on specialized options. Students will learn to utilize information management tools, software applications, and business skills to manage situations in today's virtual office teams; streamline the collection and reporting of data sources to assist in making sound business decisions; support "help desk" operations; and learn to produce, manage, and enhance materials for distribution via Internet and intranet.

### Students in Office Administration will learn to...

- Apply administrative skills to effectively organize and manage work time and priorities.
- Use e-technologies to evaluate business problems and apply software applications to record, analyze, and present information.
- Demonstrate good work habits, effective interpersonal and virtual team work skills, and a high level of professionalism.
- Communicate effectively both in writing and orally with co-workers, customers, and managers.
- Manage finances including bookkeeping, accounts payable, accounts receivable, and banking.
- Perform mathematical calculations related to the office environment.
- Use record control systems to streamline information management.
- Integrate administrative and technology skills in making business decisions and performing business functions.
- Demonstrate professional conduct and apply legal, social, and ethical responsibilities.
- Showcase organizational skills by producing a portfolio.
- Prepare for employment in office administration career.

### College Credit for Certified Administrative Professional® (CAP®)

For individuals entering the Office Administration Technology program with the **Certified Administrative Professional® (CAP®)** and **Certified Administrative Professional – Organization Management specialty (CAP-OM)** credentials, MTC will automatically award proficiency credit (CAP maximum award - 22 credit hours; CAP-OM maximum award - 25 credit hours) for the following courses:

ACC1400	Financial Accounting I
BUS2150	Legal Environment of Business
ENG1000	English Composition I
ENG1100	English Composition II
ECN2000	Microeconomics
MGT1400	Introduction to Management
MGT2410	Organizational Behavior (CAP-OM only)
OIS1200	Computer Basics
OIS1280	Records and Data Management

**OFFICE ADMINISTRATION**  
**Associate of Applied Business Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			(30-35 CrHr)	Applied Gen Ed (Basic)	Gen Ed (15 CrHr)			
<b>FIRST SEMESTER (Fall)</b>								
OIS1240	Computer Applications	3	3			[OBU003]	ALL	Placement requirements or OIS1200
BUS1010	Business English Skills	3			3		FA	OIS1240 must be taken before or concurrently with this course.
BUS2150	Legal Environment of Business	3			3	[OBU004]	FA, SP	None
MGT1400	Introduction to Management	3			3		ALL	None
MGT0000	Management Elective	3	3				0	Course requirements
<b>SECOND SEMESTER (Spring)</b>								
OIS1320	Word Advanced	3	3				SP	OIS1240
OIS1340	Excel Advanced	3	3				SP	Placement requirements or MTH0910; and OIS1240.
OIS1255	Business Integrated Technologies	3	3				SP	OIS1240 and BUS1010
BUS2100	Ethics	3		3			ALL	Placement requirements or ENG0990
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
<b>THIRD SEMESTER (Fall)</b>								
OIS1260	PowerPoint	1			1		FA	OIS1240 must be taken before or concurrently with this course.
MGT2510	Project Management	3	3				FA	OIS1240
OIS1280	Records & Data Management	2	2				FA	OIS1240
ACC1400	Financial Accounting	4			4	[OBU010]	FA, SP	Placement requirements or MTH0910; and OIS1200
BUS2800	Cooperative Education Preparation	1			1		FA, SP	ENG1000 and 16 credits
MGT0000	Management Elective	3	3				0	Course requirements
<b>FOURTH SEMESTER (Spring)</b>								
ECN2000	Microeconomics	3		3		[TMSBS] [OSS004]	ALL	None
CIT2750	Information Technology Capstone	3	3				SP	CIT2551 or OIS1255; and, OIS1320 or OIS1520
MGT0000	Management Elective	3	3				0	Course requirements
BUS2901	Cooperative Education Experience	1	1				ALL	BUS2800
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
<b>Credit Hour Total</b>			<b>60</b>					
			30	15	15			
				60				

Note: MGT2540, Leadership, can be substituted for BUS2800 and BUS2901 with Director Approval.

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

Admission Office  
Marion Technical College  
1467 Mt. Vernon Avenue  
Marion, OH 43302  
[www.mtc.edu/Admission](http://www.mtc.edu/Admission)  
[enroll@mtc.edu](mailto:enroll@mtc.edu)  
740.389.4636

### The Program – Office Administration Certificate

The curriculum is comprised of core office administration, business, management, and communications courses.

Students will gain computer skills involving Microsoft® applications and SharePoint basics; this certificate is an ideal stepping stone into many of MTC's associate degree programs.

### Students in the Office Administration Certificate program will learn to...

- Communicate effectively both in writing and orally with co-workers, customers, managers, and end-users.
- Perform mathematical calculations related to the office environment.
- Recognize and solve problems through analysis, evaluation, and synthesis, to make informed decisions.
- Demonstrate good work habits, effective interpersonal and teamwork skills, and a high level of professionalism.
- Use technologies to evaluate business problems and apply software applications to record, analyze, and present information.

### Certificate Received

This is a two-semester curriculum comprised of core office administration courses and studies in business, management, and communications. Credits earned can apply to an associate's degree.

**Office Administration Certificate**  
**One-Year Technical Certificate**  
*(Effective Academic Year 2019-20)*

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			(30-35 CrHr)	Applied Gen Ed (Basic)	Gen Ed (15 CrHr)			
<b>FIRST SEMESTER (Fall)</b>								
OIS1240	Computer Applications	3	3			[OBU003]	ALL	Placement requirements or OIS1200
BUS1010	Business English Skills	3			3		FA	OIS1240 must be taken before or concurrently with this course.
BUS2100	Ethics	3		3			ALL	Placement requirements or ENG0990
MGT1400	Introduction to Management	3			3		ALL	None
MGT2510	Project Management	3	3				FA	OIS1240
<b>SECOND SEMESTER (Spring)</b>								
OIS1320	Word Advanced	3	3				SP	OIS1240
BUS2150	Legal Environment of Business	3			3	[OBU004]	FA, SP	None
ECN2000	Microeconomics	3		3		[TMSBS] [OSS004]	ALL	None
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
OIS1255	Business Integrated Technologies	3	3				SP	OIS1240 and BUS1010
<b>Credit Hour Total</b>			<b>30</b>					
			12	9	9			
			30					

**Occupational Certification Opportunities:**

Microsoft Office Specialist (MOS) - Office 365 Certification

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. High school transcript (or GED results) and college transcripts (if applicable).

### Career Opportunities

Sales Agent  
Buyers Agent  
Real Estate Broker  
Broker Specialist  
Property Manager  
Title Researcher

Check out more career choices at Career Coach  
<https://mtc.emsicc.com>

### Credential

Becoming a licensed **Real Estate Salesperson in the State of Ohio** requires completing required coursework, meeting contract hour requirements, and passing the Real Estate Salesperson examination.

### Degree Received Associate of Applied Business

Two-year full-time degree schedule; mixture of core business, management, real estate, computer, and communications courses; program can be completed on a part-time basis.

To Learn More Visit  
[www.mtc.edu](http://www.mtc.edu)

### The Program – Business Management – Real Estate

Becoming a licensed **Real Estate Salesperson in the State of Ohio** requires completing required coursework, meeting contact hour requirements, and passing the Real Estate Salesperson examination.

Students who finish the Real Estate Option and meet the following requirements can apply through the State of Ohio to become an **Ohio Real Estate Broker**.

### Projections U.S. Department of Labor

The U.S. Department of Labor, Bureau of Labor Statistics, *and Occupational Outlook Handbook* is a useful tool for career research on a variety of management, marketing, and real estate positions.

<http://www.bls.gov/ooh/>

### Students completing the Real Estate Option will learn to ...

- Obtain Real Estate Certification
- Use the problem-solving method to solve customer concerns and business problems
- Identify individual and organizational behavioral strategies
- Use technology to present a project
- Manage finances including bookkeeping, accounts payable, accounts receivable, and banking.
- Obtain employment in the Business Management field
- Develop a marketing and/or sales plan incorporating new product ideas and strategies
- Understand legal requirements and ethical considerations pertaining to organizations.
- Communicate effectively both in writing and orally with co-workers, customers, and managers.
- Manage finances including bookkeeping
- Perform mathematical calculations related to the office environment.

**Note:** *The real estate courses are offered during Fall and Spring term in an accelerated format. Additional course offerings are in two formats: traditional day/evening and online.*



**BUSINESS MANAGEMENT**  
**• REAL ESTATE OPTION •**  
**Associate of Applied Business Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>								
MGT1400	Introduction to Management	3	3				ALL	None
REA1010	Real Estate Principles & Practices	3	3				FA, SP	None
REA1300	Real Estate Appraisal	2	2				FA, SP	REA1010
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
ECN2000	Microeconomics	3		3		[TMSBS] [OSS004]	ALL	None
<b>SECOND SEMESTER (Spring)</b>								
MKT2030	Principles of Marketing	3	3			[OBU006]	FA, SP	OIS1240 and ECN2000 must be taken before or concurrently with this course.
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
BUS2100	Ethics	3		3			ALL	Placement requirements or ENG0990
OIS1340	Excel Advanced	3	3				SP	Placement requirements or MTH0910; and OIS1240.
BUS2150	Legal Environment of Business	3	3			[OBU004]	FA, SP	None
<b>THIRD SEMESTER (Fall)</b>								
MGT2210	Human Resource Management	3	3				FA	MGT1400 must be taken before or concurrently with this course.
REA1100	Real Estate Law	3	3				FA, SP	None
REA1200	Real Estate Finance	2	2				FA, SP	REA1010
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
ACC1400	Financial Accounting	4	4			[OBU010]	FA, SP	Placement requirements or MTH0910; and OIS1200
<b>FOURTH SEMESTER (Spring)</b>								
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
ENG1100	English Composition II	3		3			ALL	ENG1000
ACC1700	Managerial Accounting	4			4	[OBU011]	SP	ACC1400
ENG1200	Business Communications	3			3	[OBU005]	ALL	ENG1000
MGT0000	Management Elective	3	3					
<b>Credit Hour Total</b>			<b>63</b>	<b>32</b>	<b>21</b>	<b>10</b>		
			<b>63</b>					

### Application Process

MTC Application for Admission and nonrefundable applicable fee.

1. Final high school transcript (or GED results) and college transcripts (if applicable).
2. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### Career Opportunities

Buyer  
Logistics  
Supply Chain  
Sourcing  
Purchasing  
Sales and Customer Service  
Transportation  
Warehousing and Distribution

### Degree Received Associate of Applied Business

Two-year full-time degree schedule offered cooperatively by MTC and Lorain County Community College; mixture of management, core business, computer, and logistics; program can be completed on a part-time basis.

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

### The Program – Business Management – Supply Chain/Logistics Management

A critical part of the business world is the process of moving raw materials from suppliers to manufacturers and then on to warehouses, retailers, and customers. Without appropriate planning, factories may be without materials needed to make goods and meet manufacturing deadlines. Students who select the Supply Chain/Logistics option within MTC's Associate of Applied Business (AAB) Business Management program will develop knowledge and skills to master logistics, import/export, and customer service. Graduates with knowledge in this growing field are needed to keep a variety of businesses – from health care to manufacturing to retail to agribusiness to government – supplied with the goods they need to succeed. As supply chain is a dynamic part of any business environment, curriculum reflects the latest trends for local and regional employers. Supply chain business students will learn how to plan logistics, find raw supplies, and work with internal and external customers, suppliers and partners to ensure business timelines and goals are met.

### Upon completion of the Supply Chain/Logistics option within MTC's AAB degree, students will be able to...

- Use the problem solving method to solve customer concerns and business problems
- Identify individual and organizational behavioral strategies
- Use technology to present a project
- Manage finances including bookkeeping, accounts payable, accounts receivable, and banking.
- Obtain employment in the Business Management field
- Develop a marketing and/or sales plan incorporating new product ideas and strategies
- Understand legal requirements and ethical considerations pertaining to organizations.
- Recognize the integration of activities that procure materials, transform them into intermediate goods and final products, and deliver them to external customers.
- Comprehend challenges related to transportation, insurance, packaging, terms of trade, inventory management, and other cross border issues involved in an international setting.
- Demonstrate an understanding of industrial logistics in the Supply Chain.
- Communicate effectively both in writing and orally with co-workers, customers, and managers.
- Manage finances including bookkeeping
- Perform mathematical calculations related to the office environment.

### Projections U.S. Department of Labor

The U.S. Department of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook* is a useful tool for career research on a wide variety of management, marketing, and logistics positions. <http://www.bls.gov/ooh/>

The Small Business Administration is an excellent source of information for anyone contemplating going into business. <http://www.sba.gov>

## BUSINESS MANAGEMENT

### ● SUPPLY CHAIN/LOGISTICS MANAGEMENT OPTION ●

#### *Associate of Applied Business Degree (Effective Academic Year 2019-20)*

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>								
MGT1400	Introduction to Management	3	3				ALL	None
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ECN2000	Microeconomics	3		3		[TMSBS] [OSS004]	ALL	None
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
<b>SECOND SEMESTER (Spring)</b>								
MKT2030	Principles of Marketing	3	3			[OBU006]	FA, SP	OIS1240 and ECN2000 must be taken before or concurrently with this course.
BUS2150	Legal Environment of Business	3	3			[OBU004]	FA, SP	None
ACC1400	Financial Accounting	4	4			[OBU010]	FA, SP	Placement requirements or MTH0910; and OIS1200
OIS1340	Excel Advanced	3			3		SP	Placement requirements or MTH0910; and OIS1240.
ECN2100	Macroeconomics	3		3		[TMSBS] [OSS005]	ALL	None
<b>THIRD SEMESTER (Fall)</b>								
ENG1100	English Composition II	3		3			ALL	ENG1000
MGT1430	Principles of Transport & Logistics	3	3				FA	MGT1400
BUS2800	Cooperative Education Preparation	1			1		FA, SP	ENG1000 and 16 credits
BUS2100	Ethics	3			3		ALL	Placement requirements or ENG0990
MGT1410	International Business	3	3				FA	MGT1400
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
<b>FOURTH SEMESTER (Spring)</b>								
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
MGT1420	Principles of Industrial Distribution	3	3				SP	MGT1400, OIS1240
MGT0000	Management Elective	3	3				0	Course requirements
ACC1700	Managerial Accounting	4			4	[OBU011]	SP	ACC1400
BUS2901	Cooperative Education Experience	1	1				ALL	BUS2800
ENG1200	Business Communications	3			3	[OBU005]	ALL	ENG1000
<b>Credit Hour Total</b>			<b>64</b>	26	21	17		
				<b>64</b>				

Note: MGT2540, Leadership, can be substituted for BUS2800 and BUS2901 with Director Approval.

## **ENGINEERING TECHNOLOGIES**

### **Debbie C. Stark**

Dean of Technical and Professional Programs  
740.386.4165 – [starkd@mtc.edu](mailto:starkd@mtc.edu)

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## **Associate of Applied Science Degrees**

Electrical Engineering Technology  
Electrical Engineering Technology – Alternative Energy Option  
Mechanical Engineering Technology

## **Associate of Technical Study Degrees**

Robotics and Automation Technology

## **Certificates**

Robotics

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement results are also required.
4. ACCUPLACER math score of 41 or above required to take the first mathematics course in the engineering program.

### Degree Received Associate of Technical Study (A.T.S.)

Two-year full-time degree schedule; mixture of core technical courses along with basic mathematics, science, and communications classes; program can be completed on a part-time basis.

### Career Opportunities

Electro-Mechanical Technician  
Electrical and Electronic Repairs  
Electro-Mechanical Equipment Assembler  
Mechanical Drafter  
Maintenance and Repair

### For More Information, Contact:

Admission Office  
Marion Technical College  
1467 Mt Vernon Avenue  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636

### The Program – Robotics and Automation Engineering Technology – ATS

Robotics and Automation graduates will combine knowledge of mechanical engineering technology with knowledge of electrical and electronic circuits to design, develop, test, and manufacture electronic and computer-controlled mechanical systems. Their work often overlaps that of both electrical and electronics engineering technicians and mechanical engineering technicians.

### Graduates of this program will be able to...

- Analyze, interpret and troubleshoot DC and AC electric circuits.
- Analyze and troubleshoot electro-mechanical circuits used in automation.
- Interpret electrical and mechanical diagrams and apply engineering principles to actual mechanical design situations.
- Use the appropriate tools and instruments to analyze electrical and mechanical systems.
- Select, construct, install, analyze and troubleshoot various DC and AC motor and power and control circuits used for various applications in industry.
- Create, update, and interpret mechanical and electrical drawings and details using appropriate CAD software.
- Program, interface and troubleshoot systems controlled by programmable logic controllers.
- Follow required mechanical, electrical and environmental safety procedures.
- Practice the 5S approach for visual order, organization, cleanliness and standardization.
- Work both independently and as an integral part of a technical team.
- Communicate effectively with customers, suppliers, and co-workers.

### Cooperative Education (or Co-op)

Cooperative Education is a learning experience that integrates academic skills with workplace experience. Students in Engineering Technologies can earn college credit, make valuable professional contacts, and link their classroom studies to real-world workplace challenges. See the department dean or academic advisor for details.

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

**ROBOTICS AND AUTOMATION TECHNOLOGY**  
**Associate of Technical Studies Degree**  
*(Effective Academic Year 2019-20)*

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			(30-35 CrHr)	Applied Gen Ed (Basic) (15 CrHr)	Gen Ed (15 CrHr)			
<b>FIRST SEMESTER (Fall)</b>								
GET1000	Introduction to Engineering	2			2	[OES001]	FA, SP	Placement requirements or ENG0970
EET1000	Introduction to Electricity	2	2				FA, SP	Placement requirements or ENG0970
EET2010	Introduction to Programmable Controllers	2	2				FA, SP	EET1000
EET2400	Robotics I	2	2				FA, SP	EET1000
MET1010	Technical Drawing with CAD	3			3		FA, SP	Placement requirements or ENG0970
TMT1110	Applied Technical Math	3		3			FA, SP	Placement requirements or MTH0920
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
<b>SECOND SEMESTER (Spring)</b>								
EET1500	Circuit Analysis I	3	3			[OET001]	SP	EET1000
MET1500	Mechanical Drives	3	3				SP	MET1010 and TMT1110 must be taken before or concurrently with this course.
MET2100	Fluid Mechanics	3	3				SP	None
PHY1110	Applied Physics	4			4		SP	TMT1110 must be taken before or concurrently with this course.
MTH1245	College Algebra	3			3		FA, SP	Placement requirements or MTH0920.
<b>THIRD SEMESTER (Fall)</b>								
EET1550	Circuit Analysis II	3	3			[OET003]	FA	EET1500, TMT1110
EET2060	Advanced Programmable Controllers	3	3				FA, SP	EET2010
EET2460	Robotics II	3	3				FA, SP	EET2400
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
MET2200	Statics	3	3			[OET007]	FA	PHY1110
SOC0000	Sociology Elective*	3		3				
<b>FOURTH SEMESTER (Spring)</b>								
EET2300	Electronics	4	4			[OET005]	SP	EET1550
EET2510	Automated Process Control	3	3				SP	EET2400
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
HSS2020	Ethnic & Cultural Diversity	3		3		[TMSBS] [OSS024]	ALL	Placement requirements or ENG0970
GET2700	Engineering Cooperative Work Experience	1	1				ALL	Dept Approval
<b>Credit Hour Total</b>			<b>65</b>					
			35	15	15			
				65				

\* Select from: PSY1100 or SOC1200

### Application Process

MTC Application for Admission and nonrefundable applicable fee.

1. Final high school transcript (or GED results) and college transcripts (if applicable).
2. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement results are also required.
3. Math placement score of 41 or above required to take the first mathematics course in the engineering program.

### Career Opportunities

Solar Energy System Designer  
Solar Photovoltaic Installer  
Mechanical Drafter

### Degree Received Associate of Applied Science

Two-year full-time degree schedule; mixture of core engineering, mathematics, CAD, and communications courses; program can be completed on a part-time basis.

### For More Information:

Admission Office  
Marion Technical College  
1467 Mt Vernon Avenue  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636

### The Program – Electrical Engineering Technology – Alternative Energy

Students enrolled in this option of the EET degree will gain valuable experience in understanding the growing industry of alternative energy systems. Early classes will expose the student to the various methods of alternative energy power generation, delivery, and uses. Later classes focus primarily on solar energy, including not only the technical aspect of the solar energy systems, but also the business side of the industry. Students will engage in real-world projects that involve site assessment, creating proposals, and designing systems.

### Graduates of this program will be able to...

- Research advances in alternative energy applications, materials, and components
- Configure and size electrical cable for various solar system configurations
- Prepare alternative energy system proposals.
- Utilize equipment and software specific to the alternative energy industry to perform various tasks related to site assessment, proposal generation, installation, maintenance, and troubleshooting.
- Follow appropriate safety procedures for onsite work.
- Follow NEC guidelines as they pertain to solar installations.
- Communicate effectively with customers, suppliers, and co-workers.

### Cooperative Education

Cooperative education is a learning experience that integrates academic skills with workplace experience. Students in Engineering Technologies can earn college credit, make valuable professional contacts, and link their classroom studies to real-world workplace challenges. See the department dean or an academic advisor for details.

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

## ELECTRICAL ENGINEERING TECHNOLOGY

### ● ALTERNATIVE ENERGY OPTION ●

**Associate of Applied Science Degree  
(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			(30-35 CrHr)	Applied Gen Ed (Basic)	Gen Ed (15 CrHr)			
<b>FIRST SEMESTER (Fall)</b>								
GET1000	Introduction to Engineering	2			2	[OES001]	FA, SP	Placement requirements or ENG0970
EET1000	Introduction to Electricity	2	2				FA, SP	Placement requirements or ENG0970
EET2010	Introduction to Programmable Controllers	2	2				FA, SP	EET1000
AET1100	Alternative Energy	3	3				FA	Placement requirements or ENG0970
MET1010	Technical Drawing with CAD	3			3		FA, SP	Placement requirements or ENG0970
TMT1110	Applied Technical Math	3			3		FA, SP	Placement requirements or MTH0920
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
<b>SECOND SEMESTER (Spring)</b>								
AET2100	Photovoltaic Technology	3	3				SP	TMT1110 must be taken before or concurrently with this course.
EET1500	Circuit Analysis I	3	3			[OET001]	SP	EET1000
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
PHY1110	Applied Physics	4			4		SP	TMT1110 must be taken before or concurrently with this course.
MTH1245	College Algebra	3		3			FA, SP	Placement requirements or MTH0920.
<b>THIRD SEMESTER (Fall)</b>								
EET1550	Circuit Analysis II	3	3			[OET003]	FA	EET1500, TMT1110
EET2060	Advanced Programmable Controllers	3	3				FA, SP	EET2010
AET1510	Business of Energy	2	2				FA	ENG1000
EET2200	Electrical Distribution Systems	2	2				FA	EET1500
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
HSS2020	Ethnic & Cultural Diversity	3		3		[TMSBS] [OSS024]	ALL	Placement requirements or ENG0970
<b>FOURTH SEMESTER (Spring)</b>								
EET2300	Electronics	4	4			[OET005]	SP	EET1550
MET1200	Computer Aided Drafting (CAD)	3	3			[OET012] [CTMET005]	SP	MET1010
GET2300	Engineering Statistics	2			2	[OES004]	SP	MTH1245 and OIS1240
GET2700	Engineering Cooperative Work Experience	1	1				ALL	Dept Approval
SOC0000	Sociology Elective*	3		3			0	Course requirements
<b>Credit Hour Total</b>			<b>63</b>		<b>63</b>			

\* Select from: PSY1100 or SOC1200



### Application Process

MTC Application for Admission and nonrefundable applicable fee.

1. Final high school transcript (or GED results) and college transcripts (if applicable).
2. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement results are also required.
3. ACCUPLACER math score of 41 or above required to take the first mathematics course in the engineering program.

### Career Opportunities

Electrical and Electronics Engineering Technician  
Electrical and Electronics Repairer  
Electrical and Electronics Equipment Assembler  
Electrical and Electronics Drafter

### Degree Received Associate of Applied Science

Two-year full-time degree schedule; mixture of core engineering, mathematics, CAD, and communications courses; program can be completed on a part-time basis.

### For More Information:

Admission Office  
Marion Technical College  
1467 Mt Vernon Avenue  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636

### The Program – Electrical Engineering Technology

The Electrical Engineering Technology graduate will be equipped with knowledge in electrical and electronics engineering. They will receive systematic training in electrical power supply, electrical equipment, motors/motor drive, PLCs, Robots, human machine interface (HMI) and industrial Ethernet. The comprehensive study in this program will support efforts in building their careers in areas such as electrical power engineering and automation engineering.

### Graduates of this program will be able to...

- analyze, interpret and troubleshoot DC and AC electric circuits
- analyze, interpret and troubleshoot digital and analog electronic circuits
- develop and interpret electrical diagrams for installation and troubleshooting
- select and use various electrical tools and instruments such as the digital multimeter, oscilloscope and function generator
- identify and explain the operation of the basic components in an electric power generation, transmission and distribution system
- program, interface and troubleshoot systems controlled by programmable logic controllers
- program, operate and troubleshoot industrial robots
- follow required electrical and environmental safety procedures
- Utilize data analysis techniques for process analysis and improvement.
- Work both independently and as an integral part of a technical team.
- Communicate effectively with customers, suppliers, and co-workers.

### Cooperative Education

Cooperative education is a learning experience that integrates academic skills with workplace experience. Students in Engineering Technologies can earn college credit, make valuable professional contacts, and link their classroom studies to real-world workplace challenges. See the department dean or an academic advisor for details.

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

## ELECTRICAL ENGINEERING TECHNOLOGY

### *Associate of Applied Science Degree (Effective Academic Year 2019-20)*

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			(30-35 CrHr)	Applied Gen Ed (Basic) (15 CrHr)	Gen Ed (Basic) (15 CrHr)			
<b>FIRST SEMESTER (Fall)</b>								
GET1000	Introduction to Engineering	2		2		[OES001]	FA, SP	Placement requirements or ENG0970
EET1000	Introduction to Electricity	2	2				FA, SP	Placement requirements or ENG0970
EET2010	Introduction to Programmable Controllers	2	2				FA, SP	EET1000
EET2400	Robotics I	2	2				FA, SP	EET1000
MET1010	Technical Drawing with CAD	3			3		FA, SP	Placement requirements or ENG0970
TMT1110	Applied Technical Math	3			3		FA, SP	Placement requirements or MTH0920
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
<b>SECOND SEMESTER (Spring)</b>								
EET1210	Digital Circuits	4	4			[OET002] and [CTEET002]	SP	Placement requirements or MTH0920; and EET1000
EET1500	Circuit Analysis I	3	3			[OET001]	SP	EET1000
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
PHY1110	Applied Physics	4			4		SP	TMT1110 must be taken before or concurrently with this course.
MTH1245	College Algebra	3			3		FA, SP	Placement requirements or MTH0920.
<b>THIRD SEMESTER (Fall)</b>								
EET1550	Circuit Analysis II	3	3			[OET003]	FA	EET1500, TMT1110
EET2060	Advanced Programmable Controllers	3	3				FA, SP	EET2010
EET2460	Robotics II	3	3				FA, SP	EET2400
EET2200	Electrical Distribution Systems	2	2				FA	EET1500
ENG1400	Oral Communications	3			3	[TMCOM] [OCM004]	ALL	None
HSS2020	Ethnic & Cultural Diversity	3			3	[TMSBS] [OSS024]	ALL	Placement requirements or ENG0970
<b>FOURTH SEMESTER (Spring)</b>								
EET2300	Electronics	4	4			[OET005]	SP	EET1550
EET2510	Automated Process Control	3	3				SP	EET2400
GET2300	Engineering Statistics	2			2	[OES004]	SP	MTH1245 and OIS1240
GET2700	Engineering Cooperative Work Experience	1	1				ALL	Dept Approval
SOC0000	Sociology Elective*	3			3		0	Course requirements
<b>Credit Hour Total</b>			<b>64</b>	<b>32</b>	<b>15</b>	<b>17</b>		

\* Select from: PSY1100 or SOC1200

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.
4. Math placement score of 41 or above required to take the first mathematics course in the engineering program.

### Career Opportunities

Mechanical Engineering Technician  
Maintenance and Repair Worker  
CNC Machine Tool Operator/Programmer  
Mechanical Drafter

### Degree Received Associate of Applied Science

Two-year full-time degree schedule; mixture of core engineering courses along with physics, communications, and math studies; program can be completed on a part-time basis.

### For More Information, Contact:

Admissions Office  
Marion Technical College  
1467 Mt Vernon Avenue  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636

### The Program – Mechanical Engineering Technology

Students in the MET program are trained to be of service in both engineering and manufacturing environments alike. Graduates of this program will have skillsets that enable them to take on a number of tasks, including CAD design, testing and measurement, material and component selection, and analysis and troubleshooting of equipment and processes.

### Graduates of this program will be able to...

- Analyze mechanical design problems through the application of engineering principles and technical skills.
- Select appropriate materials for mechanical systems and structures based on design criteria and component application.
- Troubleshoot equipment and processes using logical, systematic approach.
- Create mechanical part drawings, assemblies, and details using CAD software.
- Read and interpret fully dimensioned mechanical drawings as well as fluid power schematics.
- Demonstrate fundamental knowledge of modern manufacturing processes and techniques.
- Utilize data analysis techniques for process analysis and improvement.
- Work safely and effectively in a manufacturing environment.

### Cooperative Education

Cooperative education is a learning experience that integrates academic skills with workplace experience. Students in Engineering Technologies can earn college credit, make valuable professional contacts, and link their classroom studies to real-world workplace challenges. See the department dean or an academic advisor for details.

### Related Certifications

MET students have the opportunity to sit for the *Certified SolidWorks Associate* exam. The exam is given on campus at the conclusion of the spring semester.

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

**MECHANICAL ENGINEERING TECHNOLOGY**  
**Associate of Applied Science Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			(30-35 CrHr)	Applied Gen Ed (Basic) (15 CrHr)	Gen Ed (15 CrHr)			
<b>FIRST SEMESTER (Fall)</b>								
GET1000	Introduction to Engineering	2		2		[OES001]	FA, SP	Placement requirements or
EET1000	Introduction to Electricity	2	2				FA, SP	Placement requirements or
EET2010	Introduction to Programmable Controllers	2	2				FA, SP	EET1000
EET2400	Robotics I	2	2				FA, SP	EET1000
MET1010	Technical Drawing with CAD	3			3		FA, SP	Placement requirements or
TMT1110	Applied Technical Math	3			3		FA, SP	Placement requirements or
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or
<b>SECOND SEMESTER (Spring)</b>								
MET1200	Computer Aided Drafting (CAD)	3	3			[OET012] [CTMET005]	SP	MET1010
MET1400	Geometric Dimensioning & Tolerancing	2	2				SP	MET1010
MET1500	Mechanical Drives	3	3				SP	MET1010 and TMT1110 must be taken before or concurrently with this course.
MET2100	Fluid Mechanics	3	3				SP	None
PHY1110	Applied Physics	4			4		SP	TMT1110 must be taken before or concurrently with this course.
MTH1245	College Algebra	3		3			FA, SP	Placement requirements or
<b>THIRD SEMESTER (Fall)</b>								
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
MET2200	Statics	3	3			[OET007]	FA	PHY1110
MFT1100	Manufacturing Processes	3	3			[OET010]	FA	MET1400
SOC0000	Sociology Elective*	3		3			0	Course requirements
<b>FOURTH SEMESTER (Spring)</b>								
GET2300	Engineering Statistics	2			2	[OES004]	SP	MTH1245 and OIS1240
HSS2020	Ethnic & Cultural Diversity	3		3		[TMSBS] [OSS024]	ALL	Placement requirements or
MET2300	Strength of Materials	3	3			[OET008]	SP	MET2200
MFT2100	Computer Numerical Control	3	3				SP	MFT1100 and MET1200
TEC0000	Technical Elective**	3	3				0	Course requirements
GET2700	Engineering Cooperative Work Experience	1	1				ALL	Dept Approval
<b>Credit Hour Total</b>			<b>65</b>					
				33	15			17
					65			

\* Select from: PSY1100 or SOC1200

\*\* Select from: MGT2510, CIT1700, or OIS1340

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses suggested by placement results are also required.
4. Math placement score of 41 or above required to take the first mathematics course in the engineering program.

### Career Opportunities

Entry-level Robotics Technician  
Entry-level Electrical Engineering  
and Electronics Technician  
Entry-level Maintenance  
Technician

### The Program - Robotics Technician Certificate

The Robotics Certificate will prepare students to work with robots commonly used in a manufacturing environment. Students will learn coordinate systems, mechanical and electrical components, programming and troubleshooting, end-of-arm tooling, and the integration of robots in work cells and assembly lines.

### Graduates of this certificate program will be able to ...

- Program/teach industrial robots.
- Create, update, and interpret mechanical and electrical drawings and details using appropriate CAD software.
- Program, interface and troubleshoot systems controlled by programmable logic controllers.
- Follow required mechanical, electrical and environmental safety procedures.
- Work both independently and as an integral part of a technical team.

**Robotics Certificate**  
**One-Year Technical Certificate**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Applied Gen Ed (Basic)	Gen Ed			
<b>FIRST SEMESTER (Fall)</b>								
GET1000	Introduction to Engineering	2		2		[OES001]	FA, SP	Placement requirements or ENG0970
EET1000	Introduction to Electricity	2	2				FA, SP	Placement requirements or ENG0970
EET2010	Introduction to Programmable Controllers	2	2				FA, SP	EET1000
EET2400	Robotics I	2	2				FA, SP	EET1000
TMT1110	Applied Technical Math	3		3			FA, SP	Placement requirements or MTH0920
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
<b>SECOND SEMESTER (Spring)</b>								
EET2060	Advanced Programmable Controllers	3	3				FA, SP	EET2010
EET2460	Robotics II	3	3				FA, SP	EET2400
EET1300	Robot Handling Tool Operations & Program	1	1				SP	EET2400
MET1010	Technical Drawing with CAD	3			3		FA, SP	Placement requirements or ENG0970
MET1500	Mechanical Drives	3	3				SP	MET1010 and TMT1110 must be taken before or concurrently with this course.
MET2100	Fluid Mechanics	3	3				SP	None
<b>Credit Hour Total</b>			<b>30</b>	<b>19</b>	<b>3</b>	<b>8</b>		<b>30</b>

**Occupational Certification Opportunities:**

FANUC Certified Education Robotics Training (CERT)

## HEALTH TECHNOLOGIES DIVISION

### Debbie C. Stark

Dean of Technical and Professional Programs  
740.386.4165 – [starkd@mtc.edu](mailto:starkd@mtc.edu)

### Darlene Lewis

Administrative Assistant - Health Technologies  
740.386.4180 – [lewisd@mtc.edu](mailto:lewisd@mtc.edu)

### Jessica Applegate

Administrative Assistant - Health Technologies  
740.386.4185 – [applegatej@mtc.edu](mailto:applegatej@mtc.edu)

## HEALTH INFORMATION TECHNOLOGY DEPARTMENT

### Christina Manley, MAEd, RHIT

The Margie White Director of Health Information Technologies  
740.386.4105 – [manleyc@mtc.edu](mailto:manleyc@mtc.edu)

#### Associate of Applied Science Degree

Health Information Technology (HIT)  
Coding and Reimbursement Track  
Clinical Health Informatics Track

#### Certificates

Medical Billing and Coding (CCA, CPC-A)

#### External Certification Preparation

Clinical Health Informatics Specialist (HITPro)

## MEDICAL ASSISTING DEPARTMENT

### Peggy Smith, MEd, MLT (ASCP), CMA (AAMA)

Director of Medical Assisting Technology  
740.386.4178 – [smithp@mtc.edu](mailto:smithp@mtc.edu)

#### Associate of Technical Study Degree

Medical Assistant (CMA)

#### Certificate

Medical Assisting (CMA)

## MEDICAL IMAGING DEPARTMENT

### Debra Myers, MEd, RT, RDMS, RDCS, RVT

Director of Medical Imaging Programs  
740.386.4106 – [myersd@mtc.edu](mailto:myersd@mtc.edu)

#### Associate of Applied Science Degree

Diagnostic Medical Sonography (DMS)

#### Associate of Applied Science Degree

Radiography (RAD)

## NURSING DEPARTMENT

### Cynthia Hartman, MSN, RN, CNE

Director of Nursing  
740.386.4142 – [hartmanc@mtc.edu](mailto:hartmanc@mtc.edu)

#### Associate of Applied Science Degree

Nursing (RN)  
LPN to RN Transition (program pathway)

#### External Certification Preparation

Nurse Aide Training/State Tested Nurse Aide (STNA)

## OCCUPATIONAL THERAPY ASSISTANT DEPARTMENT

### Joshua Line, MS, OT

Director of the Occupational Therapy Assistant Program  
740.386.4185 – [linej@mtc.edu](mailto:linej@mtc.edu)

#### Associate of Applied Science Degree

Occupational Therapy Assistant (OTA)

## PHYSICAL THERAPIST ASSISTANT DEPARTMENT

### Dr. Chad Hensel PT, DPT, MHS, CSCS

Director of Physical Therapist Assistant Program  
740.386.4156 – [henselc@mtc.edu](mailto:henselc@mtc.edu)

#### Associate of Applied Science Degree

Physical Therapist Assistant (PTA)

## SURGICAL TECHNOLOGY DEPARTMENT

### Jerad Claytor, BS, CST

Director of Surgical Technology Program  
740.386.4162 – [claytorj@mtc.edu](mailto:claytorj@mtc.edu)

#### Associate of Applied Science Degree

Surgical Technologist

## **DRUG SCREENING**

Students admitted into the Health programs will be required to submit to a drug screening prior to entry into the program and periodically during the program. Positive drug screenings will result in forfeiture of the clinical, practicum, or professional practice experience. Any student who refuses or fails to cooperate, or complete any required drug screening will be considered “positive” and dismissed from the program.

## **CRIMINAL BACKGROUND CHECK**

Students admitted into the Health programs will be required to submit to a criminal background check facilitated by the Ohio Bureau of Criminal Investigation and Identification. A federal (FBI) check will be required by some Health Programs. Background checks include, but are not limited to, an analysis of fingerprints and review of prior criminal records. Students with certain felony, misdemeanor, or drug-related arrests as specified under Ohio Law will be ineligible for admission/continuation in the program.

Additionally, potential employers for MTC Health graduates may require drug screens and criminal background investigations as conditions for employment. Individuals who have been convicted of a crime, including felony, gross misdemeanor, misdemeanor, or drug-related arrests may be ineligible for employment. Therefore, completing an MTC program does not guarantee future employment.

Students are to remain free of any convictions while enrolled in the program. Students are required to notify the program director/dean within one week of any conviction regardless of adjudication/deferred sentencing. Disclosure of the judicial information by the student must include appropriate court documentation, i.e. Judgment Entry of Sentencing.



### Application Process

#### Limited Enrollment

To qualify for MTC's Sonography Program, applicants must have:

1. Fulfilled all MTC general admission requirements, and submitted both the Sonography Program Application and the non-academic standards form.  
**Application deadline June 1st.**
2. Successfully completed high school or certification of equivalent education by an organization recognized by the U.S. Department of Education. Acceptance into the Sonography program is contingent upon receipt of official final high school transcript with posted graduation date or passing GED results.
3. Earned an accumulated grade point average (GPA) of 2.5 (4.0 scale) in high school or GED examination equivalent, or completed a minimum of 12 semester hours (or equivalent) of college credit with an accumulative GPA of 2.5.
4. Taken high school algebra, biology, and chemistry, or successful completion equivalent college coursework (MTC's Principles of Biology and Chemistry - SCI 1050 and/or Pre-Algebra - MTH 0910).
5. Successful completion of the ACT or Basic Skills Assessment (ACCUPLACER) in reading, writing, mathematics (algebra) and technology skills.
6. Reached 18 years of age by the end of the calendar year in which you are seeking admission into Sonography technical courses.
7. Observed in an ultrasound department a minimum of 32 hours at three different clinical sites and a submitted "Observation Validation" form. (Form is available on web site under Sonography Program)
8. Transfer students to MTC must qualify in accordance with current Sonography program admission criteria.

A listing of all requirements, policies, and procedures for the program is available in the Sonography Student Handbook located at

<https://www.mtc.edu/course/diagnostic-medical-sonography/>

### Accreditation/Certification

The DMS Program is accredited by the Commission on Accreditation of Allied Health Education Program (CAAHEP) and the JRCEDMS.

Program graduates may take certification exams from the ARDMS or ARRT.

### Diagnostic Medical Sonography (DMS) Technology

Diagnostic Medical Sonographers use special equipment to direct high frequency sound waves into areas of the patient's body. Sonographers operate the equipment, which collects reflected echoes and forms an image that may be videotaped, transmitted, or photographed for interpretation and diagnosis by a physician. Viewing the screen during the scan, sonographers look for subtle visual cues that contrast healthy areas with unhealthy ones. They decide whether the images are satisfactory for diagnostic purposes and select which ones to store and show to the physician. Sonographers take measurements, calculate values, and analyze the results in preliminary findings for the physicians.

### Degree – Associate of Applied Science

Two-year (six semesters) full-time degree schedule; mixture of core technical and science courses along with basic communications classes.

### Sonography Mission Statement:

To provide an environment for student sonographers to become qualified and competent technologists in a healthcare setting. We partner with the healthcare community to provide higher education for sonographers. Marion Technical College encourages the process of life-long learning.

### Program Goals:

Graduates will

- To prepare competent entry-level sonographers in cognitive (knowledge), psychomotor (skills), and affective learning domains.
- To provide the community with competent diagnostic medical sonographers.
- To facilitate development of effective communication, critical thinking, and problem solving skills.
- To facilitate the development of professional attitudes, behaviors, and ethics within the framework of the diagnostic medical sonography profession.

### Learning Outcomes:

- Demonstrate knowledge and skill in abdominal sonography.
- Demonstrate knowledge and skill in OB/GYN sonography.
- Demonstrate knowledge and skill in small parts/ superficial structures /high resolution sonography.
- Modify standard procedures to accommodate for patient conditions and other variables to obtain quality images.
- Evaluate cross sectional anatomy pathology.
- Recognize emergency patient conditions and initiate first aid and basic life support procedures.
- Evaluate images for appropriate image quality and pathology.
- Demonstrate knowledge and skills related to quality assurance.
- State the safe limits of equipment operation and report malfunctions to the proper authority.
- Exercise independent judgment and discretion when performing imaging procedures.
- Demonstrate an understanding of your role in the healthcare environment.
- Practice effective communication with patients and other health professionals.
- Provide basic patient care, comfort, anticipate patient needs, and patient education.
- Demonstrate an understanding of ultrasound production.
- Demonstrate knowledge of human structure, function and pathology.
- Support the profession's code of ethics and comply with the profession's standard of practice.

## DIAGNOSTIC MEDICAL SONOGRAPHY TECHNOLOGY

### Associate of Applied Science Degree (Effective Academic Year 2019-20)

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Summer)</b>								
SCI1200	Anatomy & Physiology I	4		4		[TMNS]	ALL	SCI1050 or equivalent
ALH1110	Medical Terminology	3			3	[OHL020]	ALL	None
DMS1010	Methods of Patient Care	2	2				ALL	None
DMS1001	Introduction to Sonography	2	2				ALL	None
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
ALH1190	Physics for Allied Health	2			2		FA, SP	Placement requirements or MTH0910
<b>SECOND SEMESTER (Fall)</b>								
SCI1250	Anatomy & Physiology II	4		4		[TMNS]	FA, SP	SCI1200
DMS1040	Sonography Cross Sectional Anatomy	1	1				FA,	DMS1001. DMS1020 must be taken before or concurrently with this course.
DMS1020	Sonography Procedures I	4	4				FA	Major Only
DMS1101	Sonography Clinical I	1	1				FA	Major Only
DMS1051	Sonography Principles & Instrumentation	3	3				FA,	Major Only & ALH 1190
<b>THIRD SEMESTER (Spring)</b>								
DMS1030	Sonography Procedures II	4	4				SP	Major Only
DMS1201	Sonography Clinical II	2	2				SP	DMS1101
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
<b>FOURTH SEMESTER (Summer)</b>								
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
DMS1301	Sonography Clinical III	3	3				SU	DMS1201
<b>FIFTH SEMESTER (Fall)</b>								
DMS2050	Sonography Pathology	2	2				FA,	DMS1030
DMS2400	Sonography Clinical IV	3	3				FA	DMS1301
HSS2020	Ethnic & Cultural Diversity	3		3		[TMSBS] [OSS024]	ALL	Placement requirements or ENG0970
ENG1100	English Composition II	3		3			ALL	ENG1000
<b>SIXTH SEMESTER (Spring)</b>								
DMS2040	Advanced Imaging Procedures	2	2				SP	DMS2050
DMS2070	Sonography Review	1	1				SP	DMS2400
DMS2500	Sonography Clinical V	3	3				SP	DMS2400
<b>Credit Hour Total</b>			<b>64</b>	<b>33</b>	<b>23</b>	<b>8</b>		<b>64</b>

### Application Process Limited Enrollment

To apply for acceptance into the Health Information Technology program, your application file should contain the following:

1. MTC Application for Admission and nonrefundable application fee.
2. American College Test (ACT) scores with a minimum composite score of 18, or successful completion of college-level required program courses with a minimum accumulative grade point average of 2.5 or higher.
3. Successful completion of the ACT or Basic Skills Assessment (Accuplacer) in reading, writing, and mathematics (algebra).
4. Final high school transcript (or GED results) and college transcripts (if applicable).
5. A minimum 2.5 accumulative grade point average (GPA) in high school or college-level courses (whichever is most recent).
6. Completed Health Information Technology application.
7. Completion of successful criminal background check.

If required, College Foundation courses are available to help you meet any specialized program admission requirements.

A complete listing of all requirements and policies/procedures for the program is available in the Health Information Technology Handbook.

### Degree Received

#### Associate of Applied Science

Two-year (5 semesters) full-time degree schedule; mixture of core health information technology courses, medical, communications, and information technology; required professional practice experience provides professional development in the modern workplace; program can be completed on a part-time basis. Upon successful completion of the examination, the graduate is awarded the credential of a registered health information technician (RHIT). CAHIIM, 233 N. Michigan Ave. 21st Floor, Chicago, IL 60601-5800, 312-233-1100

To Learn More Visit [www.mtc.edu](http://www.mtc.edu)  
Information subject to change without notice.

### The Program – Health Information Technology Clinical Health Informatics

Health informatics is defined “as the science of evaluating, implementing, and utilizing technology to manage all information related to the patient care delivery process: clinical, financial, technological, and enterprise. The field draws contributions from computer science, health information management, the clinical sciences, social and organizational influences, and business practices-University of Illinois-Chicago.” Students who complete designated coursework within Health Information Technology (HIT) associates of applied science degree are prepared to take the Certified Healthcare Technology Specialists Exams through the American Health Information Management Association and the CAHIIMS exams through the Healthcare Information and Management Systems. In addition, students can sit for the RHIT certification exam upon completion of this track and work in Health Information Management (HIM). Health Information Management is the body of knowledge and practice that ensures the availability of health information to facilitate real-time healthcare delivery and critical health-related decision making for multiple purposes across diverse organizations, settings, and disciplines.

### Students in the Clinical Health Informatics program will learn to...

- Select hardware and software and use software applications and technology in the completion of Health Information Management processes.
- Participate in the planning, design, selection, implementation, integration, testing, evaluation, and support for EHRs including the installation, usage and maintenance of the EHRs.
- Apply knowledge of database architecture and design (such as data dictionary) to meet departmental needs.
- Use appropriate electronic or imaging technology for data/record storage.
- Query and generate reports to facilitate information retrieval using appropriate software.
- Assess workflows, work with vendors, install and test systems, diagnose IT problems, and train staff on systems
- Review health records and verify completeness, accuracy, and appropriateness of data and data sources according to requirements and standards.
- Code, classify, and index diagnoses and procedures for the purpose of reimbursement, standardization, retrieval and statistical analysis.
- Collect, compute, analyze, interpret, and present statistical data related to healthcare services, including quality management, utilization management, risk management, medical research, disease registries, and clinical indices.
- Apply legal principles, policies, regulations and standards for the control, use, and dissemination of healthcare information.
- Apply principles of supervision and leadership and the tools used to effectively manage human, financial, and physical resources.
- Recognize and problem-solve situations within the healthcare environment.
- Apply policies and procedures to the use of networks, including intranet and Internet applications to facilitate the electronic health record (EHR), personal health record (PHR), public health, and other administrative applications.

### Certification

This program is designed to prepare students for an ever-changing and constantly growing field. Students will cover a wide range of topics including health information management, medical terminology, the electronic health record, computer applications, health informatics, coding, healthcare statistics, healthcare reimbursement, continuous quality improvement, resource management, and legal issues. They will receive hands-on experience with the newest technological innovations available in the Health Information field.

The Health Information Technology associate degree program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Graduates of the MTC program qualify for accreditation in the health information management field by passing the national certification examination requirements of the American Health Information Management Association (AHIMA).

## HEALTH INFORMATION TECHNOLOGY • CLINICAL HEALTH INFORMATICS TRACK

### Associate of Applied Science Degree (Effective Academic Year 2019-20)

Online Program- Except CIT1351 and MGT2510

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>								
CIT1351	IT Essentials/A+	3			3	[CTIT003 & CITIT004]	FA, SP	Placement requirements or OIS1200
SCI1100	Basic Anatomy & Physiology	4		4			ALL	ALH1110 or HLT1100 can be taken concurrently
HIT1200	Health Record Management I	2	2				ALL	Dept Approval
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ALH1110	Medical Terminology	3			3	[OHL020]	ALL	None
<b>SECOND SEMESTER (Spring)</b>								
HIT1301	Clinical Classifications ICD10- CM/PCS	4	4				FA, SP	HIT1200 must be taken before or concurrently with this course.
HIT1302	Current Procedural Terminology	3	3				FA, SP	HIT1200 must be taken before or concurrently with this course.
HIT1400	Healthcare Reimbursement	2	2			[OHL022]	FA, SP	HIT1200 and HIT1301 can be taken concurrently
ALH1120	Human Diseases	3			3	[OHL019]	ALL	ALH1110
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
<b>THIRD SEMESTER (Summer)</b>								
HIT1500	Advanced Clinical Classification System	3	3				SU	HIT1301
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
MTH1240	Statistics	3		3			ALL	Placement requirements or MTH0910.
<b>FOURTH SEMESTER (Fall)</b>								
HIT2000	HIT Legal Issues	2	2			[OHL021]	SP	HIT1200
HIT2100	Health Record Management II	4	4				FA, SP	HIT1200 and Dept Approval
HIT2200	Health Information Technology Systems	4	4				FA	HIT2100
MGT2510	Project Management	3			3		FA	OIS1240
<b>FIFTH SEMESTER (Spring)</b>								
HIT2301	HIT Statistical Analysis	2	2				SP	HIT1200
HIT2400	HIT Quality Assessment	2	2				SP	HIT2100
HIT2500	Health Information Management and Data Governance	3	3				SP, SU	HIT1200 and OIS1240
HIT2900	HIT Professional Practice II	2	2				SP	Dept Approval
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
<b>Credit Hour Total</b>			<b>64</b>	33	16	15		
				<b>64</b>				

\* CIT 1351, IT Essentials/A+ and MGT 2510 Project Management -  
These two courses are not offered online and are offered on-  
campus only.

\*\*CIS1351, IT Essentials/A+ Students are presented with the  
information required to sit for their COMPtIA A+ certification exams.  
CIT1350 introduces the student to the main concepts behind  
computer hardware and software. Customer service and computer  
troubleshooting and repair are the primary focus of this course. 3 Cr.  
Hrs. Prerequisite: OIS1200 or successful completion of the  
Technology Skills Test (TST).

**Occupational Certification Opportunities:**

A+ Certification (submitted CAHIMS and CHTS to OBR on 5/30/14)

## Application Process Limited Enrollment

To apply for acceptance into the Health Information Technology program, your application file should contain the following:

1. MTC Application for Admission and nonrefundable application fee.
2. American College Test (ACT) scores with a minimum composite score of 18, or successful completion of college-level required program courses with a minimum accumulative grade point average of 2.5 or higher.
3. Successful completion of the ACT or Basic Skills Assessment (Accuplacer) in reading, writing, and mathematics (algebra).
4. Final high school transcript (or GED results) and college transcripts (if applicable).
5. A minimum 2.5 accumulative grade point average (GPA) in high school or college-level courses (whichever is most recent).
6. Completed Health Information Technology application.
7. Completion of successful criminal background check.

If required, College Foundation courses are available to help you meet any specialized program admission requirements.

A complete listing of all requirements and policies/procedures for the program is available in the Health Information Technology Handbook.

## Degree Received

### Associate of Applied Science

Two-year (5 semesters) full-time degree schedule; mixture of core health information technology courses, medical, communications, and information technology; required professional practice experience provides professional development in the modern workplace; program can be completed on a part-time basis.

## To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

*Information subject to change without notice.*

## The Program – Health Information Technology Coding and Reimbursement Online

This degree program is online.

Quality information is essential to all aspects of today's healthcare system. Health Information Management (HIM) is the body of knowledge and practice that ensures the availability of health information to facilitate real-time healthcare delivery and critical health-related decision making for multiple purposes across diverse organizations, settings, and disciplines. HIM professionals play a critical role in maintaining, collecting and analyzing the data that doctors, nurses and other healthcare providers rely on to deliver quality healthcare. They are experts in managing patient health information and medical records, administering computer information systems and coding the diagnosis and procedures for healthcare services provided to patients. Health information management (HIM) professionals work in 40 different settings under 125 different job titles. They often serve in bridge roles, connecting clinical, operational, and administrative functions.

## Students in the Coding and Reimbursement program will learn to...

- Review health records and verify completeness, accuracy, and appropriateness of data and data sources according to requirements and standards.
- Code, classify, and index diagnoses and procedures for the purpose of reimbursement, standardization, retrieval and statistical analysis.
- Actively apply the reimbursement policies and procedures in the use of clinical data, issues and systems and perform data quality reviews to validate code assignments as well as the completion of the UB02 and CMS1500.
- Collect, compute, analyze, interpret, and present statistical data related to healthcare services, including quality management, utilization management, risk management, medical research, disease registries, clinical indices.
- Apply legal principles, policies, regulations and standards for the control, use, and dissemination of healthcare information.
- Use software applications and technology in the completion of Health Information Management processes.
- Apply principles of supervision and leadership and the tools used to effectively manage human, financial, and physical resources.
- Recognize and problem solve situations within the healthcare environment.
- Participate in the planning, design, selection, implementation, integration, testing, evaluation, and support for EHRs.
- Use appropriate electronic or imaging technology for data/record storage.
- Query and generate reports to facilitate information retrieval using appropriate software.

## Certification

Marion Technical College's (MTC) Health Information Technology program is designed to prepare students for this ever-changing and constantly growing field. Within the program, students will cover a wide range of topics including health information management, medical terminology, the electronic health record, computer applications, health informatics, coding, healthcare statistics, healthcare reimbursement, continuous quality improvement, resource management, and legal issues. Students actively work with health information and receive hands-on experience with the newest technological innovations available.

The Health Information Technology associate degree program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Graduates of the MTC program qualify for accreditation in the health information management field by passing the national certification examination requirements of the American Health Information Management Association (AHIMA). Upon successful completion of the examination, the graduate is awarded the credential of a registered health information technician (RHIT). CAHIIM, 233 N. Michigan Ave, 21<sup>st</sup> Floor, Chicago, IL 60601-5800, 312-233-1100

## HEALTH INFORMATION TECHNOLOGY • CODING AND REIMBURSEMENT TRACK

### Associate of Applied Science Degree

(Effective Academic Year 2019-20)

Online Program

Course No	Course Title	Credits	TECHNICAL		NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
					Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>									
ENG1000	English Composition I	3			3		[TME001]	ALL	Placement requirements or ENG0991
SCI1100	Basic Anatomy & Physiology	4			4			ALL	ALH1110 or HLT1100 can be taken concurrently
OIS1240	Computer Applications	3				3	[OBU003]	ALL	Placement requirements or OIS1200
ALH1110	Medical Terminology	3				3	[OHL020]	ALL	None
HIT1200	Health Record Management I	2	2					ALL	Dept Approval
<b>SECOND SEMESTER (Spring)</b>									
HIT1301	Clinical Classifications ICD10-CM/PCS	4	4					FA, SP	HIT1200 must be taken before or concurrently with this course.
HIT1302	Current Procedural Terminology	3	3					FA, SP	HIT1200 must be taken before or concurrently with this course.
	Healthcare Reimbursement	2	2				[OHL022]	FA, SP	HIT1200 and HIT1301 can be taken concurrently
HIT1400									
ALH1120	Human Diseases	3				3	[OHL019]	ALL	ALH1110
<b>THIRD SEMESTER (Summer)</b>									
ENG1400	Oral Communications	3			3		[TMCOM] [OCM004]	ALL	None
HIT2500	Health Information Management and Data Governance	3	3					SP, SU	HIT1200 and OIS1240
HIT1500	Advanced Clinical Classification System	3	3					SU	HIT1301
HIT1900	HIT Professional Practice I	1	1					FA, SP	Dept Approval
<b>FOURTH SEMESTER (Fall)</b>									
HIT2000	HIT Legal Issues	2	2				[OHL021]	SP	HIT1200
HIT2100	Health Record Management II	4	4					FA, SP	HIT1200 and Dept Approval
HIT2200	Health Information Technology Systems	4	4					FA	HIT2100
MTH1240	Statistics	3			3			ALL	Placement requirements or MTH0910.
<b>FIFTH SEMESTER (Spring)</b>									
HIT2301	HIT Statistical Analysis	2	2					SP	HIT1200
HIT2400	HIT Quality Assessment	2	2					SP	HIT2100
PSY1100	General Psychology	3			3		[TMSBS] [OSS015]	ALL	None
HIT2900	HIT Professional Practice II	2	2					SP	Dept Approval
MGT1400	Introduction to Management	3				3		ALL	None
<b>Credit Hour Total</b>			<b>62</b>	34	16	12			
					<b>62</b>				

## Application Process

### Limited Enrollment

To apply for the MLT program, applicants must have:

1. MTC Application for Admission including application fee and final high school transcript.
2. A minimum 2.5 accumulative grade point average (on 4.0 scale) in high school or college-level courses (whichever is most recent).
3. American College Test (ACT) scores with a minimum composite score of 18, **or** successful completion of college-level required program courses with a minimum accumulative grade point average of 2.5 or higher.
4. Successful completion of the ACT or Basic Skills Assessment (Next Generation ACCUPLACER) in reading, writing, mathematics (statistics pathway) and Technology Skills Test (TST). College foundation courses are available to help you meet specialized program admission requirements. College transfer credit may also be used with a grade of C or better.
5. Completion of high school biology and chemistry with a grade of C or better or completion of SCI1050 with a grade of C or better.
6. Minimum of four (4) hours of laboratory observation and a completed Laboratory Observation form and signed Confidentiality Agreement.
7. Completed MLT application packet available by request or online on MTC's website.
8. Completion of successful criminal background check and successful drug screen. Students admitted into the program are required to submit to a criminal background check facilitated by the Ohio Bureau of Criminal Investigation and identification. Students with certain felony, misdemeanor, or drug-related arrests will be ineligible for admission into the program
9. Applicant must read the Medical Sciences Student Handbook. A listing of requirements, policies, and procedures for the program is available in the Student Handbook located on MTC's website.

### Degree - Associate of Applied Science

Two-year (five semesters) full-time degree schedule; mixture of core lab tech, science, and communications; required clinical experience provides professional development in the modern workplace; program can be completed on a part-time basis.

### Accreditation

The MLT Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences [NAACLS, 5600 North River Road, Suite 720, Rosemont, IL 60018-5519, 773-714-8880, [www.naacls.org](http://www.naacls.org)].

## The Program - Medical Laboratory Technology (MLT)

MLTs perform a wide variety of laboratory tests which aids the physician in the diagnosis and treatment of disease. MLTs provide compatible blood components for transfusion, perform chemical analysis of body fluids, classify blood cells, and identify microorganisms. They work in a variety of settings such as hospitals, clinics, industry, research, and independent laboratories.

### Students in the Medical Laboratory Technology program will learn to...

- Collect, process, and analyze biological specimens or other substances.
- Perform routine clinical laboratory tests in clinical chemistry, hematology/hemostasis, immunology, immunohematology, microbiology, body fluid analysis, laboratory operations and performance of assays.
- Perform pre-analytical, analytical, and post-analytical processes.
- Perform mathematical calculations related to all areas of the clinical laboratory.
- Perform problem solving and troubleshooting techniques for laboratory methodologies.
- Correlate laboratory test results with patient diagnosis and treatment and determine the significance of clinical procedures and results.
- Perform quality assessment within the clinical laboratory; recognize factors which interfere with analytical tests and take appropriate actions.
- Demonstrate the technical training sufficient to orient new employees within the clinical laboratory.
- Demonstrate professional interpersonal, oral, and written communications skills sufficient to serve the needs of patients and the public including an awareness of how diversity may affect the communication process.
- Apply basic scientific principles in learning new techniques and procedures; demonstrate application of principles and methodologies.
- Utilize computer technology applications to interact with computerized instruments and laboratory information systems.
- Demonstrate proficient knowledge of computer software as it applies to document production, spreadsheets, and presentations.
- Demonstrate knowledge of infection control and safety practices, and follow established guidelines and governmental/accreditation regulations.
- Demonstrate professional conduct and apply legal, social, and ethical responsibilities within the health care environment.
- Pursue certification and continued professional development.

### Certification

Students completing the Medical Laboratory Technology major are eligible to take the certification exam offered by the American Society of Clinical Pathologists (ASCP), 33 West Monroe, Suite 1600, Chicago, IL 60603, 312-541-4999, [www.ascp.org](http://www.ascp.org). Successful completion results in a MLT (ASCP) certification.

### Essential Program Requirements-Technical Standards

An applicant to the MLT program must demonstrate certain intellectual/conceptual, behavioral/social, and motor/physical requirements to meet program competencies. Please direct any questions to a Medical Sciences advisor at **740-389-4636**.

**MEDICAL LABORATORY TECHNOLOGY**  
**Associate of Applied Science Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL		NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			(Min 30 CrHr)	Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)	Gen Ed (Min 15 CrHr)			
<b>FIRST SEMESTER (Fall)</b>									
ALH1110	Medical Terminology	3			3		[OHL020]	ALL	None
ALH1130	Healthcare Issues: Medical Professionalism	1			1			ALL	None
CHM1000	General & Biological Chemistry	4		4				ALL	SCI1050 or equivalent, or Dept Approval
MLT1010	Basic Medical Laboratory Techniques	2	2				[OHL008]	FA	Dept Approval
MLT1020	Body Fluids	2	2				[OHL010]	FA	Dept Approval
MTH1240	Statistics	3		3				ALL	Placement requirements or MTH0910.
<b>SECOND SEMESTER (Spring)</b>									
MLT1030	Phlebotomy Theory & Techniques	2	2					SP	MLT1010 and Dept Approval
MLT1040	Hematology & Coagulation	4	4				[OHL009]	SP	Major Only, MLT1010, MLT1020
MLT1050	Clinical Chemistry	4	4					SP	MLT1020, CHM1000
SCI1100	Basic Anatomy & Physiology	4		4				ALL	ALH1110 or HLT1100 can be taken concurrently
<b>THIRD SEMESTER (Summer)</b>									
ENG1000	English Composition I	3		3			[TME001]	ALL	Placement requirements or ENG0991
MLT2000	Clinical Microbiology I	4	4					SU	MLT1040 and MLT1050
MLT2010	Immunology & Serology	2	2					SU	MLT1040 and MLT1050
OIS1240	Computer Applications	3			3		[OBU003]	ALL	Placement requirements or OIS1200
<b>FOURTH SEMESTER (Fall)</b>									
ALH1140	Healthcare Issues: Medical Law & Ethics	1			1			ALL	None
ALH1150	Healthcare Issues: Patient Communication	1			1			ALL	None
ENG1100	English Composition II	3		3				ALL	ENG1000
MLT2020	Immunohematology	4	4					FA	MLT1040 and MLT1050
MLT2100	Clinical Microbiology II	2	2					FA	MLT2000
PSY1100	General Psychology	3		3			[TMSBS] [OSS015]	ALL	None
<b>FIFTH SEMESTER (Spring)</b>									
MLT2080	MLT Case Studies	2	2					SP	Dept Approval
MLT2090	MLT Clinical Experience & Seminar	8	8					SP	MLT2100
<b>Credit Hour Total</b>			65	36	20	9			65

<sup>1</sup> Human Growth and Development recommended



### Application Process (Limited Enrollment)

Admission to the LPN/Advanced Standing Transition Program is in accordance with current Nursing policies. Applicants must submit a completed LPN/Advanced Standing to RN Transition Program application after the following items are received by MTC. The **Application deadline is October 31** each year. The LPN/Advanced Standing Transition Program begins spring semester (January).

1. Final high school transcript (or GED results).
2. Completed MTC Application for Admission (including nonrefundable application fee).
3. Official grade report for ATI, RN Fundamentals of Nursing Assessment of Level 1 or higher.
4. Official grade report for ATI, RN Maternal-Newborn Nursing Assessment of Level 1 or higher.
5. Official grade report for ATI, Nursing Care of Children Assessment of Level 1 or higher.
6. Validation of current Ohio LPN or paramedic license without restrictions.
7. Official college and/or LPN school transcripts.
8. Military paramedic applicants are required to provide a copy of DD214 and military transcripts with proper designation for medic, corpsmen, or health care specialty while serving. Courses must have been taken within 5 years of application to the Nursing program.
9. A 2.5 accumulative GPA is the minimum for acceptance and 2.0 accumulative GPA for continuation in Nursing program.
10. All students will be required to successfully complete a criminal background check and drug screen prior to admission into NUR1040.

### Degree Received: Associate of Applied Science in Nursing (RN)

LPN, Paramedics, and Military Medics must complete the Nursing (RN) Technology Program within five (5) years of passing the most recent successful Fundamentals ATI Exam. Graduates of this program are then eligible to take the licensing examination of the National Council of State Boards of Nursing to become a Registered Nurse (RN). For additional accreditation information visit our website at [www.mtc.edu](http://www.mtc.edu)

### The Program – Nursing LPN/Advanced Standing to RN Transition

Prepare men and women for challenging and rewarding careers as Registered Nurses who assist in the overall planning and providing of nursing care for patients and their families, as well as educating patients in health maintenance and restoration.

### Credit for LPN/Advanced Standing Paramedic and Military Training

Upon application, students will receive credit for transition courses after successful completion of ATI. Students in the Advanced Standing to RN Option will take a transition advanced course to bridge the gap between knowledge gained from previous experience, skills, and abilities to the learning outcomes of Marion technical College Nursing Program.

### End of Program Student Learning Outcomes

Provider of Care:

- Applies the nursing process to provide care for select populations.

Communicator:

- Selects therapeutic communication techniques with assigned populations.

Teacher:

- Implements individualized teaching plans for select populations.

Manager:

- Individualizes nursing care activities in prescribed timeframe, in collaboration with instructor and agency staff.

Member within the Profession of Nursing:

- Evaluates effectiveness of behaviors that demonstrate accountability in nursing practice.

### Nursing Program Mission Statement

Prepare students to be professional, caring Registered Nurses who promote optimal levels of wellness for individuals, families, and communities.

### LPN/Advanced Standing Transition Course

LPN/Advanced Standing Transition (NUR1040) is offered spring semester, contingent upon enrollment, space, and instructor availability. Students should register for NUR1040 only after:

- All admission requirements are met.
- Acceptance into nursing, including written response from student.
- Prerequisites are completed for NUR1040 and other current courses.
- Attendance at an LPN/Advanced Standing Transition Information Session is verified.

Upon successful completion of ATI, RN Fundamentals of Nursing Assessment of Level 1 or higher, ATI, RN Maternal-Newborn Nursing Assessment of Level 1 or higher, and ATI Nursing Care of Children Assessment of Level 1 or higher credit will be given for the following courses (ATI tests limited to 3 attempts each):

- NUR 1003 Nurse Aide Training
- NUR 1011 Foundations of Adult Nursing Care I
- NUR 1004 Nursing Test Success
- NUR 1021 Foundations of Adult Nursing Care II
- NUR 1032 Nursing Care of Women and Children

## Dual Degree

One pathway to achieve the BSN is to declare a dual degree at Marion Technical College. The dual degree would be an Associate of Applied Science in Nursing and an Associate of Science. An advantage of the dual degree would be that the MTC student can take additional courses that are transferrable to the BSN.

## Articulation

Marion Technical College has articulation agreements in which graduates from the ADN program can seamlessly transfer into BSN (Bachelor of Science in Nursing).

## To Learn More Visit:

[www.mtc.edu](http://www.mtc.edu)

## Accreditation

The MTC Nursing Program is accredited by the Accreditation Commission for Education in Nursing, Inc. (ACEN) and approved by the Ohio Board of Nursing.

ACEN Telephone: 404.975.5000.

ACEN Website: [www.acenursing.org](http://www.acenursing.org)

ACEN Address: 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326

The MTC Nursing Program is also approved by the Ohio Board of Nursing  
[www.nursing.ohio.gov](http://www.nursing.ohio.gov)

*\* For the current curriculum and approved electives, please view the Nursing RN Fact Sheet.*

**Note:** Nursing is a regulated profession. The training, licensure, and practice of nursing are subject to federal and state statutes, rules, and regulations. In addition, each hospital may have rules or policies. A student's eligibility for admission or continuation in MTC's Nursing program is subject to the requirements of, and compliance with, all applicable statutes, rules, regulations, or policies (including a physical exam). Prior to or during acceptance into the nursing program, training, licensure, or employment as a nurse, each individual will be subject to a background check including, but not limited to, an analysis of fingerprints and review of prior criminal records. The submission of any false information to MTC or any federal/state agency shall be cause for immediate dismissal from the Nursing program. The Ohio Board of Nursing may deny admission to the National Council Licensing Examination-Registered Nurse (NCLEX-RN) based on review by the Ohio Board of Nursing Compliance Unit.

### Application Process

1. Completion of an MTC Application for Admission (including nonrefundable application fee).
2. Applicants must have completed high school or obtained a GED before being enrolled in the first nursing technical course. An official copy of the applicant's final high school transcript (or GED results) should be on file in the Office of Student Records.
3. American College Test (ACT) results or SAT equivalent.
  - A minimum ACT composite score of 19 or higher or SAT equivalent is required for general program admission.
  - ACT or SAT equivalent requirement are waived for students with a BS or BA degree from a regionally-accredited college.
4. A 2.5 accumulative GPA is the minimum for acceptance.
5. Successful completion of high school biology, chemistry, and algebra is required. (MTC offers courses to meet these requirements if not completed in high school.)
6. Transfer students must qualify in accordance with current Nursing Department policies.
7. Complete MTC Nursing (RN) Technology program application.
8. Information session with MTC's Director of Nursing (RN) Technology.
9. All students will be required to successfully complete a criminal background check and drug screening prior to admission into the first Nursing technical course.
10. **Applications are accepted January 1 through March 1** for the class entering in the fall. Applications from qualified high school students will be accepted provided all the other requirements have been met and an official, interim high school transcript is on file in the MTC Office Student Records.
11. The student must be at least 18 years of age prior to the initiation of program clinical experiences.

### Nursing Program Mission Statement

Prepare students to be professional, caring Registered Nurses who promote optimal levels of wellness for individuals, families, and communities.

### Accreditation

The MTC Nursing Program is accredited by the Accreditation Commission for Education in Nursing, Inc. (ACEN) and approved by the Ohio Board of Nursing [www.nursing.ohio.gov](http://www.nursing.ohio.gov).  
**ACEN Telephone:** 404.975.5000. **ACEN Website:** [www.acenursing.org](http://www.acenursing.org) **ACEN Address:** 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326

### Degree – Associate of Applied Science in Nursing Technology (RN)

Two-year (5 semesters) full-time degree schedule of nursing, science, and general education courses; program must be completed in a maximum of five (5) years. MTC nursing students complete varied clinical experiences. Graduates are eligible to take the licensing examination of the National Council of State Boards of Nursing to become a Registered Nurse (RN). For additional accreditation information, visit our website at [www.mtc.edu](http://www.mtc.edu).

### Dual Degree

One pathway to achieve the BSN is to declare a dual degree at Marion Technical College. The dual degree would be an Associate of Applied Science in Nursing and an Associate of Science. An advantage of the dual degree would be that the MTC student can take additional courses that are transferrable to the BSN.

### The Program - Nursing (RN)

Prepare men and women for challenging and rewarding careers as Registered Nurses who assist in the overall planning and providing of nursing care for patients and their families, as well as educating patients in health maintenance and restoration.

### End of Program Student Learning Outcomes

#### Provider of Care:

- Demonstrates proficiency in the use of the nursing process to provide individualized patient care.

#### Communicator:

- Formulates therapeutic communication with patients, families, and the interdisciplinary team.

#### Teacher:

- Revises a teaching plan of care as appropriate or when teaching outcome criteria have not been met.

#### Manager:

- Organizes, prioritizes, and implements individualized nursing care while encompassing the skills of delegation, collaboration, and referral as appropriate.

#### Member within the Profession of Nursing:

- Maintains accountability of own patient care within the ethical and legal parameters of the profession utilizing current literature and resources to enhance development as a member of the nursing profession.

**Note:** Nursing is a regulated profession. The training, licensure, and practice of nursing are subject to federal and state statutes, rules, and regulations. In addition, each hospital may have rules or policies. A student's eligibility for admission or continuation in MTC's Nursing program is subject to the requirements of, and compliance with, all applicable statutes, rules, regulations, or policies (including a physical exam). Prior to or during acceptance into the nursing program, training, licensure, or employment as a nurse, each individual will be subject to a background check including, but not limited to, an analysis of fingerprints and review of prior criminal records. The submission of any false information to MTC or any federal/state agency shall be cause for immediate dismissal from the Nursing program. The Ohio Board of Nursing may deny admission to the National Council Licensing Examination-Registered Nurse (NCLEX-RN) based on review by the Ohio Board of Nursing Compliance Unit.

*\*See next page for approved electives*

**NURSING TECHNOLOGY**  
**Associate of Applied Science Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL		NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
					Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>									
NUR1004	Nursing Test Success	2	2					FA, SP	NUR1011 must be taken before or concurrently with this course
NUR1011	Foundations of Adult Nursing Care I	6	6					FA	Major Only. NUR1003 (STNA) or equivalent must be taken before this course.
SCI1200	Anatomy & Physiology I	4		4			[TMNS]	ALL	SCI1050 or equivalent
PSY1100	General Psychology	3		3			[TMSBS] [OSS015]	ALL	None
<b>SECOND SEMESTER (Spring)</b>									
NUR1021	Foundations of Adult Nursing Care II	4	4					SP	NUR1011
SCI1250	Anatomy & Physiology II	4			4		[TMNS]	FA, SP	SCI1200
MTH1240	Statistics	3		3				ALL	Placement requirements or MTH0910.
PSY2100	Human Growth & Development	3		3			[TMSBS] [OSS048]	ALL	PSY1100
NUR1032	Nursing Care of Women & Children	3	3					SP	NUR1021
<b>THIRD SEMESTER (Summer)</b>									
NUR2001	Alterations in Mental Health Nursing	3	3					SU	NUR1021 and NUR1032, or NUR1040 (if applicable), and SCI1250, PSY2100
SCI1300	Microbiology	4			4		[TMNS]	ALL	SCI1250 (with min grade of "C") or Dept Approval
<b>FOURTH SEMESTER (Fall)</b>									
NUR2011	Alterations in Functioning I	8	8					FA	NUR2001, SCI1300
OIS1220	Healthcare & Nursing Informatics	3			3			ALL	Placement requirements or OIS1200.
ENG1000	English Composition I	3		3			[TME001]	ALL	Placement requirements or ENG0991
<b>FIFTH SEMESTER (Spring)</b>									
NUR2021	Alterations in Functioning II	8	8					SP	NUR2011
NUR2040	Nursing Issues	1	1					SP	ENG1000. NUR2021 must be taken concurrently with this course.
NUR0000	Nursing Elective	3		3					Course requirements
<b>Credit Hour Total</b>			<b>65</b>						
			35	19	11				
			<b>65</b>						

**Approved Electives:** ALH1120 Human Diseases, CHM1200 Chemistry I, ECN2000 Microeconomics, ECN2100 Macroeconomics, ENG1100 English Composition II, ENG1400 Oral Communications, HSS1060 Abnormal Psychology, HSS2020 Ethnic and Cultural Diversity, HSS2620 Aging, HST1500 Early American History, HST1600 Modern American History, MGT1400 Intro to Management, MTH1250 Pre-Calculus, MTH2000 Calculus I, NTR1100 Nutrition, PSY1500 Social Psychology, SOC1200 Sociology, SOC1400 Personal and Family Relations, SOC2200 Investigating Social Problems.

### Application Process Limited Enrollment

To apply for acceptance into the (OTA) Program, your application file should contain the following:

1. American College Test (ACT) composite score of 17 or higher or equivalent SAT composite score; or, an associate's degree or higher in lieu of the ACT score.
2. Basic computer skills prior to admission to the program. This can be satisfied through successful completion of MTC'S TST.
3. A minimum overall 2.75 grade point average (GPA).
4. A 40-hour documented observation experience with an occupational therapist or an occupational therapy assistant.
5. A personal essay describing your strategies for balance between life and education, and career, goals as you begin a career as an occupational therapy assistant.
6. Successful completion of four years of high school, or a standard equivalency test, or certification of equivalent education by an organization recognized by the U.S. Department of Education.
7. Completion of all MTC general admission requirements, including Application for Admission and nonrefundable application fee.
8. Submission of the OTA Program Application.
9. In order to graduate the program in two calendar years, it is necessary to either place into the college courses required for the degree or to take their prerequisite courses prior to entering the program.

### After Admission to the Program:

1. Students admitted into the program are required to obtain CPR for Healthcare Providers, which must be maintained until graduation from the program.
2. Students admitted into the program are required to submit to a criminal background check facilitated by the Ohio Bureau of Criminal Investigation and Identification. Students with certain felony, misdemeanor, or drug-related arrests as specified in ORC 4755.11 will be ineligible for admission into the program.

### The Program – Occupational Therapy Assistant (OTA)

Occupational Therapy Assistants treat clients of any age using purposeful activities and meaningful occupations to regain skills needed for independent, satisfactory and productive living. Under the supervision of an Occupational Therapist, an OTA can treat clients with cognitive, physical, emotional and/or developmental disabilities in a variety of settings.

### Degree – Associate of Applied Science

Two-year, full-time degree schedule; mixture of core technical courses along with science, health terminology, psychology, computer, and general education classes; required clinical experiences provide professional development in the workplace.

### Certification

The Marion Technical College Occupational Therapy Assistant Program is accredited by the:

Accreditation Council for Occupational Therapy Education (ACOTE)  
ACOTE, c/o Accreditation Department  
American Occupational Therapy Association (AOTA)  
4720 Montgomery Lane, Suite 200  
Bethesda, MD 20814-3449  
(301) 652-2682  
e-mail: [accred@aota.org](mailto:accred@aota.org)  
website: [www.acoteonline.org](http://www.acoteonline.org)

The MTC OTA Program received accreditation in 2011.

### Students in the Occupational Therapy Assistant program will learn to....

- Demonstrate basic clinical, problem solving and critical thinking skills essential to client-centered occupational therapy practice.
- Internalize the importance of fundamental skills and knowledge in the field and the entry-level competencies crucial to the occupational therapy assistant upon completion of the program.
- Learn the philosophy of occupational therapy and that occupation is a powerful medium that is an organizing force in human life and can also be used to promote health and well-being.
- Examine performance of occupations in the areas of activities of daily living, instrumental activities of daily living, education, work, play, leisure and social participation.
- Select and apply appropriate occupational therapy theories and frames of reference as a foundation for assessment and intervention processes in classroom and fieldwork settings.
- Select and apply appropriate concepts of occupational therapy to enhance client participation in a variety of contexts through the adaptation of the environment, the modification of the task, or the treatment of the person.
- Internalize the occupational therapy processes necessary to provide effective intervention strategies and quality services to a diverse population across the span of practice settings for an occupational therapy assistant.
- Demonstrate the ability to use screening tools and to use appropriate occupations, tasks and activities to promote and restore health in a wide variety of service delivery systems in classroom and fieldwork settings.
- Internalize the distinct roles and responsibilities of the occupational therapist and the occupational therapy assistant in the supervisory process.
- Internalize the standards, ethics and professional behaviors of an occupational therapy assistant upon completion of the program.
- Internalize the value of lifelong learning, professional development and research to continuously improve the skill set of the individual and best practices within the occupational therapy profession.

**OCCUPATIONAL THERAPY ASSISTANT**  
**Associate of Applied Science Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Summer)</b>								
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
<b>SECOND SEMESTER (Fall)</b>								
OTA1010	Conceptual Foundations of OTA	3	3				FA	None
OTA1020	Fundamental Skills for the OTA	3	3				FA	Program Accepted
SCI1200	Anatomy & Physiology I	4		4		[TMNS]	ALL	SCI1050 or equivalent
ENG1100	English Composition II	3		3			ALL	ENG1000
PSY2100	Human Growth & Development	3			3	[TMSBS] [OSS048]	ALL	PSY1100
<b>THIRD SEMESTER (Spring)</b>								
OTA1530	Functional Anatomy	3	3				SP	OTA1020
OTA2040	BioMechanical Intervention & Occupational Performance	4	4				SP	OTA1020
OTA2030	PsycoSocial Intervention & Occupational Performance	2	2				SP	OTA1020
SCI1250	Anatomy & Physiology II	4		4		[TMNS]	FA, SP	SCI1200
<b>FOURTH SEMESTER (Summer)</b>								
SOC1200	Sociology	3		3		[TMSBS] [OSS021]	ALL	None
OTA1000	Directed Clinical Practice Level 1	1	1				SU	OTA1020
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
OTA2020	Physical Disability & Performance	3	3				SU	OTA2040
<b>FIFTH SEMESTER (Fall)</b>								
OTA2500	The Elderly & Occupational Performance	2	2				FA	OTA1000
OTA2600	Neural Plasticity & Occupational Performance	2	2				FA	Major Only
OTA2010	The Child & Occupational Performance	3	3				FA	OTA2040
OTA2510	Clinical Conditions in Occupational Therapy	3	3				FA	OTA2040
<b>SIXTH SEMESTER (Spring)</b>								
OTA2000	Practicum Level II A	3	3				SP	OTA 2020; Grade of "C" or better in all academic coursework, satisfactory rating on Professional Behavior Competence document, and program director approval are required.
OTA2001	Practicum Level II B	3	3				SP	OTA 2020; Grade of "C" or better in all academic coursework, satisfactory rating on Professional Behavior Competence document, and program director approval are required.
<b>Credit Hour Total</b>			<b>64</b>	<b>35</b>	<b>23</b>	<b>6</b>		

### Application Process: Limited Enrollment

1. Successful completion of four years of high school, or a standard equivalency test, or certification of equivalent education by an organization recognized by the U.S. Dept. of Ed.
2. Minimum grade point average of 2.5 (on 4.0 scale) or equivalent from either high school or college. If a college GPA is used to meet this requirement, it must be based upon a minimum of 12 semester or 12 quarter hours earned at one institution.
3. Completion of high school or college statistics or algebra, chemistry, and biology with a minimum grade of "C" and/or placement into college level math and science.
4. Submission of a total of **TWO (2) Physical Therapy Observation Verification and Recommendation Forms** reflecting a **total of 50** or more clinical hours completed under the supervision of a licensed Physical Therapist (PT) or licensed Physical Therapist Assistant (PTA). (The Observation Verification and Recommendation forms must be signed by a supervising licensed PT or PTA).
5. Submission of the Physical Therapist Assistant Program Application including a signed copy of the MTC Health Programs Agreement to Respect Confidentiality form.
6. Completion of all MTC general admission requirements, including MTC Application for Admission and nonrefundable application fee.
7. Completion of successful criminal background check. Students admitted into the program are required to submit to a criminal background check facilitated by the Ohio Bureau of Criminal Investigation and Identification. Students with certain felony, misdemeanor, or drug-related arrests will be ineligible for admission into the program.
8. The ACCUPLACER (Basic Skills Assessment) may be required, as might the Technology Skills Test. The ACCUPLACER may be taken in the Student Resource Center at Marion Technical College. Students who obtain scores lower than established minimums on the ACCUPLACER must successfully complete the corresponding College foundation course. Students with college credit in these areas may have the ACCUPLACER waived by the Director of the Physical Therapist Assistant program. Contact the PTA program director to determine if this testing is required in your particular situation.
9. It is recommended that candidates complete the American College Test (ACT) and indicate on the test application that scores be submitted to MTC. The ACT should be completed far enough in advance to ensure that test scores reach MTC prior to the PTA program application deadline. It is also recommended that candidates complete some required coursework in advance of application when possible. Recommended classes include Anatomy and Physiology I (SCI1200) and II (SCI 1250), and Statistics (MTH 1240).
10. Transfer credit from other colleges will be evaluated after receipt of official transcripts.
11. **To Learn More Visit**  
<http://www.mtc.edu/health/pta/pta.html>

### The Program - Physical Therapist Assistant (PTA)

Licensed physical therapist assistants function under the direct supervision of a licensed physical therapist to facilitate patient treatment plans that address various limitations stemming from illness and/or injury; educate patients about the various treatment modalities; and motivate clients as part of their "recovery team."

### Students in the Physical Therapist Assistant program will learn to ...

- Demonstrate the knowledge and skills necessary to provide service/care appropriate to the age of the patients served.
- Perform selected measurement procedures in consultation with the evaluating physical therapist.
- Use appropriate modalities that include but are not limited to heat, cold, light, water, sound, and electricity, as well as therapeutic exercise and exercise equipment.
- Modify or adjust treatment within the limits of the plan of care based on the patient's reactions, and seek guidance when necessary.
- Complete any and all required written documentation accurately and legibly.
- Recognize abnormal physiological changes and report them to the evaluating physical therapist and other appropriate personnel.
- Maintain working knowledge of applicable federal, state, and local laws and regulations regarding the profession.

Once new applicants have met the MTC requirements to qualify for admission to the PTA program, an admission point system will be used to admit each year's class. Class size is limited no more than 24 candidates having the highest admission point totals. Please note that the PTA program at MTC reserves the right to make additions or changes to the admission criteria. It is recommended that you contact the PTA program staff for the most recent admission criteria and application before applying. **Only completed applications submitted by the application deadline will be considered.** It is the applicants' responsibility to provide all documentation to the PTA program prior to the application deadline. Applicants will be notified of their status in the program by mail approximately 6 weeks after the application deadline. Applicants who are not selected into the program, but would like to be considered for a future class, will be required to complete a new program application.

### Drug Screening

Students admitted into the PTA program will be required to submit to a drug screening prior to their clinical rotation. Positive drug screenings will result in forfeiture of the clinical rotation and dismissal from any course with a laboratory component. All PTA students may be subject to periodic drug screens for cause during the program. Any student who refuses/fails to cooperate, or complete any required drug screening will be considered "positive" and dismissed from the program.

### Licensure

Upon completion of the MTC PTA program graduates will be eligible to apply for licensure by examination. Section 4755.70 of the Ohio Revised Code requires all individuals applying for a license issued by the Ohio Occupational Therapy, Physical Therapy, and Athletic Trainers Board to submit fingerprints for a criminal records check completed by the Ohio Bureau of Criminal Identification and Investigation (BCI) and the Federal Bureau of Investigation (FBI). The BCI and FBI records checks are both required for initial licensure. By law, the Board cannot complete the processing of any application until it receives the background check reports from BCI and FBI. The graduate is responsible for the cost of the BCI and FBI records checks. The Ohio Occupational Therapy, Physical Therapy, and Athletic Trainers Board may refuse to grant a license to any individual with a felony conviction, including but not limited to the habitual indulgence in or use of a controlled substance, other habit-forming drugs, or alcohol. More information can be obtained from the Ohio Revised Code - see the PTA program director for details.

### Degree – Associate of Applied Science in Physical Therapist Assistant Technology

Two-year, full-time degree schedule; and, mixture of core technical courses along with science, health terminology, computer and general education classes. PTA students complete varied clinical experiences. Program graduates are eligible to take the National Physical Therapy Examination (NPTE) of the Federation of State Boards of Physical Therapy (FSBPT) to become licensed as a physical therapist assistant (PTA). Licensed PTAs have a wide variety of employment opportunities.

**PHYSICAL THERAPIST ASSISTANT**  
**Associate of Applied Science Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL		NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
					Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>									
PTA1000	Introduction to Physical Therapy	2	2					FA	None
PTA1010	PTA Medical Documentation	1	1					FA	PTA Program Accepted
PTA1100	PTA Patient Care Skills	3	3					FA	PTA Program Accepted
PTA1102	PTA Modalities	3	3					FA	PTA Program Accepted
HLT1100	Health Terminology	1			1			ALL	None
SCI1200	Anatomy & Physiology I	4		4			[TMNS]	ALL	SCI1050 or equivalent
OIS1240	Computer Applications	3			3		[OBU003]	ALL	Placement requirements or OIS1200
<b>SECOND SEMESTER (Spring)</b>									
ALH1103	PTA Functional Anatomy	3			3			SP	PTA1000, PTA1010, PTA1100, PTA1102, SCI1200. SCI1250 must be taken before or concurrently with this course
PTA1104	Therapeutic Exercise	4	4					SP	PTA1000, PTA1010, PTA1100, PTA1102, SCI1200. SCI1250 must be taken before or concurrently with this course.
PTA1105	PTA Kinesiology & Orthopedic Considerations	4	4					SP	PTA1000, PTA1010, PTA1100, PTA1102, SCI1200. SCI1250 must be taken before or concurrently with this course.
SCI1250	Anatomy & Physiology II	4		4			[TMNS]	FA, SP	SCI1200
PSY1100	General Psychology	3		3			[TMSBS] [OSS015]	ALL	None
<b>THIRD SEMESTER (Summer)</b>									
PTA2010	Clinical Practicum I	1	1					SU	ALH1103, PTA1104, PTA1105, SCI1250 must be taken before or concurrently with this course.
PTA2105	PTA Seminar I	1	1					SU	ALH1103, PTA1104, PTA1105, SCI1250. PTA2010 must be taken before or concurrently with this course.
ENG1000	English Composition I	3		3			[TME001]	ALL	Placement requirements or ENG0991
MTH1240	Statistics	3		3				ALL	Placement requirements or MTH0910.
<b>FOURTH SEMESTER (Fall)</b>									
PTA2221	PTA Pathophysiology	3	3					FA	PTA2010 and PTA2105
PTA2223	Rehabilitation for Specific Populations	4	4					FA	PTA2010 and PTA2105
PTA2224	Neurological Rehabilitation	4	4					FA	PTA2010 and PTA2105
ENG1100	English Composition II	3		3				ALL	ENG1000
<b>FIFTH SEMESTER (Spring)</b>									
PTA2310	Clinical Practicum II	2	2					SP	PTA2221, PTA2223, PTA2224. PTA2320 and PTA2350 must be taken before or concurrently with this course.
PTA2320	Clinical Practicum III	2	2					SP	PTA2221, PTA2223, PTA2224. PTA2310 and PTA2350 must be taken before or concurrently with this course.
PTA2350	PTA Seminar II & III	1	1					SP	PTA2221, PTA2223, PTA2224. PTA2310 and PTA2320 must be taken before or concurrently with this course.
PSY2100	Human Growth & Development	3		3			[TMSBS] [OSS048]	ALL	PSY1100
<b>Credit Hour Total</b>			<b>65</b>						
			35	23	7				
			65						



### Application Process

#### Limited Enrollment

To qualify for MTC's Radiography Program, applicants must have:

1. Fulfilled all MTC general admission requirements, and submitted both the Radiography Program Application and the non-academic standards form. **Application deadline May 17th.**
2. Successfully completed high school or certification of equivalent education by an organization recognized by the U.S. Department of Education. Acceptance into the Radiography program is contingent upon receipt of official final high school transcript with posted graduation date or passing GED results.
3. Earned an accumulative grade point average (GPA) of 2.5 (4.0 scale) in high school or GED examination equivalent, or completed a minimum of 12 semester hours (or equivalent) of college credit with an accumulative GPA of 2.5.
4. Taken high school algebra, biology, and chemistry, or successful completion equivalent college coursework.
5. Successful completion of the ACT or Basic Skills Assessment (ACCUPLACER) in reading, writing, mathematics (algebra) and Technology Skills Test (TST).
6. Reached 18 years of age by the end of the calendar year in which you are seeking admission into Radiography technical courses.
7. Observed in an imaging department a minimum of 32 hours at three different clinical sites and a submitted an "Observation Validation" form. (Form is available on college website under Radiography program)
8. Transfer students to MTC must qualify in accordance with current Radiography program admission criteria.

A listing of all requirements, policies, and procedures for the program is available in the Radiography Student Handbook located on the program's page on MTC's website.

#### Accreditation

The associate degree Radiography program is accredited by the Joint Review Commission on Education in Radiologic Technology (JRCERT), 20 N Wacker Drive, Suite 2850, Chicago, IL 60606, 312-704-5300, [mail@jrcert.org](mailto:mail@jrcert.org). The program's current length of accreditation is 8 years.

#### Certification

Program graduates are eligible to take the National Registry Examination, offered by the American Registry of Radiologic Technologists (ARRT), 1255 Northland Dr., St. Paul, MN 55120, 651-687-0048, <https://www.rrt.org>. The ARRT Board reserves the right to deny admission to the ARRT examination if an individual has been convicted of a crime, including a felony, gross misdemeanor, misdemeanor, or drug-related arrest. Clinical sites as well as potential employers may require drug screens and criminal background investigations

### The Program – Radiologic Technology

Produce x-ray images to help in the diagnosis of injury and disease; position patients for accurate imaging; administer special agents that produce greater contrast in biological tissues and structures; maintain strict standards for safety and quality control.

#### Degree Received Associate of Applied Science

Two-year (six semesters) full-time degree schedule; mixture of core technical and science courses, along with basic communications classes.

#### Mission Statement

To provide an environment for student radiographers to become qualified and competent technologists in a healthcare setting. We partner with the healthcare community to provide higher education for radiographers and the school encourages the process of life-long learning.

#### Program Goals

- The program will provide the graduates with entry-level skills of a radiographer.
- To provide the community with qualified technologists.
- The program will facilitate development of effective communication, critical thinking, and problem solving skills.
- To facilitate development of professional attitudes, behaviors, and ethics.

#### Students in the Radiography program will learn to...

- Demonstrate knowledge and skill to accurately position patients including necessary modifications and evaluation of imaging procedures.
- Practice radiation protection for patient, self and others by determining exposure factors to obtain diagnostic quality images with minimum radiation exposure.
- Provide patient education, comfort, and basic patient care, anticipate patients' needs and recognize emergency condition requiring initiation of first-aid and basic life support procedures.
- Demonstrate knowledge and skills related to quality assurance and quality improvement.
- State the safe limits of equipment operation and report malfunctions to the proper authority.
- Exercise independent judgment and discretion when performing imaging procedures.
- Practice effective communication with patients and other health professionals.
- Demonstrate an understanding of basic x-ray production and interactions.
- Demonstrate knowledge of human structure, function and pathology.
- Support the professions code of ethics and comply with the profession's standard of practice and scope of practice.

**RADIOLOGIC TECHNOLOGY**  
**Associate of Applied Science Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL		NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
					Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Summer)</b>									
ALH1140	Healthcare Issues: Medical Law & Ethics	1				1		ALL	None
ALH1130	Healthcare Issues: Medical Professionalism	1				1		ALL	None
RAD1001	Introduction to Radiologic Technology	2	2					ALL	None
ALH1110	Medical Terminology	3				3	[OHL020]	ALL	None
MTH1230	Quantitative Reasoning	3			3			ALL	Placement requirements or MTH0910.
ALH1190	Physics for Allied Health	2				2		FA, SP	Placement requirements or MTH0910
<b>SECOND SEMESTER (Fall)</b>									
RAD1010	Methods of Patient Care	2	2					ALL	None
RAD1020	Radiographic Positioning & Procedures I	4	4					FA	RAD1000 program acceptance
RAD1100	Radiologic Technology Clinical I	3	3					FA	RAD1000
SCI1200	Anatomy & Physiology I	4			4		[TMNS]	ALL	SCI1050 or equivalent
RAD1052	Radiation Physics	2	2					FA	ALH 1190
<b>THIRD SEMESTER (Spring)</b>									
RAD1030	Radiographic Positioning & Procedures II	4	4					SP	RAD1020
RAD1061	Principles of Radiographic Exposure	2	2					SP	RAD1052
RAD1200	Radiologic Technology Clinical II	3	3					SP	RAD1100
SCI1250	Anatomy & Physiology II	4			4		[TMNS]	FA, SP	SCI1200
<b>FOURTH SEMESTER (Summer)</b>									
ENG1000	English Composition I	3			3		[TME001]	ALL	Placement requirements or ENG0991
RAD1300	Radiologic Technology Clinical III	4	4					SU	RAD1200
OIS1240	Computer Applications	3				3	[OBU003]	ALL	Placement requirements or OIS1200
<b>FIFTH SEMESTER (Fall)</b>									
RAD2000	Advanced Imaging Procedures & Equipment	2	2					FA	RAD1061 and RAD1030
ENG1100	English Composition II	3			3			ALL	ENG1000
HSS2020	Ethnic & Cultural Diversity	3			3		[TMSBS] [OSS024]	ALL	Placement requirements or ENG0970
RAD2101	Radiologic Technology Clinical IV	2	2					FA	RAD1300
<b>SIXTH SEMESTER (Spring)</b>									
RAD2030	Principles of Radiobiology	1	1					SP	RAD2000
RAD2050	Radiographic Pathology	1	1					SP	RAD2000
RAD2060	Radiographic Review	1	1					SP	RAD2000
RAD2201	Radiologic Technology Clinical V	2	2					SP	RAD2101
<b>Credit Hour Total</b>			<b>65</b>						
				35	20	10			
					65				

<sup>1</sup> Human Growth and Development recommended

**SURGICAL TECHNOLOGY**  
**Associate of Applied Science Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			Gen Ed	Applied Gen Ed (Basic)	Gen Ed			
<b>FIRST SEMESTER (Fall)</b>								
ENG1000	English Composition I	3			3	[TME001]	ALL	Placement requirements or ENG0991
ALH1110	Medical Terminology	3			3	[OHL020]	ALL	None
SCI1200	Anatomy & Physiology I	4			4	[TMNS]	ALL	SCI1050 or equivalent
SUR1000	Introduction to Surgical Technology	2	2				FA	Program Accepted
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
<b>SECOND SEMESTER (Spring)</b>								
SUR1100	Surgery Technology I	5	5				SP	Dept Approval
SUR1200	Sterile Processing Clinical	1	1				SP	Dept Approval
SCI1250	Anatomy & Physiology II	4			4	[TMNS]	FA, SP	SCI1200
<b>THIRD SEMESTER (Summer)</b>								
SCI1300	Microbiology	4			4	[TMNS]	ALL	SCI1250 (with min grade of "C") or Dept Approval
SUR1150	Surgery Technology II	4	4				SP	Dept Approval
SUR1300	Surgery Technology Clinical I	3	3				SP, SU	Dept Approval
<b>FOURTH SEMESTER (Fall)</b>								
SUR2000	Surgery Technology III	4	4				FA	Dept Approval
SUR2200	Surgery Technology Clinical II	5	5				FA	Dept Approval
MTH1240	Statistics	3			3		ALL	Placement requirements or MTH0910.
ALH1140	Healthcare Issues: Medical Law & Ethics	1			1		ALL	None
HSS2020	Ethnic & Cultural Diversity	3			3	[TMSBS] [OSS024]	ALL	Placement requirements or ENG0970
<b>FIFTH SEMESTER (Spring)</b>								
SUR2100	Surgery Technology IV	4	4				SP	Dept Approval
SUR2300	Surgery Technology Clinical III	5	5				SP	Dept Approval
ENG1400	Oral Communications	3			3	[TMCOM] [OCM004]	ALL	None
SUR2800	Surgery Technology Certification Exam Review	1	1				SP	Dept Approval
<b>Credit Hour Total</b>			<b>65</b>	<b>65</b>	<b>7</b>			

## Application Process Limited Enrollment

To apply for acceptance into the Medical Assisting ATS program, your application file should contain:

1. MTC Application for Admission (nonrefundable application fee).
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. A minimum 2.0 accumulative grade point average (GPA) in high school or college-level courses (whichever is most recent).
4. Successful completion of the ACT or Basic Skills Assessment (ACCUPLACER) in reading, writing, mathematics (algebra) and Technical Skills Test (TST).
5. Complete Medical Assisting program application.
6. Completion of successful criminal background check.

If required, college foundation courses are available to help you meet any specialized program admission requirements. A complete listing of all requirements and policies/procedures for the program is available in the Medical Assisting Student Handbook which can be obtained on the College website.

## Degree Received Associate of Technical Study

Two-year (four semesters) full-time degree schedule; mixture of business, communications, health applications, and information technology courses; includes field experience practicum.

## For More Information, Contact:

Admissions Office  
Marion Technical College  
1467 Mt. Vernon Avenue  
Marion, OH 43302  
Email:enroll@mtc.edu  
740.389.4636

## The Program - Medical Assisting Certificate (CMA)

The demand for Medical Assistants is expanding rapidly. MA's are the only allied health professionals specifically trained to work in ambulatory settings, such as physicians' offices, clinics, and group practices. These multi-skilled personnel can perform *administrative* and *clinical* procedures. Physicians value this unique versatility more and more, as managed care compels them to contain costs and manage human resources efficiently.

Medical Assisting continues to be one of the fastest growing occupations in healthcare. According to the US Bureau of Labor Statistics Occupational Outlook Handbook the Medical Assisting field has a 29% growth outlook through 2026, which is faster than average for all occupations. The growth of the Baby Boomer population will continue to spur demand for preventive medical services which are often provided by physicians.

Medical Assistants have a great amount of variety in their jobs and are cross-trained to perform many administrative and clinical duties. Below is a quick overview of the types of tasks a medical assistant does during a typical workday:

### Students in the Medical Assistant program will learn to...

- Communicate effectively with patients, physicians, and co-workers.
- Demonstrate competent written and medical terminology skills.
- Perform administrative duties such as scheduling appointments, maintaining patients records (paper and electronic), utilization of computer software/electronic medical records, educate patients in general office policies, and instruct individuals according to their needs.
- Perform clinical duties such as basic first aid and CPR, applying principles of aseptic technique and infection control, taking vitals and patient histories, collecting and processing specimens, performing CLIA-waived testing, performing patient screening, instructing and preparing a patient and assisting with procedures and exams, administering medications, and performing electrocardiograms and pulmonary function testing.
- Apply knowledge of local, federal, and state health care legislation such as proper documentation and reporting, performing within legal and ethical boundaries, and applying HIPAA rules in regards to privacy and release of information.
- Manage the facilities, equipment, and inventory of a medical office.
- Manage practice finances including accounts receivable, procedure charges, adjustments, and banking.
- Demonstrate proficient knowledge of computer software as it applies to document production, spreadsheets, and databases.
- Perform dosage and mathematical calculations related to the medical office environment.
- Code, classify, and index diagnoses and procedures for reimbursement by Medicare, Medicaid, and medical insurances using ICD-10-CM and CPT-4 coding.
- Recognize and problem solve situations related to the medical office environment.
- Perform in a safe manner that minimizes risk to patients, self, and others.
- Demonstrate professional interpersonal, oral, and written communications skills sufficient to serve the needs of the patients and the public including an awareness of how diversity may affect the communication process and patient care.
- Demonstrate professional conduct and apply legal, social, and ethical responsibilities within the health care environment.

### Certification

Students who complete MTC's Medical Assisting certificate program are eligible to sit for the certification exam offered by the American Association of Medical Assistants (AAMA, 20 North Wacker Drive, Suite 1575, Chicago, IL 60606, 312-899-1500, [www.aama-ntl.org](http://www.aama-ntl.org)). The credential awarded upon successful completion of the exam is the CMA (Certified Medical Assistant). Students are also eligible to sit for the certification exam offered by American Medical Technologists ([www.americanmedtech.org](http://www.americanmedtech.org)). The credential awarded upon successful completion of the exam is RMA.

Convicted felons or individuals pleading guilty to a felony are not eligible to sit for the Medical Assisting certification exam unless the Certifying Board (CB) grants a waiver based on accepted mitigating circumstances.

**MEDICAL ASSISTANT TECHNOLOGY**  
**Associate of Technical Study Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>								
ALH1110	Medical Terminology	3			3	[OHL020]	ALL	None
ALH1140	Healthcare Issues: Medical Law & Ethics	1			1		ALL	None
MED1010	Medical Assisting Clinical Procedures I	4	4			[CTMAT008][C TMAT011]	FA	Dept Approval
MED1021	Medical Office Procedures	4	4				FA	Dept Approval
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
<b>SECOND SEMESTER (Spring)</b>								
ALH1160	Pharmacology for Allied Health	2			2		FA, SP	ALH1110
MED1040	Medical Assisting Clinical Procedures II	4	4			[CTMAT011][C TMAT010]	SP	MED1010 and Medical Assisting majors only
MED1050	MA Lab Procedures	2	2			[CTMAT009][C TMAT010]	SP	MED1010 and Dept Approval
MED1061	Medical Assisting Insurance & Billing	3	3				SP	ALH1110 and Dept Approval
MED1070	Medical Assisting Capstone	1	1				SP	MED1040 must be taken before or concurrently with this course.
MED1091	Medical Assisting Practicum	2	2				SP	Dept Approval
MED1080	Medical Assisting Issues & Review	1	1				SP	Dept Approval
<b>THIRD SEMESTER (Fall)</b>								
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
SCI1100	Basic Anatomy & Physiology	4		4			ALL	ALH1110 or HLT1100 can be taken concurrently
HIT1200	Health Record Management I	2			2		ALL	Dept Approval
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
<b>FOURTH SEMESTER (Spring)</b>								
HIT1400	Healthcare Reimbursement	2	2			[OHL022]	FA, SP	HIT1200 and HIT1301 can be taken concurrently
HSS2020	Ethnic & Cultural Diversity	3		3		[TMSBS] [OSS024]	ALL	Placement requirements or ENG0970
HIT1301	Clinical Classifications ICD10-CM/PCS	4	4				FA, SP	HIT1200 must be taken before or concurrently with this course.
HIT1302	Current Procedural Terminology	3	3				FA, SP	HIT1200 must be taken before or concurrently with this course.
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
<b>Credit Hour Total</b>			<b>60</b>					
			30	19	11			
				60				

## Application Process

### Limited Enrollment

To apply for acceptance into the Health Information Technology program, your application file should contain the following:

1. MTC Application for Admission and nonrefundable application fee.
2. American College Test (ACT) scores with a minimum composite score of 18, or successful completion of college-level required program courses with a minimum accumulative grade point average of 2.5 or higher.
3. Successful completion of the ACT or Basic Skills Assessment (Accuplacer in reading, writing, and mathematics (algebra)).
4. Final high school transcript (or GED results) and college transcripts (if applicable).
5. A minimum 2.5 accumulative grade point average (GPA) in high school or college-level courses (whichever is most recent).
6. Completed Health Informatics Technology application.
7. Completion of successful criminal background check.

If required, college foundation courses are available to help you meet any specialized program admission requirements.

A complete listing of all requirements and policies/procedures for the program is available in the Health Information Technology Handbook.

To Learn More Visit [www.mtc.edu](http://www.mtc.edu)  
Information subject to change without notice.

## Clinical Health Informatics Specialist Certificate

**Career Pathway:** Health Information Technology Associate of Applied Science Degree

Students who complete this the Clinical Health Informatics Certificate at MTC are prepared to take Certified Healthcare Technology Specialist exams through the American Health Information Management Association and the CAHIMS exams through the Healthcare Information and Management Systems organization.

“As the nation moves toward industry-wide adoption of electronic health records (EHRs), the Bureau of Labor Statistics expects a shortage of about 50,000 qualified health IT workers to meet the needs of hospitals and healthcare affiliates. The Certified Healthcare Technology Specialist (CHTS) competency exams allow professionals and employers to capitalize on new technologies, procedures and careers.

The CHTS exams assess the competency of individuals seeking to demonstrate proficiency in certain health IT workforce roles integral to the implementation and management of electronic health information. Currently, there are six separate CHTS exams. Each pertains to a HIT workforce role instrumental in meaningful use of Electronic Health Record (EHR) systems. The CHTS exams assess the competency of health IT professionals to:

- Assess workflows
- Select hardware and software
- Work with vendors
- Install and test systems
- Diagnose IT problems
- Train practice staff on systems

“CAHIMS is a new Health Information Management Systems Specialist (HIMSS) Information Technology (IT) certification designed for emerging professionals within the industry (with five years or less of experience). This certification demonstrates knowledge of health IT and management systems, facilitating entry-level careers in health IT. It is designed to be a career pathway to the CPHIMS credential (Healthcare Information and Management Systems).”

### Who is the CAHIMS credential for?

- Individuals looking to work in a healthcare setting or mid-level professionals seeking career change
- Those who want to learn more about health IT, including clinicians
- Non-IT professionals, working in other departments, who work as an extension of the IT department
- Those enrolled in an academic program at the undergraduate or graduate level, i.e. healthcare informatics, CAHME-accredited programs, Masters in Healthcare Administration, or others students
- Veterans returning from active duty.

**Clinical Health Informatics Specialist Certificate  
One-Year Technical Certificate  
(Effective Academic Year 2019-20)**

**Online Program**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			Gen Ed	Applied Gen Ed (Basic)	Gen Ed			
<b>FIRST SEMESTER (Fall)</b>								
ALH1110	Medical Terminology	3		3		[OHL020]	ALL	None
CIT1351	IT Essentials/A+	3		3		[CTIT003 & CITIT004]	FA, SP	Placement requirements or OIS1200
OIS1240	Computer Applications	3		3		[OBU003]	ALL	Placement requirements or OIS1200
HIT1200	Health Record Management I	2	2				ALL	Dept Approval
HIT2000	HIT Legal Issues	2	2			[OHL021]	SP	HIT1200
<b>SECOND SEMESTER (Spring)</b>								
HIT2100	Health Record Management II	4	4				FA, SP	HIT1200 and Dept Approval
MGT2510	Project Management	3		3			FA	OIS1240
ENG1000	English Composition I	3			3	[TME001]	ALL	Placement requirements or ENG0991
ENG1400	Oral Communications	3			3	[TMCOM] [OCM004]	ALL	None
<b>THIRD SEMESTER (Summer)</b>								
HIT2200	Health Information Technology Systems	4	4				FA	HIT2100
HIT2500	Health Information Management and Data Governance	3	3				SP, SU	HIT1200 and OIS1240
HIT2400	HIT Quality Assessment	2	2				SP	HIT2100
<b>Credit Hour Total</b>			<b>35</b>					
			17	6	12			
			35					

\* CIT 1351, IT Essentials/A+ and MGT 2510 Project Management -

\*\*CIS1351, IT Essentials/A+ Students are presented with the information required to sit for their COMPTia A+ certification exams. CIT1350 introduces the student to the main concepts behind computer hardware and software. Customer service and computer troubleshooting and repair are the primary focus of this course. 3 Cr. Hrs. Prerequisite: OIS1200 or successful completion of the Technology Skills Test (TST).

**Occupational Certification Opportunities:**

A+ Certification (submitted CAHIMS and CHTS to OBR on 5/30/14)

## Application Process

### Limited Class Sizes

To apply for acceptance into the Exercise Science certificate program, your application file should contain:

1. MTC Application for Admission (nonrefundable application fee).
2. Final high school transcript (or GED results) and college transcripts (if applicable). Your high school/college courses should include successful completion of algebra and biology/chemistry.
3. A minimum 2.0 accumulative grade point average (GPA) in high school or college-level courses (whichever is most recent).
4. Successful completion of the ACT or Basic Skills Assessment (Accuplacer) in reading, writing, mathematics (algebra) and TST.

If required, college foundation courses are available to help you meet any specialized program admission requirements.

## External Certification

Students will be eligible to sit for the NSCA-CPT certification exam. This is a personal training certification from the National Strength and Conditioning Association (NSCA). Passing the exam results in the credential of NSCA-CPT enabling one to practice as a personal trainer in a variety of settings.

## For More Information, Contact:

The Office of Admissions  
Marion Technical College  
1467 Mt. Vernon Avenue  
Marion, OH 43302  
E-mail: enroll@mtc.edu  
740.389.4636

## The Program – Exercise Science Certificate

**Career Pathway:** NSCA-CPT Personal Trainer Certification, Multi-Competency Health ATS Degree, Nursing AAS Degree, PTA AAS Degree, Associate Arts/Science Degree

**NSCA-Certified Personal Trainers (NSCA-CPT®)** are health/fitness professionals who, using an individualized approach, assess, motivate, educate and train clients regarding their personal health and fitness needs. Certified personal trainers design safe and effective exercise programs, provide the guidance to help clients achieve their personal health/fitness goals, and respond appropriately in emergency situations. Recognizing their own area of expertise, a personal trainer will refer clients to other health care professionals when appropriate.

This certificate can serve as an entry point into related careers such as athletic training, physical therapy, and occupational therapy. The program builds on the college's one-year certificate program in exercise science and includes coursework in exercise assessment and prescription, wellness and disease prevention, nutrition, personal and athletic training, athletic management and biomechanics.

Bureau of Labor Statistics data indicate a job outlook growth of **10% through 2026**. Hospitals, businesses, insurance organizations, health clubs and other locations will need these individuals to perform fitness work. **The 2017 median pay is \$18.85/hour or \$39,210/year. (BLS January 2018)**

## Students in the Exercise Science certificate program will learn to:

- Practice effective communication skills with patients, families, and medical staff.
- Apply critical thinking and basic problem solving skills.
- Practice good customer service techniques.
- Demonstrate positive attitude and excellent work ethics.
- Follow code of conduct by respecting patient's rights and confidentiality.
- Demonstrate accountability, responsibility and understanding of job description and expectations.
- Perform fitness and wellness skills which may include:
  - Obtaining and recording vital signs, height, and weight.
  - Observe participants and inform them of corrective measures necessary for skill improvement.
  - Instruct participants in maintaining exertion levels to maximize benefits from exercise routines.
  - Offer alternatives to accommodate different levels of fitness.
  - Plan routines and choose different movements for each set of muscles, depending on participants' capabilities and limitations.
  - Teach proper breathing techniques used during physical exertion.
  - Evaluate individuals' abilities, needs, and physical conditions, and develop suitable training programs to meet any special requirements.
  - Explain and enforce safety rules and regulations governing sports, recreational activities, and the use of exercise equipment.
  - Monitor participants' progress and adapt programs as needed.
  - Provide students with information and resources regarding nutrition, weight control, and lifestyle issues.



**Exercise Science Certificate**  
**One-Year Technical Certificate**  
*(Effective Academic Year 2019-20)*

Course No	Course Title	Credits	OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
<b>FIRST SEMESTER (Fall)</b>					
NUR1150	CPR & First Aid	1		ALL	None
HLT1100	Health Terminology	1		ALL	None
SCI1100	Basic Anatomy & Physiology	4		ALL	ALH1110 or HLT1100 can be taken concurrently
OIS1240	Computer Applications	3	[OBU003]	ALL	Placement requirements or OIS1200
PSY1100	General Psychology	3	[TMSBS] [OSS015]	ALL	None
ALH1050	Introduction to Exercise Science	3	[CTES001]	FA, SP	None
<b>SECOND SEMESTER (Spring)</b>					
NTR1100	Nutrition	3	[OHL016]	ALL	None
MKT2030	Principles of Marketing	3	[OBU006]	FA, SP	OIS1240 and ECN2000 must be taken before or concurrently with this course.
SCI1150	Exercise Physiology	3		SP	SCI1100, or SCI1200 and SCI1250
ALH2000	Exercise in Special Populations	2		FA, SP	ALH1050, SCI1100. HLT1100 must be taken before or concurrently with this course.
ALH2650	Strength Training & Exercise Prescription	3		SP	SCI1050, SCI1100. HLT1100 must be taken before or concurrently with this course.
ALH2670	Exercise Science Seminar/Directed Practice II	1		SP	ALH2000, SCI1150, and ALH2650 must be taken before or concurrently with this course.
<b>Total Credit Hours</b>		<b>30</b>			

**Occupational Certification Opportunities:**  
National Strength and Conditioning

### Application Process Limited Enrollment

To apply for acceptance into the Medical Assisting certificate program, your application file should contain:

1. MTC Application for Admission (nonrefundable application fee).
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. A minimum 2.0 accumulative grade point average (GPA) in high school or college-level courses (whichever is most recent).
4. Successful completion of the ACT or Basic Skills Assessment (ACCUPLACER) in reading, writing, mathematics (algebra) and Technical Skills Test (TST).
5. Complete Medical Assisting program application.
6. Completion of successful criminal background check.

If required, college foundation courses are available to help you meet any specialized program admission requirements. A complete listing of all requirements and policies/procedures for the program is available in the Medical Assisting Student Handbook which can be obtained on the College website.

### Certification

Students who complete MTC's Medical Assisting certificate program are eligible to sit for the certification exam offered by the American Association of Medical Assistants (AAMA, 20 North Wacker Drive, Suite 1575, Chicago, IL 60606, 312-899-1500, [www.aama-ntl.org](http://www.aama-ntl.org)). The credential awarded upon successful completion of the exam is the CMA (Certified Medical Assistant). Students are also eligible to sit for the certification exam offered by American Medical Technologists ([www.americanmedtech.org](http://www.americanmedtech.org)). The credential awarded upon successful completion of the exam is RMA. Convicted felons or individuals pleading guilty to a felony are not eligible to sit for the Medical Assisting certification exam unless the Certifying Board (CB) grants a waiver based on accepted mitigating circumstances.

### The Program - Medical Assisting Certificate (CMA)

The demand for Medical Assistants is expanding rapidly. MA's are the only allied health professionals specifically trained to work in ambulatory settings, such as physicians' offices, clinics, and group practices. These multi-skilled personnel can perform *administrative* and *clinical* procedures. Physicians value this unique versatility more and more, as managed care compels them to contain costs and manage human resources efficiently.

Medical Assisting continues to be one of the fastest growing occupations in healthcare. According to the US Bureau of Labor Statistics Occupational Outlook Handbook the Medical Assisting field has a 29% growth outlook through 2026, which is faster than average for all occupations. The growth of the Baby Boomer population will continue to spur demand for preventive medical services which are often provided by physicians.

Medical Assistants have a great amount of variety in their jobs and are cross-trained to perform many administrative and clinical duties. Below is a quick overview of the types of tasks a medical assistant does during a typical workday:

#### Administrative duties may include the following:

- Using computer applications
- Answering the telephone
- Greeting patients
- Updating paper and electronic medical records
- Coding (procedural and diagnostic) and filling out insurance forms
- Scheduling appointments
- Arranging for hospital admissions and laboratory services
- Handling correspondence, billing, and bookkeeping
- Demonstrates professional, interpersonal, oral and written communications skills

#### Clinical duties vary, but may include the following:

- Taking medical histories and performing vital signs
- Explaining treatment procedures to patients
- Preparing patients for examination
- Assisting the physician during an exam
- Instructing patients about medication and special diets
- Collecting and preparing laboratory specimens including blood collection
- Performing basic laboratory tests
- Authorizing prescription refills as directed
- Preparing and administering medications as directed by a physician
- Taking electrocardiograms
- Removing sutures and changing dressings

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

**Medical Assisting Certificate  
One-Year Technical Certificate  
(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>								
ALH1110	Medical Terminology	3			3	[OHL020]	ALL	None
ALH1140	Healthcare Issues: Medical Law & Ethics	1			1		ALL	None
MED1010	Medical Assisting Clinical Procedures I	4	4			[CTMAT008][CTMAT011]	FA	Dept Approval
MED1021	Medical Office Procedures	4	4				FA	Dept Approval
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
<b>SECOND SEMESTER (Spring)</b>								
ALH1160	Pharmacology for Allied Health	2			2		FA, SP	ALH1110
MED1040	Medical Assisting Clinical Procedures II	4	4			[CTMAT011][CTMAT010]	SP	MED1010 and Medical Assisting majors only
MED1050	MA Lab Procedures	2	2			[CTMAT009][CTMAT010]	SP	MED1010 and Dept Approval
MED1061	Medical Assisting Insurance & Billing	3	3				SP	ALH1110 and Dept Approval
MED1070	Medical Assisting Capstone	1	1				SP	MED1040 must be taken before or concurrently with this course.
MED1091	Medical Assisting Practicum	2	2				SP	Dept Approval
MED1080	Medical Assisting Issues & Review	1	1				SP	Dept Approval
<b>Credit Hour Total</b>			<b>33</b>	21	3	9		
				33				

**Occupational Certification Opportunity:**

CMA - Certified Medical Assistant  
RMA-Registered Medical Assistant

### **Application Process Limited Enrollment**

To apply for acceptance into the Medical Billing and Coding certificate program, your application file should contain:

1. MTC Application for Admission and nonrefundable application fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the ACT or Basic Skills Assessment (ACCUPLACER) in reading, writing, and mathematics (pre-algebra).
4. A minimum 2.5 accumulative grade point average (GPA) in high school or college-level courses (whichever is most recent).
5. Completed Medical Billing and Coding program application.
6. Completion of successful criminal background check.

If required, college foundation courses are available to help you meet any specialized program admission requirements.

### **To Learn More Visit**

[www.mtc.edu](http://www.mtc.edu)

### **The Program - Medical Billing and Coding Certificate (CCA, CPC-A, CPMA, CPB)**

This certificate program is online.

Medical Billing and Coding Technicians or Health Information Technicians organize and manage health information data. They ensure that the patient information is high quality, accurate, accessible, and secure in both paper and electronic health records systems. Using various classification systems they code and categorize patient information for insurance reimbursement purposes, databases, and registries and to maintain medical and treatment histories. After completing the certificate program, one is eligible to sit for a coding credentialing exam through the American Academy of Professional Coders (AAPC) or the American Health Information Management Association (AHIMA).

The Medical Biller/Coder or Health Information Technician fields is growing faster than average. According to the US Bureau of Statistics Occupational Outlook Handbook this area of healthcare has a 15% growth outlook through 2024 and is expected to increase as the population ages. (BLS, January 2016)

### **Certification**

Students who complete MTC's Medical Billing and Coding certificate program are eligible to sit for the certification exam offered by either the American Health Information Management Association (AHIMA, 233 N. Michigan Ave., 21<sup>st</sup> Floor, Chicago, Illinois 60601-5800 ) [www.ahima.org](http://www.ahima.org) or the American Academy of Professional Coders (AAPC, 2480 South 3850 West, Suite B, Salt Lake City, Utah 84120, 800-626-2633, [www.aapc.com](http://www.aapc.com)). Other certification exams include the Certified Medical Biller, Certified Professional Medical Auditor, and the Certified Professional Compliance Officer; all through the AAPC. These certifications demonstrate the holder's expertise in medical billing, auditing and regulatory compliance. Graduates typically pursue either the Certified Coding Associate credential (CCA) through AHIMA or the Certified Professional Coder Apprentice (CPC-A) through AAPC.

**Medical Billing and Coding Certificate**  
**One-Year Technical Certificate**  
*(Effective Academic Year 2019-20)*

**Online Program**

Course No	Course Title	Credits	TECHNICAL		NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			Gen Ed	Applied Gen Ed (Basic)	Gen Ed	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>									
ENG1000	English Composition I	3	3				[TME001]	ALL	Placement requirements or ENG0991
SCI1100	Basic Anatomy & Physiology	4	4					ALL	ALH1110 or HLT1100 can be taken concurrently
OIS1240	Computer Applications	3		3			[OBU003]	ALL	Placement requirements or OIS1200
ALH1110	Medical Terminology	3		3			[OHL020]	ALL	None
HIT1200	Health Record Management I	2	2					ALL	Dept Approval
<b>SECOND SEMESTER (Spring)</b>									
HIT1301	Clinical Classifications ICD10- CM/PCS	4	4					FA, SP	HIT1200 must be taken before or concurrently with this course.
HIT1302	Current Procedural Terminology	3	3					FA, SP	HIT1200 must be taken before or concurrently with this course.
HIT1400	Healthcare Reimbursement	2	2				[OHL022]	FA, SP	HIT1200 and HIT1301 can be taken concurrently
ALH1120	Human Diseases	3		3			[OHL019]	ALL	ALH1110
<b>THIRD SEMESTER (Summer)</b>									
HIT2500	Health Information Management and Data Governance	3	3					SP, SU	HIT1200 and OIS1240
HIT1500	Advanced Clinical Classification System	3	3					SU	HIT1301
HIT1900	HIT Professional Practice I	1	1					FA, SP	Dept Approval
<b>Credit Hour Total</b>			<b>34</b>						
			18	7	9				
				34					

**Occupational Certification Opportunities:**

Industry Certification: CCA (Certified Coding Assistant), CCS-P, CCA, CPC; National Healthcareer Association (NHA) - Certified Billing & Coding Specialist (CBCS)

### Application Process Limited Enrollment

To apply for the Phlebotomy/Medical Laboratory Assistant program, applicants must have:

1. MTC Application for Admission including application fee and final high school transcript.
2. A minimum 2.0 accumulative grade point average (on 4 scale) in high school or college-level courses (whichever is most recent).
3. Successful completion of the ACT or Basic Skills Assessment (Next Generation ACCUPLACER) in reading, writing, mathematics (statistics pathway) and Technology Skills Test (TST). College foundation courses are available to help you meet specialized program admission requirements. College transfer credit may also be used with a grade of C or better.
4. Completed Phlebotomy/Medical Laboratory Assistant application packet available by request or online on MTC's website.
5. Completion of successful criminal background check and successful drug screen. Students admitted into the program are required to submit to a criminal background check facilitated by the Ohio Bureau of Criminal Investigation and identification. Students with certain felony, misdemeanor, or drug-related arrests will be ineligible for admission into the program.
6. Applicant must read the Medical Science Student Handbook. A listing of requirements, policies, and procedures for the program is available in the Student Handbook located on MTC's website.

### For More Information, Contact:

The Office of Admission  
Marion Technical College  
1467 Mt Vernon Avenue  
Marion, OH 43302  
Email: enroll@mtc.edu  
740-389-4636

### The Program – Phlebotomy/Medical Laboratory Assistant Certificate

**Career Pathways:** Medical Assistant ATS Degree, Medical Laboratory Technology AAS Degree, Nursing AAS Degree

Phlebotomy Technicians draw blood for tests, transfusions, research, or blood donations. Medical Laboratory Assistants are able to perform a variety of tasks within the medical laboratory including waived and point-of-care testing and quality assurance. They typically work in hospitals, medical and diagnostic laboratories, blood donor centers, physician offices, and other health care facilities.

The demand for certified Phlebotomists is growing much faster than average. According to the Bureau of Labor Statistics this field is projected to grow 25% through 2024. (BLS January 2016) The External Certificate Exam is available through the American Society of Clinical Pathology (ASCP) Registry.

### Students in the Phlebotomy/Medical Laboratory Assistant Certificate program will learn to...

- Demonstrate knowledge of the health care delivery system, medical terminology and basic understanding of anatomy and physiology and anatomic terminology.
- Demonstrate basic understanding of age specific or psycho-social considerations involved in the performance of phlebotomy procedures on various age groups of patients.
- Follow standard operating procedures to collect specimens via venipuncture and capillary puncture.
- Prepare blood and body fluid specimens for analysis according to standard operating procedure.
- Prepare/reconstitute reagents, standards and controls according to standard operating procedure.
- Follow established quality assurance and quality control protocol
- Demonstrate knowledge of aseptic techniques, infection control, and safety in the collection and processing of specimens that minimizes risk to patients, self, and others.
- Perform CLIA-waived and Point-of-Care testing, perform patient screenings, and vital sign measurements.
- Identify and report potential pre-analytical errors that may occur during specimen collection, labeling, transporting and processing.
- Apply knowledge of local, federal, and state health care legislation such as proper documentation and reporting, performing within legal and ethical boundaries, and applying HIPAA rules in regard to privacy and release of information.
- Recognize and problem solve situations related to the medical lab environment.
- Demonstrate professional conduct and apply legal, social, and ethical responsibilities within the health care environment.

### External Certification

Students who complete the program are eligible to take the PBT certification exam (Route 2) offered by the American Society of Clinical Pathologists website [www.ascp.org/](http://www.ascp.org/). Eligibility for the Medical Laboratory Assistant certification requires PBT certification and one year of full time experience as a lab assistant (Route 5) through ASCP.

**Phlebotomy/Medical Laboratory Assistant Certificate**  
**One-Year Technical Certificate**  
*(Effective Academic Year 2019-20)*

Course No	Course Title	Credits	TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			NON- Gen Ed	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>							
ALH1110	Medical Terminology	3		3	[OHL020]	ALL	None
ALH1130	Healthcare Issues: Medical Professionalism	1		1		ALL	None
MLT1010	Basic Medical Laboratory Techniques	2	2		[OHL008]	FA	Dept Approval
MTH1240	Statistics	3		3		ALL	Placement requirements or MTH0910.
OIS1240	Computer Applications	3		3	[OBU003]	ALL	Placement requirements or OIS1200
<b>SECOND SEMESTER (Spring)</b>							
ALH1140	Healthcare Issues: Medical Law & Ethics	1		1		ALL	None
ALH1150	Healthcare Issues: Patient Communication	1		1		ALL	None
ENG1000	English Composition I	3		3	[TME001]	ALL	Placement requirements or ENG0991
MLT1030	Phlebotomy Theory & Techniques	2	2			SP	MLT1010 and Dept Approval
MLT1060	Advanced Medical Laboratory Techniques	2	2			SP	MLT1010
PSY1100	General Psychology	3		3	[TMSBS] [OSS015]	ALL	None
<b>THIRD SEMESTER (Summer)</b>							
MLT1400	Phlebotomy Clinical	2	2			SU	MLT1060
SCI1100	Basic Anatomy & Physiology	4		4		ALL	ALH1110 or HLT1100 can be taken concurrently
<b>Credit Hour Total</b>			<b>30</b>	<b>8</b>	<b>13</b>	<b>9</b>	

**Occupational Certification Opportunity:**  
 ASCP

## Nurse Assistant Certification (STNA) Preparation Training

**Career Pathway:** Nursing (RN) Associate of Applied Science Degree

This Nurse Aide Training (NUR1003) is designed to prepare students to sit for an external examination which would qualify them as an STNA. NUR1003, an equivalent training course, or an STNA certification is required for entry into the first nursing technical course (NUR1011).

This training also meets a market need and provides students an opportunity for gainful employment offering valuable experience.

### Students in Nurse Aide Preparation Training will learn to:

- Identify Ohio Department of Health requirements for State-Tested Nurse Aide (STNA).
- Describe the role of the nurse aide.
- Discuss aspects of communications important to nurse aides.
- Identify and implement infection control practices.
- Discuss safety and emergency precautions.
- Explain ways to promote residents' independence.
- Identify legal rights of the nursing home resident.
- Demonstrate basic nursing care and personal care skills at a satisfactory level.
- Discuss theory related to performing basic nursing care skills
- Identify the needs of an aging resident relating to mental health and social services.
- Recognize basic restorative services available to nursing home residents.

### What Can I Expect?

This training course follows the guidelines set forth in the Omnibus Budget Reconciliation Act of 1987 and focuses on long-term care of the elderly population. Critical thinking situations are an integral part of each class discussion.

Students will be required to submit to a criminal background check at the onset of this course. The fee for this background check will be included in the cost of tuition. Individuals with

certain felony, misdemeanor, **or drug-related arrests may not be eligible for course admission.**

### High School Students

The Nurse Assistant Certification Preparation Training course (NUR1003) is qualified for College Credit Plus funding. This is a great option for qualified high school students seeking a hands-on experience in healthcare, college credit, and certification to work as an STNA. Additional materials not available in the campus bookstore. Please contact your high school for further information.

### Admission –Limited Enrollment

Marion Technical College (MTC) must meet state guidelines for attendance requirements, therefore students **ARE REQUIRED** to attend all classes and labs. Any missed hours of instruction must be made up hour for hour at an additional student cost of \$25.00 per hour. Also, the NUR1003 course carries the following additional student expenses: TB skin test, uniform for clinical, and (if desired) state examination fee and cost of the textbooks, which vary.

3 semester hours. No course prerequisites.

- **15 week sessions:** 2.5 hours lecture and 2.5 hours lab weekly, plus 20 additional clinical hours.
- **Fast track sessions:** 20 hours lecture and 20 hours lab weekly, plus 16 additional clinical hours.

### External Certification

Students will obtain a certificate of completion from the Ohio Department of Health upon successful completion of the NUR1003 (Nurse Assistant Certification Preparation Training) course. Successful completion of the course also makes students eligible to take the state examination for nurse aides. Passing the exam results in the State-Tested Nurse Aide (STNA) title and placement on the Ohio Nurse Aide Registry. Successful completion of the training and the nurse aide examination also makes students eligible for employment in the healthcare field as a nurse aide, home health aide, and direct service provider. The program includes classroom instruction, lab, and clinical (workplace) experiences. MTC is recognized by the State of Ohio as an approved agency for offering nurse aide training classes by meeting all minimum state and federal guidelines.

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)



### Application Process

To apply for acceptance into the Bioscience Technology Program, your application file should contain the following:

1. Complete **North Central State College** Application for Admission.
2. American College Test (ACT) scores with a minimum composite score of 18, or successful completion of college-level required program courses with a minimum accumulative grade point average of 2.5 or higher.
3. Successful completion of the ACT or Basic Skills Assessment (ACCUPLACER) in reading, writing, and mathematics (algebra).
4. Final high school transcript (or GED results) and college transcripts (if applicable).
5. A minimum 2.5 accumulative grade point average (GPA) in high school or college-level courses (whichever is most recent).
6. Completed Bioscience Technology application.
7. Completion of successful criminal background check.

If required, college foundation courses are available to help you meet any specialized program admission requirements.

### What Will It Take to Succeed

The successful student will be a dedicated individual who will acquire the technical skills and attention to detail necessary to carry out complex tests and procedures in a wide variety of settings.

### Career Opportunities

Data provided by the Career Coach Website reports 7.9 % local job growth (within 45 miles of Mansfield) predicted over the next five years in North Central Ohio Region.

### Degree Received

Associate of Applied Science Degree

### For More Information, Contact:

Admissions Office  
Marion Technical College  
Email: enroll@mtc.edu - phone: 740.389.4636  
Visit website for more information [www.mtc.edu](http://www.mtc.edu)

Visit website for more information  
<https://www.ncstatecollege.edu/cms/degrees/bioscience>

### The Program - Bioscience Technology: Partnership Program at North Central State College

Bioscience is one of the newest areas of interest in the agricultural, manufacturing and criminal justice fields. This broad-based program will give you the basic knowledge required by the versatile careers available, as well as the processes, techniques and safety issues required in the lab. Bioscience covers a wide selection of scientific disciplines that covers living organisms from the smallest living organisms to the largest. Scientists involved in this area seek to improve chemical process and organisms.

### Marion Technical College-North Central State College Partnership

Marion Technical College and North Central State College have entered into a partnership in order to offer an associate degree in Bioscience Technology to MTC students. This consortium allows MTC students to take general education courses at MTC, and a blend of bioscience technology courses from North Central State College. Areas of study included in the curriculum include: forensics, microbiology, anatomy and physiology, histology, plant, and animal bioscience, along with good manufacturing practices.

### Students in the Bioscience Technology program will learn to...

- Utilize scientific concepts and laboratory research techniques currently used in the field of biotechnology.
- Demonstrate the ability to use various instruments and methods of analysis.
- Utilize appropriate safety procedures in every laboratory and the related analytical protocol.
- Apply laboratory research techniques to environmental pollution monitoring, sewage treatment, agricultural, industrial waste, and biofuels.
- Identify tissue using photographs, microscope slides, videotapes, and internet histology sites.
- Demonstrate fundamental histology techniques of preparation of tissue, embed tissues, use a microtome, and staining of tissue as a method for identification.
- Understand the various techniques in the applications of manufacturing biopharmaceuticals and biomedical research.
- General understanding of agricultural molecular techniques in genetic-engineering, basic science of gene and gene manipulation.
- Apply techniques in the area of forensic DNA extraction and how bioscience interacts with forensics.

### Courses for Transfer from Marion Technical College

BIO 1100	General Biology
CHM 1000	General and Biological Chemistry
ENG 1000	English Composition I
ENG 1100	English Composition II
ENG 1400	Oral Communications
SCI 1200	Anatomy & Physiology I
SCI 1250	Anatomy & Physiology II
SCI 1300	Microbiology
	Humanities elective
	Social Science elective

## Admission Requirements Limited Enrollment

To apply for acceptance into the Respiratory Care program, your application file should contain the following:

1. American College Test (ACT) composite score of 18-21; other appropriate test scores/developmental coursework.
2. A minimum 2.5 accumulative grade point average (GPA) for any previous college course work at the time of selection and matriculation.
3. Must have basic computer skills prior to admission to the program. This can be satisfied through successful completion of the Technology Skills Test (TST).
4. Complete 16 hours of observation with a respiratory care practitioner in a hospital of the applicant's choice. Appointments with the hospital are made by the applicant.
5. Complete an interview with the Respiratory Care Program chairperson or director of clinical education.
6. Results of a physical examination including laboratory tests and completion of required immunizations before actual clinical course work can be started. The Respiratory Care program also has technical standards for which all students must be capable. These standards specify skills necessary to participate in learning activities and professional practice.
7. To meet the expanding requirements of our clinical affiliates, students will be required to submit to drug screening. Positive drug screens will result in dismissal from all clinical courses and consequently from the program.
8. A Limited Permit from the Ohio Respiratory Care Board must be obtained. This process includes a criminal background check. The Limited Permit must be maintained throughout to graduation.
9. Complete an American Heart Association, BLS, Health Care Provider, CPR course prior to clinical course work. Must be maintained through to graduation.
10. Complete a mandatory criminal background check. Anyone with a prior felony and/or some misdemeanors are at risk of being dismissed from the program. A positive criminal record may also prevent an individual from obtaining a license to practice.

If required, college foundation courses are available to help you meet any specialized program admission requirements.

### For More Information, Contact:

The Office of Admission  
Marion Technical College  
1467 Mt. Vernon Avenue  
Marion, Ohio 43302  
Email: [enroll@mtc.edu](mailto:enroll@mtc.edu) Phone: 740.389.4636

## The Program - Respiratory Therapy Technology: Partnership Program at North Central State College and Rhodes State College

This is a partnership program between Marion Technical College, North Central State College and Rhodes State College. The program is designed to prepare students as competent advanced level respiratory therapists who provide respiratory care for patients with heart and lung disorders, under the direction of a licensed physician. Students in the program receive instruction in classroom sessions, lab practices and field clinical experience. The scope of practice includes general care, neonatal critical care, pediatric critical care, adult trauma care, diagnostic testing, rehabilitation, home care, education and research.

### The Partnership

Students can enroll at North Central State College or Rhodes State College while attending Marion Technical College (MTC) with the help of distance education formats such as live video conferencing, podcasting and other distance modalities. MTC students can take their general education core courses at MTC and become enrolled in the respiratory care program at either college with a reduction in travel due to the use of distance education. Clinical education experiences may be available in the Marion area as well.

### Degree - Associate of Applied Science

An associate degree is awarded from North Central State College or Rhodes State College upon successful completion of the program. Students are eligible to take the national board exams to become a licensed Registered Respiratory Therapist (RRT). Both college Respiratory Care programs are fully accredited by the Committee on Accreditation for Respiratory Care (CoARC).

### Courses for transfer from Marion Technical College

ALH1110	Medical Terminology
CHM1000	General & Biological Chemistry
ENG1000	English Composition I
ENG1400	Oral Communications
MTH1230	Quantitative Reasoning or
MTH1240	Statistics
SCI 1200	Anatomy & Physiology I
SCI 1250	Anatomy & Physiology II
SCI 1300	Microbiology
SOC 1200	Sociology

*Information subject to change without notice*

## Application Process

### TO APPLY to OSUM:

1. Associate Degree or Diploma from an ACEN-accredited institution.
2. Completion of four required pre-requisites with a grade of C- or better by the end of spring term prior to enrollment.
3. Minimum GPA on all college-level work of 2.75 on a scale of 4.0 (Most successful applicants have a cumulative GPA of 3.0 or higher.)
4. Unrestricted and current RN licensure by the first day of autumn semester of the year of admission.

### Application deadlines

- For Spring Semester, applications are accepted May1 – August 1.
- For Autumn Semester applications are accepted January 18 – April 1.
- Priority Admission in the first 2 months of application cycle.

## Degree Received

Bachelor of Science in Nursing (BSN)

### For More Information, Contact

The Admissions Coordinator for the RN to BSN Option at 614-292-4041, or by email at [rnbsn@osu.edu](mailto:rnbsn@osu.edu)

*Information subject to change without notice.*

### Accreditation

The MTC Nursing Program is accredited by the Accreditation Commission for Education in Nursing, Inc. (ACEN, 3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326, telephone: 404-975-5000, website: [www.acenursing.org](http://www.acenursing.org)) and approved by the Ohio Board of Nursing.

## The Program – Transfer Pathway – RN to BSN from MTC to OSUM

Marion Technical College offers over 65 credit hours that will transfer into The Ohio State University's RN to BSN degree program. This plan gives Registered Nurses a more affordable option in obtaining a Bachelor of Science Degree with the luxury of being able to stay in Marion. The Associate of Science curriculum (nursing transfer pathway) toward the BSN can be accomplished while waiting to enter the MTC Nursing Program or to fulfill full time requirements while in the MTC Nursing Program or upon completion of the MTC Nursing Program.

### Required Nursing Courses:

Students admitted to the RN to BSN option must complete a series of core nursing courses. All courses have a didactic component that can be accessed online through the university's course management system. Two of the required courses have a clinical component which can be completed near the student's home. In addition, students must take a minimum of one professional elective (three credit hours) to complete the nursing requirements. This course can be taken any time prior to graduation.

A minimum of 4 required prerequisites with a grade of C- or better must be completed by the end of spring semester prior to admission. A minimum of 30 credit hours must be taken at The Ohio State University at Marion. It is recommended that students interested in this option meet with an OSUM Academic Advisor prior to beginning the BSN curriculum.

### What Will It Take To Succeed?

To be successful, a student must make a personal commitment to attend all classes, work independently between class sessions, and complete all assignments in a timely manner.

### Dual Degree

One pathway to achieve your BSN is to declare a dual degree at Marion Technical College. The dual degree would be an Associate of Applied Science in Nursing and an Associate of Science. An advantage of the dual degree would be that you could take additional courses that are transferrable to the Bachelor of Science in Nursing.



### Application Process (Limited Enrollment)

Admission to the LPN/Advanced Standing Transition Program is in accordance with current Nursing policies. Applicants must submit a completed LPN/Advanced Standing to RN Transition Program application after the following items are received by MTC. The **Application deadline is October 31** each year. The LPN/Advanced Standing Transition Program begins spring semester (January).

1. Final high school transcript (or GED results).
2. Completed MTC Application for Admission (including nonrefundable application fee).
3. Official grade report for ATI, RN Fundamentals of Nursing Assessment of Level 1 or higher.
4. Official grade report for ATI, RN Maternal-Newborn Nursing Assessment of Level 1 or higher.
5. Official grade report for ATI, Nursing Care of Children Assessment of Level 1 or higher.
6. Validation of current Ohio LPN or paramedic license without restrictions.
7. Official college and/or LPN school transcripts.
8. Military paramedic applicants are required to provide a copy of DD214 and military transcripts with proper designation for medic, corpsmen, or health care specialty while serving. Courses must have been taken within 5 years of application to the Nursing program.
9. A 2.5 accumulative GPA is the minimum for acceptance and 2.0 accumulative GPA for continuation in Nursing program.
10. All students will be required to successfully complete a criminal background check and drug screen prior to admission into NUR1040.

### Degree Received: Associate of Applied Science in Nursing (RN)

LPN, Paramedics, and Military Medics must complete the Nursing (RN) Technology Program within five (5) years of passing the most recent successful Fundamentals ATI Exam. Graduates of this program are then eligible to take the licensing examination of the National Council of State Boards of Nursing to become a Registered Nurse (RN). For additional accreditation information visit our website at [www.mtc.edu](http://www.mtc.edu)

### The Program – Nursing LPN/Advanced Standing to RN Transition

Prepare men and women for challenging and rewarding careers as Registered Nurses who assist in the overall planning and providing of nursing care for patients and their families, as well as educating patients in health maintenance and restoration.

### Credit for LPN/Advanced Standing Paramedic and Military Training

Upon application, students will receive credit for transition courses after successful completion of ATI. Students in the Advanced Standing to RN Option will take a transition advanced course to bridge the gap between knowledge gained from previous experience, skills, and abilities to the learning outcomes of Marion technical College Nursing Program.

### End of Program Student Learning Outcomes

Provider of Care:

- Applies the nursing process to provide care for select populations.

Communicator:

- Selects therapeutic communication techniques with assigned populations.

Teacher:

- Implements individualized teaching plans for select populations.

Manager:

- Individualizes nursing care activities in prescribed timeframe, in collaboration with instructor and agency staff.

Member within the Profession of Nursing:

- Evaluates effectiveness of behaviors that demonstrate accountability in nursing practice.

### Nursing Program Mission Statement

Prepare students to be professional, caring Registered Nurses who promote optimal levels of wellness for individuals, families, and communities.

### LPN/Advanced Standing Transition Course

LPN/Advanced Standing Transition (NUR1040) is offered spring semester, contingent upon enrollment, space, and instructor availability. Students should register for NUR1040 only after:

- All admission requirements are met.
- Acceptance into nursing, including written response from student.
- Prerequisites are completed for NUR1040 and other current courses.
- Attendance at an LPN/Advanced Standing Transition Information Session is verified.

Upon successful completion of ATI, RN Fundamentals of Nursing Assessment of Level 1 or higher, ATI, RN Maternal-Newborn Nursing Assessment of Level 1 or higher, and ATI Nursing Care of Children Assessment of Level 1 or higher credit will be given for the following courses (ATI tests limited to 3 attempts each):

- NUR 1003 Nurse Aide Training
- NUR 1011 Foundations of Adult Nursing Care I
- NUR 1004 Nursing Test Success
- NUR 1021 Foundations of Adult Nursing Care II
- NUR 1032 Nursing Care of Women and Children

## Dual Degree

One pathway to achieve the BSN is to declare a dual degree at Marion Technical College. The dual degree would be an Associate of Applied Science in Nursing and an Associate of Science. An advantage of the dual degree would be that the MTC student can take additional courses that are transferrable to the BSN.

## Articulation

Marion Technical College has articulation agreements in which graduates from the ADN program can seamlessly transfer into BSN (Bachelor of Science in Nursing).

## To Learn More Visit:

[www.mtc.edu](http://www.mtc.edu)

## Accreditation

The MTC Nursing Program is accredited by the Accreditation Commission for Education in Nursing, Inc. (ACEN) and approved by the Ohio Board of Nursing.

ACEN Telephone: 404.975.5000.

ACEN Website: [www.acenursing.org](http://www.acenursing.org)

ACEN Address: 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326

The MTC Nursing Program is also approved by the Ohio Board of Nursing  
[www.nursing.ohio.gov](http://www.nursing.ohio.gov)

*\* For the current curriculum and approved electives, please view the Nursing RN Fact Sheet.*

**Note:** Nursing is a regulated profession. The training, licensure, and practice of nursing are subject to federal and state statutes, rules, and regulations. In addition, each hospital may have rules or policies. A student's eligibility for admission or continuation in MTC's Nursing program is subject to the requirements of, and compliance with, all applicable statutes, rules, regulations, or policies (including a physical exam). Prior to or during acceptance into the nursing program, training, licensure, or employment as a nurse, each individual will be subject to a background check including, but not limited to, an analysis of fingerprints and review of prior criminal records. The submission of any false information to MTC or any federal/state agency shall be cause for immediate dismissal from the Nursing program. The Ohio Board of Nursing may deny admission to the National Council Licensing Examination-Registered Nurse (NCLEX-RN) based on review by the Ohio Board of Nursing Compliance Unit.

## INFORMATION TECHNOLOGIES

### **Debbie C. Stark**

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Director of Business & Information Technology / Assistant  
Professor  
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## **Associate of Applied Business Degrees**

Computer Information Technology

- Software Development
- Networking Major
- Database Administration Option

## **Certificates**

Database Administration  
Networking  
Administration Certificate  
Software Development  
Web Development

## **COOPERATIVE EDUCATION**

Marion Technical College believes that maximum benefit is derived from integrating cooperative education (workplace) experiences into academic programs. Securing Co-op employment that is related to the student's academic program is an ideal method for bringing classroom and lab experiences "to life." Information Technologies programs at MTC include a co-op experience.

The Co-op program was established based upon need for graduates to have practical application experience in the work environment as identified through assessment of advisory committees. These committees are comprised of area and regional employers whose input helps shape MTC's program and course development.

### Application Process

MTC Application for Admission and nonrefundable applicable fee.

1. Final high school transcript (or GED results) and college transcripts (if applicable).
2. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### Career Opportunities

Risk Management Security Analyst  
Risk Specialist  
Security Engineer Specialist  
Cyber Security Engineer  
Technical Specialist Server Administrator 2

Check out more careers choices at Career Coach

<https://mtc.emsicc.com/>

### For More Information, Contact:

Admission Office  
Marion Technical College  
1467 Mt Vernon Avenue  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636

### The Program – Computer Information Technology – Cyber Security

Design, build, and maintain security policies and standards related to information security with concentration on the three tenets of Cyber Security including confidentiality, integrity, and availability of assets in use by people, corporations, and government.

### Students in the Cyber Security program will learn to...

- Create a security framework based on current regulations.
- Install and configure various operating systems and harden these systems against cyber-attacks.
- Recognize various types of risks, threats, and vulnerabilities in various environments through the use of labs and classroom exercises.
- Professionally create business impact analyses statements, business continuity plans and disaster recovery plans.
- Troubleshoot hardware, operating systems, and network communications problems.
- Prepare for CompTIA Security +, Network +, and A+ certification exams.

### Degree Received Associate of Applied Science

Two-year full-time degree schedule; mixture of core software applications, networking classes, and security training including extensive hands-on experience in the classroom environment. Training also includes project management, ethics, and communications; program can be completed on a part-time basis.



**COMPUTER INFORMATION TECHNOLOGY**

**• CYBER SECURITY •**

**Associate of Applied Science Degree**

**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			(30-35 CrHr)	Applied Gen Ed (Basic)	Gen Ed (15 CrHr)			
<b>FIRST SEMESTER (Fall)</b>								
CIT1351	IT Essentials/A+	3	3			[CTIT003 & CITIT004]	FA, SP	Placement requirements or OIS1200
CIT1370	Computer Security Fundamentals	3			3		FA, SP	OIS1240 must be taken before or concurrently with this course.
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
CIT1100	Introduction to Programming Concepts with Python	3			3		FA	Placement requirements or OIS1200 or OIS1240
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
<b>SECOND SEMESTER (Spring)</b>								
CIT1810	Cyber Law & Ethics	3			3		SP	CIT1370, OIS1240
CIT1410	Network Structure	3	3				FA,SP	None
CIT1610	Networking Fundamentals/Cisco I	3	3			[CTIT007]	FA	Placement requirements or OIS1200.
CIT2200	Supporting a Microsoft Server OS/MCSE II	3	3			[CTIT013]	SP	CIT1351
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
<b>THIRD SEMESTER (Summer)</b>								
HSS2020	Ethnic & Cultural Diversity	3		3		[TMSBS] [OSS024]	ALL	Placement requirements or ENG0970
CIT2110	Operating Systems	3	3				SU	CIT1351
<b>FOURTH SEMESTER (Fall)</b>								
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
BUS2800	Cooperative Education Preparation	1			1		FA, SP	ENG1000 and 16 credits
CIT2621	Routing/Switching Essentials CISCO II	3	3			[CTIT008]	FA	CIT1100
CIT2710	Digital Forensics	3	3				FA	CIT1351, CIT1810
MGT2510	Project Management	3			3		FA	OIS1240
<b>FIFTH SEMESTER (Spring)</b>								
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
CIT2641*	Connecting Networks/Cisco IV	3	3			[CTIT010]	SP	CIT2631 can be taken before or concurrently with this course.
CIT2755	Cyber Security Capstone – Cyber Ops	3	3				SP	CIT1810 and CIT2110. CIT2631 can be taken before or concurrently with this course.
CIT2631*	Scaling Networks CISCO III	3	3			[CTIT009]	FA, SP	CIT2621.
BUS2901	Cooperative Education Experience	1	1				ALL	BUS2800
<b>Credit Hour Total</b>			<b>62</b>					
			31	15	16			
				62				

\* This course is only offered in an 8-week half session format.

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. High school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) or ACT and Technology Skills Test (TST) is required. Or, students may complete college foundation courses.

### Degree Received

This is not an MTC degree or certificate. It is suggested courses that will prepare students for specific "**External**" **Certification**.

### Career Opportunities

Help Desk Specialists  
Network Administrators  
Computer Technicians  
Network Specialists  
Technical Sales  
Technology Coordinators

Check out more career choices  
at Career Coach  
<https://mtc.emsicc.com/>

### For More Information, Contact:

Admission Office  
Marion Technical College  
1467 Mt Vernon Avenue  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636

### Information Technology Preparation for External Certification

Industry-recognized information technology certifications are an important way of documenting the achievement of hardware and/or software skills. Certifications are externally constructed tests – many with worldwide standing – that are often used in initial hiring and in-house promotion procedures. These certifications often require continued professional training and testing.

MTC offers courses to help prepare students to take certain certification exams. Listed below are blocks of courses associated with various certification exams. Students completing these courses will be awarded corresponding college credit, which may be applied toward a Computer Information Technology associate degree program. MTC also operates a testing center to facilitate completion of a variety of exams. Courses offered in the Information Technologies department prepare students to take exams for the following external certifications:

- Microsoft® Certified Solutions Associate (MCSA)
- CompTIA A+
- Cisco® Certified Entry Level Technician (CCENT)
- Cisco® Certified Network Associate Routing and Switching (CCNA)
- Certified Fiber Optic Technician (CFOT®)
- Certified Premise Cabling Technician (CPCT)

## External Certification Preparation

Course ID	Course Title	Cr Hrs	Term	Course Requirements
<b><u>Microsoft® Certified Professional [MCP]</u></b>				
CIT 2200	Supporting a Microsoft Server	3	SP	CIT1351
<b><u>Microsoft® Certified Solutions Associate [MCSA]</u></b>				
CIT 2200	Supporting a Microsoft Server	3	SP	CIT1351
CIT 2251	Administering Windows Server	3	FA	CIT2200
CIT 2301	Configuring Advanced Windows Server Services	3	SP	CIT2251
<b><u>CompTIA® A+</u></b>				
CIT 1351	IT Essentials/A+	3	FA, SP	Placement requirements or OIS1200
<b><u>Cisco® Networking Certificate [CCENT]</u></b>				
CIT 1100	Networking Fundamentals/Cisco I	3	SP	Placement requirements or OIS1200
CIT 2621	Routing and Switching Essentials/Cisco II	3	FA	CIT1100
<b><u>Cisco® Networking Certificate [CCNA ROUTING AND SWITCHING]</u></b>				
CIT 2631	Scaling Networks/Cisco III	3	SP	CIT2621 must be taken before or concurrently with this course.
CIT 2641	Connecting Networks/Cisco IV	3	SP	CIT2631
<b><u>FOA® Fiber Optic Certification [CFOT®]</u></b>				
CIT 1410	Network Structure	3	FA, SP	None
<b><u>FOA® Premise Cabling Technician Certification [CPCT®]</u></b>				
CIT 1410	Network Structure	3	FA, SP	None

**Computer Information Technology - Networking Certificate**  
**One-Year Technical Certificate**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			(30-35 CrHr)	Applied Gen Ed (Basic)	Gen Ed (15 CrHr)			
<b>FIRST SEMESTER (Fall)</b>								
CIT1351	IT Essentials/A+	3	3			[CTIT003 & CITIT004]	FA, SP	Placement requirements or OIS1200
CIT1100	Introduction to Programming Concepts with Python	3		3			FA	Placement requirements or OIS1200 or OIS1240
OIS1240	Computer Applications	3		3		[OBU003]	ALL	Placement requirements or OIS1200
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
CIT1370	Computer Security Fundamentals	3		3			FA, SP	OIS1240 must be taken before or concurrently with this course.
<b>SECOND SEMESTER (Spring)</b>								
CIT1810	Cyber Law & Ethics	3		3			SP	CIT1370, OIS1240
CIT1410	Network Structure	3		3			FA,SP	None
CIT1100	Introduction to Programming Concepts with Python	3	3				FA	Placement requirements or OIS1200 or OIS1240
CIT2200	Supporting a Microsoft Server OS/MCSE II	3	3			[CTIT013]	SP	CIT1351
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
<b>Credit Hour Total</b>			<b>30</b>	<b>9</b>	<b>6</b>	<b>15</b>		
				<b>30</b>				

Occupational Certification Opportunity:  
CompTIA A+

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### Career Opportunities

Computer Technician  
Help Desk  
Network Administrator  
Network Technician  
Systems Administrator  
Technical Support

Check out more career choices  
at Career Coach  
<https://mtc.emsicc.com/>

### For More Information, Contact:

Admission Office  
Marion Technical College  
1467 Mt Vernon Avenue  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636

### The Program – Computer Information Technology – Networking

Design, build, and maintain computer systems and networks based on industry-recognized standards and practices; learn to use, configure, and maintain routers, switches, servers, and other interconnectivity components to provide secure electronic communications.

### Students in the Networking program will learn to...

- Successfully configure a small- to mid-size network.
- Install and configure network and workstation operating systems.
- Secure network communications and resources.
- Configure physical network infrastructure.
- Troubleshoot hardware, operating systems, and network communications problems.
- Prepare for CompTIA, Microsoft® and Cisco® certification exams.

### Degree Received Associate of Applied Science

Two-year full-time degree schedule; mixture of core software applications and networking classes incorporating **Microsoft®** and **Cisco® Systems** includes business, communications, and management skills; program can be completed on a part-time basis.

**COMPUTER INFORMATION TECHNOLOGY**  
**• NETWORKING OPTION •**  
**Associate of Applied Science Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			(30-35 CrHr)	Gen Ed (15 CrHr)	Applied Gen Ed (Basic) (15 CrHr)			
<b>FIRST SEMESTER (Fall)</b>								
CIT1351	IT Essentials/A+	3	3			[CTIT003 & CITIT004]	FA, SP	Placement requirements or OIS1200
CIT1370	Computer Security Fundamentals	3			3		FA, SP	OIS1240 must be taken before or concurrently with this course.
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
CIT1100	Introduction to Programming Concepts with Python	3			3		FA	Placement requirements or OIS1200 or OIS1240
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
<b>SECOND SEMESTER (Spring)</b>								
CIT1810	Cyber Law & Ethics	3			3		SP	CIT1370, OIS1240
CIT1410	Network Structure	3	3				FA, SP	None
CIT1100	Introduction to Programming Concepts with Python	3	3				FA	Placement requirements or OIS1200 or OIS1240
CIT2200	Supporting a Microsoft Server OS/MCSE II	3	3			[CTIT013]	SP	CIT1351
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
<b>THIRD SEMESTER (Summer)</b>								
HSS2020	Ethnic & Cultural Diversity	3		3		[TMSBS] [OSS024]	ALL	Placement requirements or ENG0970
CIT2110	Operating Systems	3	3				SU	CIT1351
<b>FOURTH SEMESTER (Fall)</b>								
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
BUS2800	Cooperative Education Preparation	1			1		FA, SP	ENG1000 and 16 credits
CIT2621	Routing/Switching Essentials CISCO II	3	3			[CTIT008]	FA	CIT1100
CIT2251	Administering Windows Server	3	3				FA	CIT2200
MGT2510	Project Management	3			3		FA	OIS1240
<b>FIFTH SEMESTER (Spring)</b>								
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
CIT2641*	Connecting Networks/Cisco IV	3	3			[CTIT010]	SP	CIT2631 can be taken before or concurrently with this course.
CIT2631*	Scaling Networks CISCO III	3	3			[CTIT009]	FA, SP	CIT2621.
CIT2301	Configuring Advanced Windows Server Services	3	3				SP	CIT2251
BUS2901	Cooperative Education Experience	1	1				ALL	BUS2800
<b>Credit Hour Total</b>			<b>62</b>					
			31	15	16			
				62				

\* This course is only offered in an 8-week half session format.

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### Degree Received Associate of Applied Science

Two-year full-time degree schedule; mixture of core programming and applications classes with business, communications, management, and general studies courses; program can be completed on a part-time basis.

### For More Information, Contact:

Admission Office  
Marion Technical College  
1467 Mt Vernon Avenue  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636

### The Program – Computer Information Technology – Software Development

Learn how to build the computer applications that businesses require to present information to both employees and customers in an easy-to-use manner; acquire application development skills with a strong focus on Microsoft® technology; work with development tools to create programs that can be used locally, on a computer network, and accessed via the Internet; learn basic database design techniques. See your academic advisor to confirm the schedule.

### Students in the Software Development program will learn to...

- Build software applications using C# and other current development languages.
- Develop Microsoft® Windows applications that utilize standard Windows controls, database access, and error handling.
- Create ASP web applications that allow users to create, retrieve, update, and delete data stored in a database.
- Design and implement a database (including triggers, stored procedures, and views) using Microsoft® SQL Server.
- Communicate professionally with co-workers, managers, end-users, and customers.
- Analyze and prepare design specifications for information systems.

### Career Opportunities

Consultant  
Programmer  
Systems Development  
Technical Support  
Information Systems Manager  
Software Developer  
Systems Analyst  
Web Developer

Check out more career choices at Career Coach. <https://mtc.emsicc.com/>

**COMPUTER INFORMATION TECHNOLOGY  
SOFTWARE DEVELOPMENT**  
**Associate of Applied Science Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			(30-35 CrHr)	Applied Gen Ed (Basic) (15 CrHr)	Gen Ed (15 CrHr)			
<b>FIRST SEMESTER (Fall)</b>								
CIT1351	IT Essentials/A+	3	3			[CTIT003 & CITIT004]	FA, SP	Placement requirements or OIS1200
CIT1100	Introduction to Programming Concepts with Python	3	3				FA	Placement requirements or OIS1200 or OIS1240
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
CIT1370	Computer Security Fundamentals	3			3		FA, SP	OIS1240 must be taken before or concurrently with this course.
<b>SECOND SEMESTER (Spring)</b>								
CIT1810	Cyber Law & Ethics	3			3		SP	CIT1370, OIS1240
CIT1701	Introduction to Logic and Visual Programming	3	3			[CTIT012]	FA, SP	CIT1100
ACC1400	Financial Accounting	4			4	[OBU010]	FA, SP	Placement requirements or MTH0910; and OIS1200
CIT1756	Intermediate Logic and Visual Programming	3	3				SP	CIT1701
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
<b>THIRD SEMESTER (Summer)</b>								
HSS2020	Ethnic & Cultural Diversity	3		3		[TMSBS]	ALL	Placement requirements or ENG0970
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
<b>FOURTH SEMESTER (Fall)</b>								
CIT1750	ASP.NET Web Application Development	3	3				FA	CIT1701
BUS2800	Cooperative Education Preparation	1			1		FA, SP	ENG1000 and 16 credits
CIT2551	Java Programming	3	3				FA	CIT1701
OIS1520	Scripting	3	3				FA	OIS1240 must be taken before or concurrently with this course.
MGT2510	Project Management	3			3		FA	OIS1240
<b>FIFTH SEMESTER (Spring)</b>								
BUS2901	Cooperative Education Experience	1	1				ALL	BUS2800
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
CIT2520	Developing Databases/Microsoft SQL Server	3	3				SP	CIT1701
CIT2561	Developing Mobile Apps	3	3				SP	CIT2551
CIT2750	Information Technology Capstone	3	3				SP	CIT2551 or OIS1255; and, OIS1320 or OIS1520
<b>Credit Hour Total</b>			<b>63</b>					
			31	15	17			
				63				



**Computer Information Technology - Software Development Certificate**  
**One-Year Technical Certificate**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			(30-35 CrHr)	Gen Ed (15 CrHr)	Applied Gen Ed (Basic) (15 CrHr)			
<b>FIRST SEMESTER (Fall)</b>								
CIT1351	IT Essentials/A+	3	3			[CTIT003 & CITIT004]	FA, SP	Placement requirements or OIS1200
CIT1100	Introduction to Programming Concepts with Python	3	3				FA	Placement requirements or OIS1200 or OIS1240
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
CIT1370	Computer Security Fundamentals	3			3		FA, SP	OIS1240 must be taken before or concurrently with this course.
<b>SECOND SEMESTER (Spring)</b>								
CIT1810	Cyber Law & Ethics	3			3		SP	CIT1370, OIS1240
CIT1701	Introduction to Logic and Visual Programming	3			3	[CTIT012]	FA, SP	CIT1100
CIT2520	Developing Databases/Microsoft SQL Server	3	3				SP	CIT1701
CIT1756	Intermediate Logic and Visual Programming	3	3				SP	CIT1701
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
<b>Credit Hour Total</b>			<b>30</b>	<b>12</b>	<b>6</b>	<b>12</b>		
				<b>30</b>				

**Occupational Certification Opportunity:**

CompTIA A+

**Computer Information Technology - Web Development Certificate**  
**One-Year Technical Certificate**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			(30-35 CrHr)	Gen Ed (15 CrHr)	Applied Gen Ed (Basic) (15 CrHr)			
<b>FIRST SEMESTER (Fall)</b>								
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
OIS1520	Scripting	3	3				FA	OIS1240 must be taken before or concurrently with this course.
CIT1100	Introduction to Programming Concepts with Python	3	3				FA	Placement requirements or OIS1200 or OIS1240
OIS2011	Video & Photography Technologies	3	3				FA	OIS1240 must be taken before or concurrently with this course.
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
<b>SECOND SEMESTER (Spring)</b>								
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
OIS1500	Web Page Authoring I	3	3				SP	OIS1240
OIS1620	Digital Image Manipulation	3	3				SP	OIS1240 must be taken before or concurrently with this course.
CIT1701	Introduction to Logic and Visual Programming	3	3			[CTIT012]	FA, SP	CIT1100
MKT2030	Principles of Marketing	3	3			[OBU006]	FA, SP	OIS1240 and ECN2000 must be taken before or concurrently with this course.
<b>Credit Hour Total</b>			<b>30</b>	<b>21</b>	<b>6</b>	<b>3</b>		

Occupational Certification Opportunities:  
Adobe Certified Associate - Photoshop

## **PUBLIC SERVICE TECHNOLOGIES**

### **Debbie C. Stark**

Dean of Technical and Professional Programs  
740.386.4165 – [starkd@mtc.edu](mailto:starkd@mtc.edu)

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Administrative Assistant  
740.725.4014 – [martint@mtc.edu](mailto:martint@mtc.edu)

### **Vicki Weaver**

Administrative Assistant  
740.386.4115 – [weaverv@mtc.edu](mailto:weaverv@mtc.edu)

### **Greg Perry, Esq.**

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## **Associate of Applied Science Degrees**

Criminal Justice

- Probation Officer Option

## **Associate of Technical Study Degrees**

Law Enforcement

## **Certificates**

Law Enforcement

## **INTERNSHIPS**

The Criminal Justice Program is a structured learning experience in which students take what they have learned in the classroom and apply it during an on-the-job learning experience at a law enforcement agency, all while earning college credit. The internship experience is jointly supervised by a member of the MTC faculty and a designated person at the law enforcement agency. Students must complete 150 hours at the job site, and submit interim reports on a bi-weekly basis. They are also evaluated by the law enforcement agency on their job performance focusing on several critical skills.

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### Career Opportunities:

Case Manager  
Chemical Dependency Counselor Assistant  
Human Services Employee  
Rehabilitation Specialist

### Under the new Medicaid Re-design these employment areas may be an option:

Peer Recovery Supporter  
Care Management Specialist  
Recovery Coach

### For More Information, Contact:

Admission Office  
Marion Technical College  
1467 Mt Vernon Ave  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636

### The Certificate –Addiction Studies Certification

Assess client needs; plan and implement direct and indirect services for individuals and families; make referrals and enable linkage to social service agencies; advocate for client rights and services; and provide case management within the context of a multidisciplinary team. Graduates will be able to complete state requirements for CDCA and work directly with clients in treatment, recovery and as part of the support team.

Graduates who have successfully completed the Certificate of Addiction Studies will be able to apply to the Ohio Chemical Dependency Board for the Chemical Dependency Counselor Assistant (CDCA) certification.

### What am I expected to learn?

- Demonstrate knowledge of counseling and interviewing strategies which includes the use of active listening skills.
- Demonstrate an understanding of ethnic and cultural diversity.
- Display fundamental knowledge of addictions and the ethical guidelines that are a part of working in the field of dependency treatment.
- Demonstrate professional behavior in accordance with best treatment practices.
- Demonstrate knowledge of psychopathology, case management, community resources, addictions theories, and family systems.
- Demonstrate knowledge of the development of addictions.
- Demonstrate knowledge of case management and service coordination in prevention, treatment and the referral process in addictions.
- Describe various substances, their classification and long term effects.

### Addiction Studies Option

If you are interested in working within the growing field of Addiction Studies this may be the program for you. All of the courses in the Certificate of Addiction Studies can be transferred into the Associate of Applied Science, Addiction Option. This AAS will allow you to apply for the **CDCA Phase I & Phase II**, and the **LCDC II**, through the **Ohio Chemical Dependency Professionals Board**. The requirements for the **LCDC II** includes an Associate's degree and 2000 work hours of experience in the field of substance use disorders or addictions in order to complete the license. This work experience can be obtained after graduation in the workplace.

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

**Addiction Studies Certificate**  
**One-Year Technical Certificate**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Applied Gen Ed (Basic)	Gen Ed			
<b>FIRST SEMESTER (Fall)</b>								
HSS1000	Introduction to Addiction Studies	3		3			FA	Placement requirements or ENG0970. HSS and CRJ majors only or Dept Approval.
HSS2640	Chemical Dependency: Intro Pharmacology	3	3				FA	HSS1000
HSS2010	Introduction to Counseling	3	3				FA	HSS1030
HSS2030	Introduction to Case Management	3	3				FA	HSS1040
HSS1030	Interviewing Techniques	3	3				FA	Placement requirements or ENG0970. HSS majors only and Dept Approval.
<b>SECOND SEMESTER (Spring)</b>								
HSS2660	Chemical Dependency, Etiology, Assessment, & Diagnosis	3	3				FA, SP	Dept Approval
ENG1000	English Composition I	3			3	[TME001]	ALL	Placement requirements or ENG0991
PSY1100	General Psychology	3			3	[TMSBS] [OSS015]	ALL	None
HSS2020	Ethnic & Cultural Diversity	3			3	[TMSBS] [OSS024]	ALL	Placement requirements or ENG0970
<b>THIRD SEMESTER (Summer)</b>								
HSS2630	Chemical Dependency: Ethics	3	3				SU	None
<b>Credit Hour Total</b>			<b>30</b>	18	9	3		
				30				

**Occupational Certification Opportunities:**

Ohio Chemical Dependency Professionals Board - Meets the educational requirements for:  
 CDCA Phase I & II (Chemical Dependency Counselor Assistant, Phase I & II)  
 LCDC II (Licensed Chemical Dependency Counselor II)

### Application Process

1. MTC Application for Admission and nonrefundable application fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the American College Test (ACT) with a minimum composite score of 15.
4. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### Career Opportunities

Case Manager  
Chemical Dependency Counselor Assistant  
Family Services Advocate  
Human Services Employee  
Mental Health Technician  
Social Worker Assistant  
Rehabilitation Specialist

### Degree Received

#### Associate of Applied Science

Two-year (four semesters) full-time degree schedule; mixture of core social work, psychology, and human services classes, combined with interviewing, substance abuse, counseling, and case management coursework; two "practicum" field placements provide opportunities to apply classroom learning to real work settings within the professional social service community; the program can be completed on a part-time basis.

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

### The Program – Human and Social Services – Addiction Studies

Assess client needs; plan and implement direct and indirect services for individuals and families; make referrals and enable linkage to social service agencies; advocate for client rights and services; and provide case management within the context of a multidisciplinary team. Graduates work directly with clients in treatment, recovery and as part of the support team.

Graduates who have successfully completed the program are eligible to take the exam for the **Social Work Assistant (SWA)** via the **Ohio Counselor, Social Worker, and Marriage and Family Therapist Board (CSWMFT)**. The Addiction Studies Option graduates have also completed all of the education requirements for the **CDCA Phase I & Phase II**, as well as the **LCDC II**.

### What am I expected to learn?

- Demonstrate knowledge of counseling and interviewing strategies which includes the use of active listening skills.
- Demonstrate an understanding of ethnic and cultural diversity.
- Display fundamental knowledge of social work theory and values, ethical guidelines, and legal regulations in both social work and addiction fields.
- Demonstrate professional behavior in accordance with social work practices.
- Demonstrate knowledge of psychopathology, case management, community resources, addictions theories, and family systems.
- Demonstrate knowledge of substance use or the development of addictions.
- Demonstrate knowledge of case management and service coordination in prevention, treatment and the referral process in addictions.
- Describe various substances, their classification and long term effects.

### Addiction Studies Option

If you are interested in working within the growing field of Addiction Studies this may be the program for you. Along with the Associate of Applied Science degree (AAS) in Human and Social Services, you will receive a Certificate of Addiction Studies. As stated above, this will allow you to apply for the **CDCA Phase I & Phase II**, and the **LCDC II**, through the **Ohio Chemical Dependency Professionals Board**. The requirements for the **LCDC II** includes 2000 work hours of experience in the field of substance use disorders or addictions in order to complete the license. This can be obtained after graduation in the workplace.

### For More Information, Contact:

Admission Office  
Marion Technical College  
1467 Mt Vernon Ave  
Marion, OH 43302  
Email: [enroll@mtc.edu](mailto:enroll@mtc.edu)  
740.389.4636

**HUMAN & SOCIAL SERVICES**  
**● ADDICTION STUDIES OPTION ●**  
**Associate of Applied Science Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>								
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
HSS1010	Introduction to Social Welfare	3	3			[OSS030]	FA	Placement requirements or ENG0970. HSS and CJ majors only or Dept Approval.
HSS1000	Introduction to Addiction Studies	3			3		FA	Placement requirements or ENG0970. HSS and CRJ majors only or Dept Approval.
HSS1030	Interviewing Techniques	3	3				FA	Placement requirements or ENG0970. HSS majors only and Dept Approval.
<b>SECOND SEMESTER (Spring)</b>								
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
HSS1040	Introduction to Social Work	3	3			[OSS029]	SP	Placement requirements or ENG0970. HSS majors only and Dept Approval.
HSS1050	Family Development	3	3				SP	HSS1010
HSS1060	Abnormal Psychology	3			3	[TMSBS] [OSS017]	FA, SP	Placement requirements or ENG0970; and PSY1100
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
	<i>OR</i>							
MTH1240	Statistics						ALL	Placement requirements or MTH0910.
<b>THIRD SEMESTER (Summer)</b>								
HSS2020	Ethnic & Cultural Diversity	3		3		[TMSBS] [OSS024]	ALL	Placement requirements or ENG0970
HSS2630	Chemical Dependency: Ethics	3	3				SU	None
<b>FOURTH SEMESTER (Fall)</b>								
HSS2010	Introduction to Counseling	3	3				FA	HSS1030
HSS2030	Introduction to Case Management	3	3				FA	HSS1040
HSS2640	Chemical Dependency: Intro Pharmacology	3	3				FA	HSS1000
PSY2100	Human Growth & Development	3		3		[TMSBS] [OSS048]	ALL	PSY1100
HSS2040	Human Services-Practicum I	4	4				FA	HSS1040 and HSS1060
<b>FIFTH SEMESTER (Spring)</b>								
HSS2050	Human Services-Practicum II	4	4				SP	HSS2040 and Dept Approval
HSS2660	Chemical Dependency, Etiology, Assessment, & Diagnosis	3	3				FA, SP	Dept Approval
SOC1200	Sociology	3		3		[TMSBS] [OSS021]	ALL	None
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
<b>Credit Hour Total</b>			<b>65</b>	35	21	9		

Courses approved for HSS Electives: HSS2610 Crisis Intervention, 3 credits; HSS2620 Aging, 3 credits; HSS2640 CD: Intro to Pharmacology, 3 credits; HSS2650 Juvenile Delinquency, 3 credits; HSS2660 CD: Etiology, Assessment, Diagnosis and Treatment Modalities, 3 credits; HSS2630 CD: Ethics, 3 credit; HSS2680 Orientation to Deafness, 3 credits; NUR1150 CPR & First Aid, 1 credit; NUR1170 Dealing with Loss, 2 credits; NUR1000 Nurse Aid Training (STNA), 4 credits; CRJ1600 Intro to Corrections, 3 credits.

**Application Process**

In addition to general college admission, the peace officer basic training academy requires individuals to meet specialized admission criteria such as a physical examination and background investigation.

**Ohio Peace Officer Basic Training Program Physical Fitness Standards**

Eligibility to sit for the state certification exam includes the successful completion of a physical fitness assessment. Individuals must meet the following physical assessment exit standards:

**(Age and Gender Minimum Scores)**

Gender	Age	Sit-Ups (1 min.)	Push-Ups (1 min.)	1.5 Mile Run
Males	(<-29)	40	33	11:58
Females	(<-29)	35	18	14:07
Males	(30-39)	36	27	12:25
Females	(30-39)	27	14	114:34
Males	(40-49)	31	21	13:11
Females	(40-49)	22	11	15:24
Males	(50-59)	26	15	14:16
Females	(50-59)	17	13	17:13
Males	(60+)	20	15	15:56
Females	(60+)	8	8	18:52

**Career Opportunities**

Police Officer	Corrections Officer
Court Officer	Private Security Officer
Juvenile Center Manager	Deputy Sheriff
Crime Scene Investigator	Dispatcher
Private Investigator	Jailer
Probation/Parole Officer	Fingerprint Technician
State Highway Patrol Trooper	

Check out more career choices at Career Coach. <https://mtc.emsicc.com/>

**Degree Received  
Associate of Technical Studies (A.T.S.)**

Two-year full-time degree schedule; mixture of core criminology/forensic science courses and studies in communications, information technology, and broad-based general education classes; includes field experience internship(s); program can be completed on a part-time basis.

**To Learn More Visit**  
[www.mtc.edu](http://www.mtc.edu)

**The Program – Law Enforcement Associate of Technical Studies Degree**

The Law Enforcement Associate of Technical Studies degree includes courses that are required to become employed as a peace officer in Ohio. An individual must successfully complete the state-mandated training and pass the certification examination sponsored by the Ohio Peace Officer Training Academy (OPOTA).

Marion Technical College offers the state mandated curriculum to become a certified peace officer in Ohio. The courses are offered Monday through Friday evenings and occasionally on the weekend. Upon successful completion of all academy requirements, students will be eligible to take the OPOTC exam.

Students who want to earn an Associate of Applied Science in Criminal Justice degree may apply a portion of the peace officer basic training credits toward the degree.

**Students in the ATS-Law Enforcement program will learn to...**

- Demonstrate an understanding of basic law enforcement skills, criminal justice techniques, and problem solving methodologies.
- Describe and apply current laws (federal, state, & municipal) to various situations involving crimes and/or civil offenses.
- Apply learned information, concepts, and theories to successfully investigate crime/accident scenes, conduct interviews and interrogations, provide reports and courtroom testimony as needed, and interface with appropriate law enforcement professionals and/or agencies.
- Demonstrate the safe and effective use of firearms, unarmed self-defense methods, and first aid.

In order to become employed as a peace officer in Ohio, an individual must successfully complete the state-mandated training and pass the certification examination sponsored by the Ohio Peace Officer Training Academy (OPOTA); students complete specialized training to work as an Ohio Peace Officer.

**For More Information, Contact:**

Admission Office  
Marion Technical College  
1467 Mt Vernon Avenue  
Marion, OH 43302  
Email: [enroll@mtc.edu](mailto:enroll@mtc.edu)  
740.389.4636



**LAW ENFORCEMENT**  
**Associate of Technical Studies Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>								
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
HSS2020	Ethnic & Cultural Diversity	3		3		[TMSBS] [OSS024]	ALL	Placement requirements or ENG0970
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
<b>SECOND SEMESTER (Spring)</b>								
CRJ1500	Criminology	3	3			[OSS034]	SP	None
CIT1050	Computer Crime for Law Enforcement	3			3		SP	OIS1240
HSS1060	Abnormal Psychology	3		3		[TMSBS] [OSS017]	FA, SP	Placement requirements or ENG0970; and PSY1100
CRJ2110	Administrative Report Writing	3			3		SP	ENG1000
HSS2650	Juvenile Delinquency	3			3		SP	Placement requirements or ENG0970; and CRJ1000.
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
<b>THIRD SEMESTER (Fall)</b>								
CJA2801	Law Enforcement I	5	5				FA	Commander Approval
CJA2802	Law Enforcement II	4	4				FA	Commander Approval
CJA2803	Law Enforcement III (Firearms)	2	2				FA	Commander Approval
CJA2804	Law Enforcement IV	2	2				FA	Commander Approval
<b>FOURTH SEMESTER (Spring)</b>								
CJA2805	Law Enforcement V	2	2				SP	Commander Approval
CJA2806	Law Enforcement VI	6	6				SP	Commander Approval
CJA2807	Law Enforcement VII	6	6				SP	Commander Approval
CJA2808	Law Enforcement VIII	3	3				SP	Commander Approval
<b>Credit Hour Total</b>			<b>63</b>	33	18	12		
				63				

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### Career Opportunities

Police Officer  
Corrections Officer  
Jailer  
Court Officer  
Juvenile Center Manager  
Crime Scene Investigator  
Private Investigator  
Deputy Sheriff  
Private Security Officer  
Dispatcher  
Probation/Parole Officer  
Fingerprint Technician  
State Highway Patrol Trooper

Check out more career choices at Career Coach  
<https://mtc.emsicc.com/>

### Degree Received Associate of Applied Science

Two-year full-time degree schedule; the curriculum is a mixture of criminology and forensic science courses and studies in communications, information technology, and a field experience internship courses; program can be completed on a part-time basis.

### The Program - Criminal Justice

Develop basic skills and instincts for work in law enforcement and corrections; understand the various components of and countermeasures for criminal behavior and activity; apply Ohio law to various situations; integrate technology into law enforcement work.

### Students in the Criminal Justice program will learn to...

- Demonstrate an understanding of basic law enforcement skills, criminal justice techniques, and problem-solving methodologies.
- Describe and apply current laws (federal, state, and municipal) to various situations involving crimes and/or civil offenses.
- Apply learned information, concepts, and theories to successfully investigate crime/accident scenes.
- Demonstrate the appropriate use of first aid, especially first aid that may be required of a first responder.
- Develop the skills necessary to successfully conduct interviews and interrogations.
- Use appropriate technology to conduct investigations and to communicate with other agencies having a common interest in law enforcement.
- Demonstrate the effective use of public speaking skills in areas related to criminal justice (oral presentations, suspect interrogations, victim interviews, courtroom testimony, and public relations).
- Use learned forensic skills to process crime scene evidence.
- Develop the skills to successfully analyze drugs and narcotics.

### For More Information, Contact:

Admission Office  
Marion Technical College  
1467 Mt Vernon Avenue  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

**CRIMINAL JUSTICE**  
**Associate of Applied Science Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL		NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
			Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)	Gen Ed	Applied Gen Ed			
<b>FIRST SEMESTER (Fall)</b>									
CRJ1000	Introduction to Criminal Justice	3	3				[OSS031]	FA	None
CRJ1150	Introduction to Private Security	3	3					FA	None
	OR								
CJA0000	Law Enforcement Academy Elective							0	Acceptance into Academy
OIS1240	Computer Applications	3			3		[OBU003]	ALL	Placement requirements or OIS1200
ENG1400	Oral Communications	3		3			[TMCOM] [OCM004]	ALL	None
NUR1150	CPR & First Aid	1	1					ALL	
	or								
CJA0000	Law Enforcement Academy Elective							0	Acceptance into Academy
HSS2020	Ethnic & Cultural Diversity	3		3			[TMSBS] [OSS024]	ALL	Placement requirements or ENG0970
<b>SECOND SEMESTER (Spring)</b>									
CRJ1500	Criminology	3	3				[OSS034]	SP	None
CRJ1600	Introduction to Corrections	3	3				[OSS033]	SP	None
MTH1230	Quantitative Reasoning	3		3				ALL	Placement requirements or MTH0910.
ENG1000	English Composition I	3		3			[TME001]	ALL	Placement requirements or ENG0991
PSY1100	General Psychology	3		3			[TMSBS] [OSS015]	ALL	None
<b>THIRD SEMESTER (Fall)</b>									
CRJ1650	Gangs & Terrorism	3	3					FA	None
CRJ2050	Criminal Investigations	3	3					FA	None
	OR								
CJA0000	Law Enforcement Academy Elective							0	Acceptance into Academy
CRJ2200	Drugs & Narcotics	3	3					FA	CRJ1000 must be taken before or concurrently with this course.
MGT1400	Introduction to Management	3			3			ALL	None
BUS2800	Cooperative Education Preparation	1			1			FA, SP	ENG1000 and 16 credits
<b>FOURTH SEMESTER (Spring)</b>									
CIT1050	Computer Crime for Law Enforcement	3	3					SP	OIS1240
HSS1060	Abnormal Psychology	3		3			[TMSBS] [OSS017]	FA, SP	Placement requirements or ENG0970; and PSY1100
CRJ2150	Criminalistics	3	3					SP	CRJ2050
HSS2650	Juvenile Delinquency	3			3			SP	Placement requirements or ENG0970; and CRJ1000.
CRJ2110	Administrative Report Writing	3			3			SP	ENG1000
CRJ2250	Criminal & Constitutional Law	3	3					SP	None
	OR								
CJA0000	Law Enforcement Academy Elective							0	Acceptance into Academy
CRJ2900	Internship (CRJ)	1	1					SP	BUS2800
	OR								
CJA0000	Law Enforcement Academy Elective							0	Acceptance into Academy
<b>Credit Hour Total</b>			<b>63</b>						
			32	18	13				
			63						

### Application Process

1. MTC Application for Admission and nonrefundable applicable fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### Career Opportunities

Probation/Parole Officer  
Police Officer  
Diversion Officer  
Corrections Officer  
Jailer  
Court Officer  
Juvenile Center Manager  
Crime Scene Investigator  
Private Investigator  
Deputy Sheriff  
Private Security Officer  
Dispatcher  
Fingerprint Technician  
State Highway Patrol Trooper

Check out more career choices at Career Coach

<https://mtc.emsicc.com/>

### Degree Received Associate of Applied Science

Two-year full-time degree schedule; the curriculum is a mixture of criminology and forensic science courses and studies in communications, information technology, and a field experience internship courses; program can be completed on a part-time basis.

### The Program – Criminal Justice – Probation Officer

Develop basic skills and instincts for work in law enforcement and corrections; understand the various components of and countermeasures for criminal behavior and activity; apply Ohio law to various situations; integrate technology into law enforcement work.

### Students in the Criminal Justice – Probation Officer program will learn to...

- Demonstrate an understanding of basic law enforcement skills, criminal justice techniques, and problem solving methodologies.
- Describe and apply current laws (federal, state, and municipal) to various situations involving crimes and/or civil offenses.
- Apply learned information, concepts, and theories to successfully investigate crime/accident scenes.
- Demonstrate the appropriate use of first aid, especially first aid that may be required of a first responder.
- Develop the skills necessary to successfully conduct interviews and interrogations, as well as pre-sentence investigations.
- Use appropriate technology to conduct investigations and to communicate with other agencies having a common interest in law enforcement.
- Demonstrate the effective use of public speaking skills in areas related to criminal justice (oral presentations, suspect interrogations, victim interviews, courtroom testimony, and public relations).
- Understand the roles of various public agencies in the social welfare community and how probation plays an integral role in the criminal justice system.
- Apply learned information, concepts and theories to successfully deal with offenders addicted to controlled substances, including recognizing addiction and making proper referrals for treatment.
- Master evidence-based probation practices.
- Prepare for state certification in the Ohio Risk Assessment System (ORAS).

### For More Information, Contact:

Admission Office  
Marion Technical College  
1467 Mt Vernon Avenue  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

**CRIMINAL JUSTICE**  
**• PROBATION OFFICER OPTION •**  
**Associate of Applied Science Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>								
CRJ1000	Introduction to Criminal Justice	3	3			[OSS031]	FA	None
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
NUR1150	CPR & First Aid	1			1		ALL	None
or CJA0000	Law Enforcement Academy Elective						0	Acceptance into Academy
HSS2020	Ethnic & Cultural Diversity	3		3		[TMSBS] [OSS024]	ALL	Placement requirements or ENG0970
<b>SECOND SEMESTER (Spring)</b>								
CRJ1500	Criminology	3	3			[OSS034]	SP	None
CRJ1600	Introduction to Corrections	3	3			[OSS033]	SP	None
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
CRJ1751	Probation & Parole	3	3				SP	CRJ1000
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
<b>THIRD SEMESTER (Fall)</b>								
CRJ1650	Gangs & Terrorism	3	3				FA	None
CRJ2050	Criminal Investigations	3	3				FA	None
<b>OR</b>								
CJA0000	Law Enforcement Academy Elective						0	Acceptance into Academy
CRJ2200	Drugs & Narcotics	3	3				FA	CRJ1000 must be taken before or concurrently with this course.
HSS1010	Introduction to Social Welfare	3	3			[OSS030]	FA	Placement requirements or ENG0970. HSS and CJ majors only or Dept Approval.
HSS1000	Introduction to Addiction Studies	3	3				FA	Placement requirements or ENG0970. HSS and CRJ majors only or Dept Approval.
BUS2800	Cooperative Education Preparation	1			1		FA, SP	ENG1000 and 16 credits
<b>FOURTH SEMESTER (Spring)</b>								
CIT1050	Computer Crime for Law Enforcement	3	3				SP	OIS1240
HSS1060	Abnormal Psychology	3		3		[TMSBS] [OSS017]	FA, SP	Placement requirements or ENG0970; and PSY1100
HSS2650	Juvenile Delinquency	3			3		SP	Placement requirements or ENG0970; and CRJ1000.
MGT1400	Introduction to Management	3	3				ALL	None
CRJ2900	Internship (CRJ)	1			1		SP	BUS2800
<b>OR</b>								
CJA0000	Law Enforcement Academy Elective						0	Acceptance into Academy
CRJ2110	Administrative Report Writing	3			3		SP	ENG1000
<b>Credit Hour Total</b>			<b>63</b>					
			33	18	12			
			63					

### Application Process

1. MTC Application for Admission and nonrefundable application fee.
2. Final high school transcript (or GED results) and college transcripts (if applicable).
3. Successful completion of the American College Test (ACT) with a minimum composite score of 15.
4. Successful completion of the Basic Skills Assessment (ACCUPLACER) and Technology Skills Test (TST) is required. Any college foundation courses recommended by placement assessment results are also required.

### Career Opportunities

Case Manager  
Chemical Dependency Counselor Assistant  
Family Services Advocate  
Human Services Employee  
Mental Health Technician  
Social Worker Assistant  
Rehabilitation Specialist

### Degree Received Associate of Applied Science

Two-year (four semesters) full-time degree schedule; mixture of core social work, psychology, and human services classes, combined with interviewing, substance abuse, counseling, and case management coursework; two "practicum" field placements provide opportunities to apply classroom learning to real work settings within the professional social service community; the program can be completed on a part-time basis.

### The Program – Human and Social Services

Assess client needs; plan and implement direct and indirect services for individuals and families; make referrals and enable linkage to social service agencies; advocate for client rights and services; and provide case management within the context of a multidisciplinary team.

Graduates who have successfully completed the program are eligible to take the exam for the **Social Work Assistant (SWA)** via the **Ohio Counselor, Social Worker, and Marriage and Family Therapist Board (CSWMFT)**.

### What am I expected to learn?

- Demonstrate knowledge of counseling and interviewing strategies which includes the use of active listening skills.
- Demonstrate an understanding of ethnic and cultural diversity.
- Display fundamental knowledge of social work theory and values, ethical guidelines, and legal regulations.
- Demonstrate professional behavior in accordance with social work practices.
- Demonstrate knowledge of psychopathology, case management, community resources, addictions theories, and family systems.

### Additional Career Track: Certificate in Addiction Studies

And if you're interested in working within the growing field of Addictions Studies providing treatment and recovery programs, community-based programs for adults and juveniles, half-way houses, or other specialty treatment and mental health facilities, MTC's **Addiction Studies Track** provides specialized training. This track consists of the established HSS curriculum plus **HSS 2640 Intro to Pharmacology, HSS2660: Etiology, Diagnosis, Treatment Modalities, and Assessment), HSS2630 Ethics**. These chemical dependency courses also contribute towards becoming a **Chemical Dependency Counselor Assistant (CDCA)**, and or as a **Licensed Chemical Dependency Counselor II (LCDC II) via The Ohio Chemical Dependency Professional Board (OCDP)**. \* Students will need to complete additional work hours after graduation to obtain this credential, as identified via OCDP.

### For More Information, Contact:

Admission Office  
Marion Technical College  
1467 Mt Vernon Ave  
Marion, OH 43302  
Email: enroll@mtc.edu  
740.389.4636

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

**HUMAN & SOCIAL SERVICES**  
**Associate of Applied Science Degree**  
**(Effective Academic Year 2019-20)**

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed (Min 15 CrHr)	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>								
OIS1240	Computer Applications	3			3	[OBU003]	ALL	Placement requirements or OIS1200
PSY1100	General Psychology	3		3		[TMSBS] [OSS015]	ALL	None
HSS1010	Introduction to Social Welfare	3	3			[OSS030]	FA	Placement requirements or ENG0970. HSS and CJ majors only or Dept Approval.
HSS1000	Introduction to Addiction Studies	3			3		FA	Placement requirements or ENG0970. HSS and CRJ majors only or Dept Approval.
HSS1030	Interviewing Techniques	3	3				FA	Placement requirements or ENG0970. HSS majors only and Dept Approval.
<b>SECOND SEMESTER (Spring)</b>								
ENG1000	English Composition I	3		3		[TME001]	ALL	Placement requirements or ENG0991
HSS1040	Introduction to Social Work	3	3			[OSS029]	SP	Placement requirements or ENG0970. HSS majors only and Dept Approval.
HSS1050	Family Development	3	3				SP	HSS1010
HSS1060	Abnormal Psychology	3			3	[TMSBS] [OSS017]	FA, SP	Placement requirements or ENG0970; and PSY1100
MTH1230	Quantitative Reasoning	3		3			ALL	Placement requirements or MTH0910.
	OR							
MTH1240	Statistics						ALL	Placement requirements or MTH0910.
<b>THIRD SEMESTER (Fall)</b>								
HSS2010	Introduction to Counseling	3	3				FA	HSS1030
HSS2030	Introduction to Case Management	3	3				FA	HSS1040
HSS0000	HSS Elective	3	3				0	Course requirements
ENG1100	English Composition II	3		3			ALL	ENG1000
PSY2100	Human Growth & Development	3		3		[TMSBS] [OSS048]	ALL	PSY1100
HSS2040	Human Services-Practicum I	4	4				FA	HSS1040 and HSS1060
<b>FOURTH SEMESTER (Spring)</b>								
HSS2020	Ethnic & Cultural Diversity	3		3		[TMSBS] [OSS024]	ALL	Placement requirements or ENG0970
HSS2050	Human Services-Practicum II	4	4				SP	HSS2040 and Dept Approval
HSS0000	HSS Elective	3	3				0	Course requirements
ENG1400	Oral Communications	3		3		[TMCOM] [OCM004]	ALL	None
SOC1200	Sociology	3		3		[TMSBS] [OSS021]	ALL	None
<b>Credit Hour Total</b>			<b>65</b>	<b>32</b>	<b>24</b>	<b>9</b>		

Courses approved for HSS Electives: HSS2610 Crisis Intervention, 3 credits; HSS2620 Aging, 3 credits; HSS2640 CD: Intro to Pharmacology, 3 credits; HSS2650 Juvenile Delinquency, 3 credits; HSS2660 CD: Etiology, Assessment, Diagnosis and Treatment Modalities, 3 credits; HSS2630 CD: Ethics, 3 credit; HSS2680 Orientation to Deafness, 3 credits; NUR1150 CPR & First Aid, 1 credit; NUR1170 Dealing with Loss, 2 credits; NUR1000 Nurse Aid Training (STNA), 4 credits; CRJ1600 Intro to Corrections, 3 credits.

### Application Process

In addition to general college admission, the peace officer basic training academy requires individuals to meet specialized admission criteria such as a physical examination and background investigation.

### Ohio Peace Officer Basic Training Program Physical Fitness Standards

Eligibility to sit for the state certification exam includes the successful completion of a physical fitness assessment. Individuals must meet the following physical assessment exit standards:

#### (Age and Gender Minimum Scores)

Gender	Age	Sit-Ups (1 min.)	Push-Ups (1 min.)	1.5 Mile Run
Males	(<-29)	40	33	11:58
Females	(<-29)	35	18	14:07
Males	(30-39)	36	27	12:25
Females	(30-39)	27	14	114:34
Males	(40-49)	31	21	13:11
Females	(40-49)	22	11	15:24
Males	(50-59)	26	15	14:16
Females	(50-59)	17	13	17:13
Males	(60+)	20	15	15:56
Females	(60+)	8	8	18:52

### Career Opportunities

Police Officer	Corrections Officer
Court Officer	Private Security Officer
Juvenile Center Manager	Deputy Sheriff
Crime Scene Investigator	Dispatcher
Private Investigator	Jailer
Probation/Parole Officer	Fingerprint Technician
State Highway Patrol Trooper	

Check out more career choices at Career Coach. <https://mtc.emsicc.com/>

### For More Information, Contact:

Admission Office  
 Marion Technical College  
 1467 Mt Vernon Avenue  
 Marion, OH 43302  
 Web: <http://www.mtc.edu/Admission>  
 Email: [enroll@mtc.edu](mailto:enroll@mtc.edu)  
 740.389.4636

### To Learn More Visit

[www.mtc.edu](http://www.mtc.edu)

### The Program – Law Enforcement Certificate

The Law Enforcement Certificate degree includes courses that are required to become employed as a peace officer in Ohio. An individual must successfully complete and pass the certification examination sponsored by the Ohio Peace Officer Training Academy (OPOTA).

Marion Technical College offers the state mandated curriculum to become a certified peace officer in Ohio. The courses are offered Monday through Friday evenings and occasionally on the weekend. Upon successful completion of all academy requirements, students will be eligible to take the OPOTC exam.

Students who want to earn an Associate of Applied Science in Criminal Justice degree may apply a portion of the peace officer basic training credits toward the degree.

### Students in the Law Enforcement Certificate program will learn to...

- Demonstrate an understanding of basic law enforcement skills, criminal justice techniques, and problem solving methodologies.
- Describe and apply current laws (federal, state, & municipal) to various situations involving crimes and/or civil offenses.
- Apply learned information, concepts, and theories to successfully investigate crime/accident scenes, conduct interviews and interrogations, provide reports and courtroom testimony as needed, and interface with appropriate law enforcement professionals and/or agencies.
- Demonstrate the safe and effective use of firearms, unarmed self-defense methods, and first aid.

In order to become employed as a peace officer in Ohio, an individual must successfully complete and pass the certification examination sponsored by the Ohio Peace Officer Training Academy (OPOTA); students complete specialized training to work as an Ohio Peace Officer.

### Law Enforcement Certificate

Students who successfully complete the peace officer basic training academy will receive a 30-hour law enforcement certificate.



**Law Enforcement Academy Certificate**  
**One-Year Technical Certificate**  
*(Effective Academic Year 2019-20)*

Course No	Course Title	Credits	TECHNICAL	NON-TECHNICAL		OTM, TAG, CT <sup>2</sup> approved course	Term(s) Offered	Course Requirements
				Gen Ed	Applied Gen Ed (Basic)			
<b>FIRST SEMESTER (Fall)</b>								
CJA2801	Law Enforcement I	5	5				FA	Commander Approval
CJA2802	Law Enforcement II	4	4				FA	Commander Approval
CJA2803	Law Enforcement III (Firearms)	2	2				FA	Commander Approval
CJA2804	Law Enforcement IV	2	2				FA	Commander Approval
<b>SECOND SEMESTER (Spring)</b>								
CJA2805	Law Enforcement V	2	2				SP	Commander Approval
CJA2806	Law Enforcement VI	6	6				SP	Commander Approval
CJA2807	Law Enforcement VII	6	6				SP	Commander Approval
CJA2808	Law Enforcement VIII	3	3				SP	Commander Approval
<b>Credit Hour Total</b>			<b>30</b>	<b>0</b>	<b>0</b>			
				<b>30</b>				

**Occupational Certification Opportunities:**

Ohio Peace Officer Training Academy (OPOTA) Certification

**ACC1000                      Fundamentals of Accounting**

ACC1000 is a beginning accounting course that covers basic accounting topics. 2 Cr Hrs. Course Requirement(s): Placement or MTH0910.

**ACC1400                      Financial Accounting**

This course offers an introduction to accounting, emphasizing how general purpose financial statements (Income Statement, Statement of Retained Earnings, Balance Sheet, and Statement of Cash Flows) communicate information about a business's performance and position to external stakeholders. Approximately one-third of the course emphasizes how the accountant processes and presents the information and includes exposure to recording transactions, adjusting entries, and preparing financial statements for service and merchandising firms according to established rules and procedures. The balance of the course examines major elements of the statements such as cash, receivables, inventory, long-lived assets, depreciation, current and long-term liabilities, and capital stock transactions. Basic financial statement analysis is also included. 4 Cr Hrs. Course Requirement(s): MTH0910 or appropriate placement score; and, OIS1200 or TST. Ohio TAG Course [OBU010].

**ACC1500                      Microcomputer Applications in Accountg**

This course introduces the student to computerized applications for keeping accounting records. Both integrated accounting software and practical spreadsheet applications are explored. 3 Cr Hrs. Course Requirement(s): ACC1400, OIS1240.

**ACC1700                      Managerial Accounting**

This course presents fundamental managerial accounting concepts and objectives, and cost data accumulation procedures using job order and process costing. Other topics include cost-volume-profit analysis, budgeting, performance evaluations, differential analysis and product pricing, and capital investment analysis. 4 Cr Hrs. Course Requirement(s): ACC1400. Ohio TAG Course [OBU011].

**ACC2210                      Intermediate Accounting I**

This course is a review of financial reporting and the accounting cycle. Students will also explore theory and applications in the preparation of income statements, balance sheets, and the statement of cash flows. This course also covers theories and applications of earnings management, cash, and receivables. The course includes a review and analysis of generally accepted accounting principles, and compares acceptable alternatives and other proposals. 3 Cr Hrs. Course Requirement(s): ACC1400.

**ACC2220                      Intermediate Accounting II**

This course is a continuation of Intermediate Accounting I. The course includes the study of additional balance sheet items, primarily, inventory, intangible assets, debt and equity financing, investing activities of business organizations, and acquisition, utilization, and retirement of non-current assets. 3 Cr Hrs. Course Requirement(s): ACC2210.

**ACC2300                      Federal Taxation**

The course is designed to provide insight and application of the federal income tax regulations that apply to individuals, partnerships, and corporations. Emphasis will be placed on Individual tax returns and will include income realization and recognition, exclusions from income, business and personal deductions, credits from tax, business and personal gains and losses, depreciation, accounting periods and methods, and the alternative minimum tax. 3 Cr Hrs. Course Requirement(s): ACC1400.

**ACC2400                      Auditing**

This course introduces and describes the rapidly changing audit function as it relates to the external auditor. Topics include the professional responsibilities of auditors, audit tasks, planning and designing an audit, internal control procedures, control and substantive testing, and audit reporting. 3 Cr Hrs. Course Requirement(s): ACC1400.

**ACC2500 Non-Profit Accounting**

This course introduces accounting practices of not-for-profit organizations. Topics covered include fund accounting and the preparation, analysis, and interpretation of financial statements in a nonprofit organization. 3 Cr Hrs. Course Requirement(s): ACC1400.

**ACC2600 Payroll Accounting**

This course covers the laws that affect employers in their payroll operations and the procedures used in a typical payroll accounting system. A computerized payroll simulation will be completed in the course. 1 Cr Hr. Course Requirement(s): ACC1400.

**ACC2980 Special Topics**

This special course in the area of accounting is designed to give groups of students the opportunity to pursue studies not otherwise offered in the degree program. Graded on a Satisfactory/Unsatisfactory basis. 1 - 4 Cr Hrs. Course Requirement(s): Department Approval.

**ACC2990 Individual Investigation**

This course is an independent investigation of an appropriate problem in the field of Accounting. Graded on a Satisfactory/Unsatisfactory basis. 1 – 4 Cr Hrs. Course Requirement(s): Department Approval.

**AET1000 Intro to Alternative Energy**

This course provides an introduction to alternative energy resources, with a scientific examination of their technology and application. An overview of the conventional energy sources will be given first and make the students aware of their problems. Then the course will focus on alternate energy sources such as solar, wind, biomass, geothermal, hydrogen, geothermal, and more. Other subjects that will be explored are the alternative energy generation, storage, transportation, and conservation. The students will be familiarized with scientific terms and concepts of the supply, use and efficiency of energy systems. 3 credit hours. Course Requirement(s): None. Ohio TAG Course [ORE001].

**AET1100 Alternative Energy**

This course provides an introduction to alternative energy resources, with a scientific examination of their technology and application. An overview of the conventional energy sources will be given first and make the students aware of their problems. Then the course will focus on alternate energy sources such as solar, wind, biomass, geothermal, and hydrogen. The students will be familiarized with scientific terms and concepts of the supply, use and efficiency of energy systems. Hands on training will be given in a lab environment to further the student's understanding of the energy sources,. 3 Cr Hrs. Course Requirement(s): Placement or ENG0970.

**AET1200 Wind Energy Technology**

This course will provide a comprehensive introduction to various aspects of wind technology. It will explain wind turbines in term of the structure, types, aerodynamics and efficiency. Various components of turbines such as nacelle, generator, gearbox, controllers and generators will be explained. The operation of the turbine in the wide wind spectrum, for example, the yaw and pitch regulation will be discussed. Different techniques to connect the turbines to the grid and size the system will be covered. Then the procedure of wind site assessment and turbine installation will be explained and demonstrated. The students will also learn how to read electrical diagram and make electric connection and testing. The relevant NEC codes and wind safety will be introduced. Hands-on labs will be integrated into the course to help students better understand the site assessment, turbine installation and maintenance. 3 credit hours. Course Requirement(s): None

**AET1510 Business of Energy**

This course will focus on energy issues that are both business and technology ones. The mapping of technology into consumer terms is a main focus. A knowledge of Photovoltaic is required, which involves site assessment analysis. Specific tasks will include the planning of a public symposium on solar energy, the generation of "real" proposals for pilot customers and papers relating the recent advancements in solar energy technologies. 2 Cr Hrs. Course Requirement(s): ENG1000.

**AET2100                      Photovoltaic Technology**

This course will provide an overview of photovoltaic (PV) technology in various aspects including the principles, manufacturing, installation and maintenance. It will start from the introduction of the p-n junction. Different types of solar cells will be discussed and their characteristic compared. Details of the operation of solar systems will be taught as well as how they are connected to the grids. Components in a typical PV system will be explained in terms of their functions and performance. Then the procedure of PV installation will be explained, including the site assessment, panel installation and electric wiring. The relevant NEC codes and solar work safety will be introduced. Hands-on labs will be integrated into the course to help students better understand the PV installation and maintenance. 3 Cr Hrs. Course Requirement(s): TMT1110 must be taken before or concurrently with this course.

**AET2200                      Alternative Energy Control & Delivery**

This course will provide an overview of energy transfer and control systems. In particular, the principles of power switching circuits for renewable energy applications, particularly solar and wind energy, will be introduced. Various power devices will be explained. Then, theory of rectifier (AC to DC conversion) and inverter (DC to AC conversion) will be explored to detail. Other protective and relay circuits that control the battery charging will be covered, as well as the control and voltage regulating circuits. 3 credit hours. Course Requirements: AET1200 or AET2100.

**AET2700                      Alternative Energy Co-op Work Experience**

Cooperative education is a learning experience which integrates the students' academic field of study with work experience in business and industry. An arrangement is established by which students receive college credit for structured, on-the-job learning experiences related to their academic field. 1 - 4 credit hours. AET2700 is repeatable to a maximum of 12 credit hours. Graded satisfactory/unsatisfactory. Course Requirement(s): Greater than 45 credit hours and Dept Approval.

**AET2800                      Alternative Energy Applied Project**

This capstone course allows students to apply and integrate previous coursework by planning and designing an alternative energy system. 1 credit hour. Course Requirement(s): Department Approval

**ALH1050                      Introduction to Exercise Science**

This course provides the learner an introduction into what exercise science is and what types of careers one could pursue with education in this field. The course and text will allow the student to gain knowledge of different career path options, while also be introduced to key scientific components within the field of exercise science. 3 Cr Hrs. Course Requirement(s): None.

**ALH1103                      PTA Functional Anatomy**

In this class, students will learn functional anatomy as it relates to the field of physical therapy. Emphasis is placed on the study of the skeletal system, arthrology, and the origin, insertion, action, and innervation of major muscles. 3 Cr Hrs [2 hrs. lecture; 3 hrs. lab]. Course Requirement(s): PTA1000, PTA1010, PTA1100, PTA1102, SCI1200. SCI1250 must be taken before or concurrently with this course.

**ALH1110                      Medical Terminology**

This course builds a workable medical vocabulary applicable to all specialties of medicine. The student will learn definitions, pronunciations, spelling and abbreviations of anatomical structures, symptomatic diagnostic and procedural terms pertaining to each medical specialty and body system. Medical terms will also include pharmacology, clinical laboratory, radiology, and surgery. Basic anatomy and physiology and common human diseases will be covered for each body system. 3 Cr Hrs. Course Requirement(s): None. Ohio TAG Course [OHL020].

**ALH1120                      Human Diseases**

This course provides the student with an introduction to the pathology of human disease including signs and symptoms, etiology, diagnostic tests, treatment, and prevention. Associated pathological conditions in each anatomical body system and medical specialty will be discussed. The student will be expected to define common terms and apply

principles of normal anatomy and physiology of the human body systems to the disease processes of common health problems. 3 Cr Hrs. Course Requirement(s): ALH1110. Ohio TAG Course [OHL019].

**ALH1130 Healthcare Issues:Medical Professionalism**

This course is a study of topics relevant to the health care environment including professional conduct, interpersonal and interdepartmental communication, and Health Insurance Portability and Accountability Act [HIPAA]. 1 Cr Hr. Course Requirement(s): None.

**ALH1140 Healthcare Issues:Medical Law and Ethics**

This course is a study of topics relevant to the health care environment including ethics, confidentiality, patient rights, legal responsibilities, problem solving and critical thinking. 1 Cr Hr. Course Requirement(s): None.

**ALH1150 Healthcare Issues: Patient Communication**

This course is a study of topics relevant to the health care student in providing effective therapeutic patient communications in the medical environment. Topics include communication barriers, gathering patient information, patient education, grief process, and diversity of patients. 1 Cr Hr. Course Requirement(s): None.

**ALH1160 Pharmacology for Allied Health**

This course is an introduction to pharmacology to prepare the allied health student. Topics include indications for use of the most commonly prescribed medications and classifications of drugs and their effects on the human body systems. 2 Cr Hrs. Course Requirement(s): ALH1110.

**ALH1190 Physics For Allied Health**

This course introduces the student to the basic principles of physics with an emphasis on electricity and magnetism. The course is designed to provide the student with not only a basic knowledge of electricity and magnetism but also an understanding of real world applications. To prepare the student to understand electricity and magnetism, additional topics include forces, work, energy, power, sounds, and the atomic nature of matter. Topics in electricity and magnetism include electrical forces and fields, currents, electrical circuits, magnetic forces and fields, capacitance, electromagnetic induction and transformers. 2 Cr Hr. Course Requirement(s): Placement or MTH0910.

**ALH2000 Exercise in Special Populations**

This course provides the learner a framework of how exercise prescription needs will vary based on specific populations. Included will be exercise needs for those with various cardiopulmonary, integumentary, neurological, metabolic, and orthopedic conditions. Students will have the opportunity to develop exercise plans and gain increased knowledge of exercise guidelines. 2 Cr Hrs. Course Requirement(s): ALH1050, SCI1100. HLT1100 must be taken before or concurrently with this course.

**ALH2500 Strength Training and Exercise Prescript**

This course provides the learner advanced knowledge of the physiology of strength development. Strength exercise design and testing will be a major focus. This course also provides instruction in muscle anatomy and kinesiology. Students will have the opportunity to develop and implement strength programs in a lab setting. This course specifically prepares the learner for the NSCA- CPT (personal trainer) examination which, upon passing, certifies the student as a personal trainer. 3 Cr Hrs. Course Requirement(s): SCI1050 and SCI1100. HLT1100 must be taken before or concurrently with this course.

**ALH2600 ExerciseScienceSeminar\_DirPractice**

This course provides the learner an opportunity to complete one of several final projects in this certificate program including: a final project, directed practicum experience, or research opportunity. 1 Cr Hr. Course Requirement(s): ALH2000 and ALH2500.

**ALH2650 Strength Training and Exercise Prescrip**

This course provides the learner advanced knowledge of the physiology of strength development. Strength exercise design and testing will be a major focus. This course also provides instruction in muscle anatomy and kinesiology.

Students will have the opportunity to develop and implement strength programs in a lab setting. This course specifically prepares the learner for the NSCA- CPT (personal trainer) examination which, upon passing, certifies the student as a personal trainer. 3 Cr Hrs. Course Requirement(s): SCI1050, SCI1100. HLT1100 must be taken before or concurrently with this course.

**ALH2670                      Exercise Science Seminar/Directed Pract**

This course provides the learner an opportunity to complete one of several final projects in this certificate program including: a final project, directed practicum experience, or research opportunity. This course also serves to prepare the student to prepare to take the NSCA-CPT certification examination. 1 Cr Hr. Course Requirement(s): ALH2000, SCI1150, and ALH2650 must be taken before or concurrently with this course.

**ASC000X                      Arts and Science Elective**

This course is used for the transfer-in of a course from another institution that does not equate to a course in our course inventory but could be used as an elective for the arts and science program. 1 – 4 Cr Hrs.

**ASC1000                      Orientation To College**

Orientation to College is a stepping stone for later success at the college. The course will provide students with information about technology access and function, development of an educational plan, library use, and interaction in the classroom, with faculty, and administrative offices. 1 Cr Hr. Course Requirement(s): None

**ASC1020                      Skills for Success**

Skills for Success is designed to increase college success. The course will focus on developing practical study skills and other techniques to enhance academic success. Topics include time management, test taking, communication skills, study techniques, and personal issues that face many college students. Graded satisfactory/unsatisfactory. 1 Cr Hr. Course Requirement(s): None

**ASC1100                      Conversational Spanish for CJ**

Conversational Spanish for Criminal Justice will introduce basic spoken Spanish in a variety of authentic law enforcement situations. By interpreting various situations involving cultural differences, students prepare themselves to effectively react to real-life law enforcement conditions. This course provides important and useful information, thereby preparing each student to effectively assist Spanish-speaking individuals in our changing world. 3 Cr Hrs. Course Requirement(s): CJ and LE Major Only

**BIO0001                      Bio Elective**

This course is used for the transfer-in of a course from another institution that does not equate to a course in our course inventory but could be used as a biology elective for the arts and science program. 1 – 4 Cr Hrs.

**BIO1020Z                      Human Biology**

Exploration of human biology; topics include structure and physiological function, reproduction and development, genetics and disease, ecology, and evolution. Not intended for students majoring in one of the biological sciences. Course Requirement(s): Not open to students with credit for 102. This course is available for EM credit. GE nat sci bio course.

**BIO1100                      General Biology**

This is a one semester course. This course has a laboratory component which emphasizes the principles of the lecture. The lecture will deal with scientific theory, chemistry, the cell, energy, genetics, principles of evolution, and basic anatomy and physiology. 4 Cr Hrs. Course Requirement(s): SCI1050 or Department Approval. Ohio Transfer Module (OTM) Course [TMNS].

**BIO1101Z                      Intro Biology I**

Basic principles of biology; topics include the nature of science, organismal diversity, evolution, ecology, genetics, reproduction, and cellular structure and function. Not intended students majoring in one of the biological sciences.

Course Requirement(s): Not open to students with credit for 1101E, 1113 (113), 1113H (115H), 101, Entmly 1101 (101), or MolGen 1101 (PlntBio101). This course is available for EM credit. GE Nat Sci Bio course.

**BUS1010 Business English Skills**

This course is designed to help students refine basic English skills that relate to business through the use of realistic learning materials. Punctuation, grammar, spelling, capitalization, vocabulary, and sentence structure are emphasized and reinforced through proofreading and editing business documents. 3 Cr Hrs. Course Requirement(s): OIS1240 must be taken before or concurrently with this course.

**BUS2100 Ethics**

This course focuses on identifying and analyzing ethical and unethical behavior. The application of moral philosophies and the ethical problem-solving model are used to demonstrate how ethical dilemmas can be resolved. 3 Cr Hrs. Course Requirement(s): Placement or ENG0990.

**BUS2150 Legal Environment of Business**

Legal Environment of Business provides an overview of law and its relationship to business. Topics include the Foundations, the Public and International Environment, the Commercial Environment, the Business Environment, the Employment Environment, and the Regulatory Environment. This is practical law that every businessperson should know. Topical discussions apply the readings to everyday situations. Written assignments complement the text and require outside research. 3 Cr. Hrs. Course Requirement(s): None. Ohio TAG Course [OBU004].

**BUS2800 Cooperative Education Preparation**

The purpose of this course is to help students transition from the classroom to the world of work. Each student will conduct a job search, learn selection strategies, practice interview techniques, improve upon personal and professional communication skills, and submit a plan for the cooperative education experience. Graded A-F. 1 Cr Hr. Course Requirement(s): ENG1000 and 16 credits.

**BUS2901 Cooperative Education Experience**

This course places the student in a work setting related to his or her major field of study as developed in the co-op preparation course. Practical application of knowledge and skills acquired in the classroom are carried out in the work environment with supervision. Co-op students receive college credit for structured, on-the-job learning experiences related to their program. Graded satisfactory/unsatisfactory. 1 Cr. Hr. Course Requirement(s): BUS2800.

**BUS2980 Special Topics**

This is a special course in the area of business designed to give groups of students the opportunity to pursue studies not otherwise offered in the degree program. Graded on a Satisfactory/Unsatisfactory basis. 1 – 4 Cr. Hrs. Course Requirement(s): Department Approval.

**BUS2990 Individual Investigation**

This course is an independent investigation of an appropriate problem in the field of Business. No more than four Cr Hrs. will apply toward graduation. Graded on a Satisfactory/Unsatisfactory basis. 1 – 4 Cr Hrs. Course Requirement(s): Department Approval.

**BWPS0016 NC Math Boot Camp**

Designed to precede Math courses

**CHEM1210Z General Chemistry 1**

First course for science majors, covering dimensional analysis, atomic structure, the mole, stoichiometry, chemical reactions, thermochemistry, electron configuration, bonding, molecular structure, gases, liquids, and solids. Prereq: One unit of high school chemistry, and Math Placement Level L or M; or a grade of C- or above in Math 1130 (130), 1131 (131), 1148 (148), 1150 (150), or above. Not open to students with credit for 1220 (123), 1620 (162), 1920H (202H), 1250 (125), 1610, or 1910H (202H). This course is available for EM credit. GE nat sci phys course.

**CHEM1220Z                    General Chemistry II**

Continuation of 1210 for science majors, covering solutions, kinetics, chemical equilibrium, solubility and ionic equilibria, qualitative analysis, thermodynamics, electrochemistry, descriptive chemistry, coordination compounds, and nuclear chemistry. Prereq: 1210, 1215, 1250, 1610 (162), 1910H (202H), or 122, and Math Placement Level L or M; or a grade of C- or above in Math 1130 (130), 1131 (131), 1148 (148), or 1150 (150), or above. Not open to students with credit for 1620 (163), 1920H (203H), 123, 2310, 2510 (251), 2610, or 2910H (251H). This course is available for EM credit. GE nat sci phys course. NS Admis Cond course.

**CHM1000                    General & Biological Chemistry**

This elementary chemical concepts class is designed primarily for Medical Laboratory Science students. Students will first learn about chemical bonding, mixtures, acids, and bases. Then students will explore the structure and function of various types of organic compounds such as hydrocarbons, carbohydrates, lipids, proteins, and nucleic acids. 4 Cr Hrs. Course Requirement(s): SCI1050 or equivalent, or Department Approval.

**CHM1200                    Chemistry I**

This course is the first semester of a two-semester course in general chemistry appropriate for students interested in pursuing careers in science, medicine and engineering. Topics include matter and measurement; structures of atoms, molecules and ions; inorganic chemical nomenclature; chemical reactions and stoichiometry, acid-base and oxidation-reduction reactions and solution stoichiometry; gases; thermochemistry; electronic structure; periodic properties of the elements, chemical bonding, molecular geometry and chemical bonding theories. Laboratory exercises reinforce basic principles and emphasize. 4 Cr Hrs. Course Requirement(s): High School Chemistry or SCI1050; Ohio Transfer Module (OTM) Course [TMNS]; Ohio TAG Course [OSC008]; and, Ohio TAG Sequence Course CHM1200 & CHM1250 [OSC023].

**CHM1250                    Chemistry II**

This course is the second semester of a two-semester course in general chemistry appropriate for students interested in pursuing careers in science, medicine and engineering. Topics include gases and the gas laws; intermolecular forces, liquids and solids; properties of solutions; chemical kinetics; chemical equilibrium, acid-base equilibria and aspects of aqueous equilibria. Laboratory exercises reinforce basic principles and emphasize analytical techniques. 4 Cr Hrs. Course Requirement(s): CHM1200 or Department Approval; Ohio Transfer Module (OTM) Course [TMNS]; Ohio TAG Course [OSC009]; and, Ohio TAG Sequence Courses CHM1200 & CHM1250 [OSC023].

**CIT0001                    CIT Elective**

This course is used for the transfer-in of a course from another institution that does not equate to a course in our course inventory but could be used as an elective for the computer information program. 1 – 4 Cr Hrs.

**CIT1050                    Computer Crime for Law Enforcement**

The course is a study of the techniques employed by law enforcement investigators to recognize and investigate crimes involving computers and other electronic devices. Information Technology concepts include files and properties, hardware, networks and Internet and social media. Law enforcement topics include criminals, crimes, laws, procedures used at crime scenes, search warrants, writing search warrants, recognizing electronic evidence, seizing computers, and the laws of search and seizure. Additional topics included in this course are First Amendment rights as they pertain to computers and dealing with and arresting suspects involved in the violation of computer crime laws. 3 Cr Hrs. Course Requirement(s): OIS1240.

**CIT1100                    Intro to Programming Concepts w/Python**

This course introduces programming concepts using the Python programming language. Students will learn programming concepts and object-oriented programming while learning the language. Python is used in many areas including Web programming and Cyber Security. 3 Cr Hrs. Course Requirement(s): Placement requirements or OIS1200 or OIS1240.

**CIT1351                    IT Essentials / A+**

Students are presented with the information required to take the CompTIA A+ Certification Exams. CIT1351 introduces



the student to the main concepts behind computer hardware and software. Customer service and computer troubleshooting and repair are the primary focus of this course. Students are introduced to the world of virtualization through the classroom use of VMWare. 3 Cr Hrs. Course Requirement(s): Placement or OIS1200. Ohio CTAG Approved Course [CTIT003 & CTIT004].

**CIT1370 Computer Security Fundamentals**

This course will introduce students to the ever changing world of cyber security. Focus is centered on detection, identification, and prevention of cyber attacks. Additional topics covered in the course will include social media threats, development of security policies and procedures, training of personnel and community members, and structural security. This course provides the students with the information necessary to pass the COMPTia Security + professional certification exam. This certificate is recognized industry-wide as an indication of knowledge in the security field. 3 Cr Hrs. Course Requirement(s): OIS1240 must be taken before or concurrently with this course.

**CIT1410 Network Structure**

This course will cover structured cabling systems that provide a comprehensive information technology infrastructure. Copper and fiber optic media will be studied, installed, and tested via lab exercises that demonstrate the student's proficiency. The course will emphasize safety practices, essentials of electrical and optical transmission, structured cabling standards, cabling standards organizations as well as cabling installation and testing. A combination of lecture, demonstrations and various on-line resources will provide the basic skills a technician requires. 3 Cr Hrs. Course Requirement(s): None.

**CIT1610 Networking Fundamentals Cisco I**

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. Students will build simple LANS, perform basic configuration of both switches and routers and implement IP addressing schemes using both IPv4 and IPv6. CIT1610 is the first of two courses that will prepare students for the Cisco® Certified Entry-level Network [CCENT] exam. 3 Cr Hrs. Course Requirement(s): Placement or OIS1200. Ohio CTAG Approved Course [CTIT007].

**CIT1701 Intro to Logic and Visual Programming**

In this course, the student will learn the basics of visual programming and design. The course will also introduce students to database concepts. The logical structure common to computer programs will be discussed. 3 Cr Hrs. Course Requirement(s): CIT1100. Ohio CTAG Approved Course [CTIT012].

**CIT1750 ASP.NET Web Application Development**

In this course, students will review techniques for implementing Websites using ASP.NET technology. Students will design and create Web applications that include Web forms, user management, and database access. 3 Cr Hrs. Course Requirement(s): CIT1701.

**CIT1756 Intermediate Logic & Visual Programming**

Building on skills learned in CIT1701, this course guides the student in the use of additional programming techniques. Students will learn to create computer software that utilizes data access and security techniques. The student will also be introduced to Object-Oriented design fundamentals. 3 Cr Hrs. Course Requirement(s): CIT1701.

**CIT1810 Cyber Law and Ethics**

There is a vast difference between business ethics and cyber ethics. This course discusses current laws related to Cyber Security and the ethics for information technology professionals and how they affect the information technology industry and society. Students will learn to apply the laws and ethics to real world practices in managing information networks and systems developing applications. Law and ethics will be brought to life through in-class discussions and lectures and by utilizing advanced research techniques through peer-reviewed journal entries. 3 Cr Hrs. Course Requirement(s): CIT1370, OIS1240.

**CIT2110                    Operating Systems**

Students need to be able to locate and modify the operating system kernels to close holes in the cyber environment. This course is designed to provide the students with an understanding of how the various operating systems operate. Through hands-on activities, students will learn to write shell scripts and perform basic operations within the Linux OS along with UNIX. In Windows, students will download and run various utilities that will verify that their Windows system is protected. To perform these various operations, students will operate in the VMWare virtual environment building both an Ubuntu and a Windows virtual machine. 3 Cr Hrs. Course Requirement(s): CIT1351.

**CIT2200                    Supporting a Microsoft Server OS/MCSE II**

This course is intended for anyone who wants to learn how to install, configure, administer, and support the primary services in the Microsoft Windows Server operating system. It is designed to help participants prepare for the first Microsoft Server certification exam. Course topics include examining basic system administration procedures, the creation and management of Windows Server user, group, and computer accounts, sharing system resources, and using Web and Terminal Services. 3 Cr Hrs. Course Requirement(s): CIT1351. Ohio CTAG Approved Course [CTIT013].

**CIT2251                    Administering Windows Server**

This course teaches the fundamentals of deploying, supporting, and administering Windows systems. It is designed to help participants prepare for the second in the series of Microsoft certification exams. Course topics include deployment methods, management of user and service accounts, maintenance of Active Directory, configuration and troubleshooting of the DNS, Remote Access and Network Policy Server roles, working with file services and file system security, and implementing update management. 3 Cr Hrs. Course Requirement(s): CIT2200.

**CIT2301                    Config. Adv. Windows Server Services**

This course teaches you the skills and the knowledge necessary to install, configure, and manage Windows Server. It is designed to help participants prepare for the third Microsoft Server certification exam. The three courses combined, CIT2200, CIT2251, and CIT2301, provide the students with the tools to prepare for the Microsoft Certified Systems Analyst (MSCA) certification. Course topics include Advanced Network Services, Advanced File Services, Dynamic Access Control, clustering, disaster recovery, Certificate servers, and AD FS. 3 Cr Hrs. Course Requirement(s): CIT2251.

**CIT2520                    Developing Databases / Msft SQL Server**

Students completing this course will be able to design databases using Microsoft SQL Server. Skills developed in this course will include building a normalized database, designing queries, and database security. 3 Cr Hrs. Course Requirement(s): CIT1701.

**CIT2530                    Database Administration**

In this course, students will learn how to install, configure, and troubleshoot SQL Server installations. Additional topics include backup and restore strategies, importing and exporting data, and working with security. Hands-on exercises will be included to enable the student to apply the concepts being discussed. 3 Cr Hrs. Course Requirement(s): CIT2200.

**CIT2540                    Business Intelligence Data Warehousing**

In this course, students will learn how to design and implement a data warehouse. Students will design and create SSIS solutions to extract, transform, and load data. Hands-on exercises will be included to enable the student to apply the concepts being discussed. 3 Cr Hrs. Course Requirement(s): CIT2520.

**CIT2551                    Java Programming**

In this course, students will learn to develop programs using Java. Students will create programs that utilize decision-making, iteration, arrays, and data access. Common object-oriented techniques will be reviewed and implemented in program solutions. 3 Cr Hrs. Course Requirement(s): CIT1701.

**CIT2561                    Developing Mobile Apps**

This course will teach students to design and develop mobile applications. Students will learn how to create the user interface and utilize built-in elements of the mobile device for application input. Additional course topics include

processing input, working with data, and incorporating multimedia into a mobile application solution. 3 Cr Hrs. Course Requirement(s): CIT2551.

**CIT2591 MCTS Test Preparation**

This course is designed to assist the student in reviewing material in preparation for a current Microsoft exam. Hands-on exercises will be included to enable the student to apply the concepts being discussed. 3 Cr Hrs. Course Requirement(s): CIT2551.

**CIT2592 Emerging Technologies**

This course will allow students to explore current technology topics. Participants will use hands-on activities to apply the concepts being discussed. Additional course activities will include evaluating and determining appropriate uses for the technology in a business solution and working in virtual teams. 3 Cr Hrs. Course Requirement(s): BUS1010 or CIT1756.

**CIT2621 Routing/Switching Essentials CISCO II**

This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with virtual LANs and interVLAN routing in both IPv4 and IPv6 networks. CIT2621 is the second course that will prepare students for the Cisco Certified Entry-level Network Technician (CCENT) Exam. 3 Cr Hrs. Course Requirement(s): CIT1100. Ohio CTAG Approved Course [CTIT008].

**CIT2631 Scaling Networks CISCO III**

This course describes the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement a WLAN in a small-to-medium network. CIT2631 is the first of two courses that will prepare students to take the Cisco Certified Network Associate Routing and Switching (CCNA). 3 Cr Hrs. Course Requirement(s): CIT2621.

**CIT2641 Connecting Networks/Cisco IV**

This course focuses on the WAN technologies and network services required by converged applications in a network. By the end of this course, students will be able to configure PPPoE, GRE, single-homed eBGP, extended IPv4 and IPv6 ACLs. Students will also develop the knowledge and skills needed to implement a WLAN in a small-to-medium network. For LANs, students will be able to configure SNMP and Cisco SPAN. Students will also develop knowledge about QoS and the trends in networking including Cloud, virtualization, and SDN. CIT2641 is the second of two courses that will prepare students to take the Cisco Certified Network Associate Routing and Switching (CCNA) exam. 3 Cr Hrs. Course Requirement(s): CIT2631 can be taken before or concurrently with this course.

**CIT2710 Digital Forensics**

This course introduces students to digital forensics. Topics covered will include forensic processes, imaging and file recovery, and hashing. Students will also learn about laws for reporting and handling of digital evidence. 3 Cr Hrs. Course Requirement(s): CIT1351, CIT1810.

**CIT2750 Information Technology Capstone**

This capstone course brings together all the skills learned in the student's major. Students will incorporate information technology management, problem-solving, communication, research, and teamwork skills while completing an instructor-assigned project. Students will meet virtually regularly with instructor, teammates and other needed personnel to update team project(s) status. 3 Cr Hrs. Course Requirement(s): CIT2551 or OIS1255; and, OIS1320 or OIS1520

**CIT2755 Cyber Security Capstone-Cyber Ops**

This course brings together skills that students have learned in previous hardware, networking, programming and security classes to learn the skills necessary to analyze security incidents. Students will use their skills to determine if

incidents are normal activity or possible attacks. They will look at logs and captured activity to determine attack sources and methods. 3 Cr Hrs. Course Requirement(s): CIT1820 and CIT2110. CIT2631 must be taken before or concurrently with this course.

**CJA2801 Law Enforcement I**

This is an Ohio Peace Officer Training Academy (OPOTA) certified course covering the administration (Unit 1) and legal (Unit 2) blocks of instruction. Students in this course will receive OPOTA instruction in police administration, ethics and professionalism, including an examination of the role of the American peace officer. The course will also cover criminal law, including substantive portions of the Ohio Revised Code and its application to real-life scenarios. Finally, the course examines the laws of arrest, search and seizure, the rules of evidence, the use of force, and civil liability for police agencies and the individual officer. Students may not have any type of felony conviction, a conviction for drugs of abuse, or a domestic violence conviction to be eligible for admission into the Marion Law Enforcement Academy. 5 Cr Hrs. Course Requirement(s): Commander Approval.

**CJA2802 Law Enforcement II**

This is an Ohio Peace Officer Training Academy (OPOTA) certified course covering the human relations (Unit 3) and first aid (Unit 7) blocks of instruction. Topics include: communication with the public, domestic violence, crisis intervention, child abuse and neglect, victim rights, crime prevention, and understanding cultural differences. Students also receive certification in cardio-pulmonary resuscitation (CPR) and automated external defibrillation (AED). 4 Cr Hrs. Course Requirement(s): Commander Approval.

**CJA2803 Law Enforcement III (Firearms)**

This is an Ohio Peace Officer Training Academy (OPOTA) certified course covering the firearms unit (Unit 4). Students will learn the proper law enforcement use of the handgun and shotgun, which will be furnished by the Criminal Justice Program. 2 Cr Hrs. Course Requirement(s): Commander Approval.

**CJA2804 Law Enforcement IV**

This is an Ohio Peace Officer Training Academy (OPOTA) certified course covering law enforcement techniques for subject control (Unit 6). Topics include: ground fighting, arrest, handcuffing techniques, frisking and searching, impact weapons, chemical weapons, taser, prisoner transport, use of force and civil liability. 2 Cr Hrs. Course Requirement(s): Commander Approval.

**CJA2805 Law Enforcement V**

This is an Ohio Peace Officer Training Academy (OPOTA) certified course covering the physical conditioning (Unit 12) and homeland security (Unit 13) blocks of instruction. Topics include: 30 mandatory hours of physical conditioning and assessment and preparation for the OPOTA timed 1.5 mile run, timed sit-ups and timed pushups required for state certification. This is a physically demanding course focused on strength and cardio training. Students will learn how to maintain a physically fit and healthy lifestyle. This course will also cover hazardous materials and weapons of mass destruction, bombs and explosives, terrorism awareness, incident command systems, and national incident management systems. 2 Cr Hrs. Course Requirement(s): Commander Approval.

**CJA2806 Law Enforcement VI**

This is an Ohio Peace Officer Training Academy (OPOTA) certified course covering the driving (Unit 5) and traffic (Unit 10) blocks of instruction. Topics include: Defensive driving, pursuit driving, traffic accident investigation, motor vehicle offenses, traffic tickets, and field sobriety testing. 6 Cr Hrs. Course Requirement(s): Commander Approval.

**CJA2807 Law Enforcement VII**

This is an Ohio Peace Officer Training Academy (OPOTA) certified course covering the patrol (Unit 8) and investigations (Unit 11) blocks of instruction. Topics include: Patrol stops, building searches, civil disorders, crime scene investigation, photography, Ohio drug laws, interviewing and interrogation techniques, and report writing. 6 Cr Hrs. Course Requirement(s): Commander Approval.

**CJA2808 Law Enforcement VIII**

This course is being added to the Law Enforcement program to incorporate the additional hours required for peace officer basic training by the Ohio Peace Officer Training Commission. This additional course is necessary to increase the total credit hours of the peace officer training academy from 27 to 30. 3 Cr Hrs. Course Requirement(s): Commander Approval.

**CJA2990 Individual Investigation**

This course offers independent study designed to meet a specific student need in the field of Law Enforcement. Graded satisfactory/unsatisfactory. 1 – 4 Cr Hrs. Course Requirement(s): Department Approval.

**CORD01 College Readiness**

College Readiness Class (CORD01) helps students improve their basic academic skills while preparing them for transition to college classes, employment and career training, or completion of their high school equivalence. Academic competencies ranging from elementary reading and arithmetic through high school and introductory college-level mathematics and writing will be addressed, based upon each student's need. Class pre-test and orientation is required. Daytime classes meet four times each week, Monday through Thursday for three hours each day. Evening classes meet two times each week, Tuesday and Thursday, for four hours each day. There are no fees for this Non-Credit course.

**CORDMM Muffins & Math**

Designed to improve basic math skills and prepare students for MTC's beginning math courses.

**CRJ1000 Introduction to Criminal Justice**

This course is an overview of Criminal Justice Careers. Topics include federal, state, and local law enforcement agencies, corrections, and court systems. Students will also explore the role of the Homeland Security agency. CRJ1000 includes an overview of the jurisdiction, function, and the areas of enforcement of each agency. 3 Cr Hrs. Course Requirement(s): None. Ohio TAG Course [OSS031].

**CRJ1150 Introduction to Private Security**

This course is a study of the development, philosophy, responsibility, and functions of private and homeland security. CRJ1150 includes a study of the roles and requirements of licensed private investigation, private security principles, the legal authority of private security, and career opportunities. The course also includes information about applying private security principles to everyday life. 3 Cr Hrs. Course Requirement(s): None.

**CRJ1500 Criminology**

This course is an in-depth study of the nature of crime, its causes, and crime statistics. The course includes information about violent crime, property crime, morality crime, and organized crime. The course also includes a study of ways to prevent crime. 3 Cr Hrs. Course Requirement(s): None. Ohio TAG Course [OSS034].

**CRJ1600 Introduction to Corrections**

This course provides a broad view of the American criminal justice system, and follows individuals from arrest and conviction to incarceration and parole. CRJ1600 surveys current philosophies and operations in/at all levels of modern corrections supported by an overview of relevant history. The course also provides the student with an in depth study of a wide range of court decisions that affect or have affected the offender and due process as it applies to the institution, parole, probation, probation hearings, and classification procedure. 3 Cr. Hrs. Course Requirement(s): None. Ohio TAG Course [OSS033].

**CRJ1650 Gangs and Terrorism**

This course is designed to give the student a basic understanding of both domestic and international terrorism and its impact on the American society and the world. Students will discuss the evolution of these groups and what strategies and tactics are being employed by both the military and law enforcement to combat and contain these terrorist organizations. 3 Cr. Hrs. Course Requirement(s): None.

**CRJ1751 Probation & Parole**

This course provides a basic study of the theory and practice of probation and parole, with an emphasis on offender risk assessment and evidence-based practices. Students will learn: the history and philosophy of probation and parole in the United States; how probation and parole integrates into the criminal justice system; how to classify offenders and the sentencing process; how to complete a pre-sentence investigation report; how to implement supervised probation, non-reporting probation, judicial release, electronic monitoring and other community-based corrections; legal rights of probationers and parolees; training and selection requirements for probation and parole officers; master evidence-based probation practices; and attain state certification in the Ohio Risk Assessment System (ORAS). 3 Cr Hrs. Course Requirement(s): CRJ1000.

**CRJ2050 Criminal Investigations**

This course provides a basic study of the theory and practice of crime scene reconstruction with emphasis placed on criminal evidence processing. Further, the student will examine procedures used by law enforcement agencies and crime labs in crime scene processing to include investigative techniques needed for special criminal offenses involving violent offenses and/or property crimes. This course introduces the student to basic forensic procedures used by law enforcement during the investigative process. The course includes topics in basic biology and chemistry. 3 Cr. Hrs. Course Requirement(s): None

**CRJ2110 Administrative Report Writing**

This course is an introduction to the basic concepts of technical report writing and the preliminary investigation methods used to prepare various types of criminal justice system reports, letters, memoranda, directives and administrative reports. Students will be required to prepare simulated reports based upon fictitious scenarios and assigned related readings, applying the rules of English grammar, spelling, sentence structure, punctuation, and word usage, and the format appropriate for successful criminal justice writing. Students will become familiar with technical terminology and research sources commonly used in the criminal justice field. 3 Cr Hrs. Course Requirement(s): ENG1000.

**CRJ2150 Criminalistics**

This course covers advanced techniques in the collection, identification, preservation, and transportation of physical evidence, as well as crime laboratory capabilities and limitations. A major portion of the course centers on discussions and labs involving common items of physical evidence encountered at crime scenes. The course includes descriptions of forensic analysis, techniques for the proper collection and preservation of evidence, and Biology concepts relating to the analysis of physical evidence. An introduction to fingerprinting and general classification of fingerprints, ballistics and firearms identification, photography, DNA, energy and matter as it applies to evidence, the human body, including typing and recognizing human blood, and other techniques necessary for law enforcement to successfully investigate and prosecute major crimes are included. 3 Cr Hrs. Course Requirement(s): CRJ2050.

**CRJ2200 Drugs and Narcotics**

This course presents a study of the social and physical implications of legal and illegal drugs, drug abuse, the drug trade, and the domestic and foreign organizations involved in the trafficking of illegal narcotics and the effects these drugs have on society and law enforcement agencies. Students will learn how to recognize legal and illegal drugs and how to chemically/microscopically test legal and illegal drugs to identify the drug in question. 3 Cr Hrs. Course Requirement(s): CRJ1000 must be taken before or concurrently with this course.

**CRJ2250 Criminal and Constitutional Law**

This course is a comprehensive study of the Ohio Revised Code. Students will learn to identify elements of offenses and apply these elements to hypothetical situations, enabling the student to apply the law and determine appropriate charges. Other topics include procedural law, courtroom testimony, and the laws governing Ohio's criminal justice system. This course also provides a thorough study of the constitutional basis for substantive and procedural law, with an emphasis is on the 1st, 4th, 5th, 6th, 7th, 8th, and 14th Amendments of the U.S. Constitution. Cases discussed in class

will involve current legal decisions affecting the role of the criminal justice profession to include all components of the criminal justice system. 3 Cr Hrs. Course Requirement(s): None

**CRJ2900 Internship**

This is a structured learning experience in which students receive college credit for on-the-job learning experiences related to a criminal justice career interest. The internship experience will be jointly supervised by a member of the faculty and a designated person at the agency involved. This course is graded on a satisfactory/unsatisfactory basis. 1 Cr Hr. Course Requirement(s): BUS2800

**CRJ2990 Individual Investigation**

This course is an independent investigation of an appropriate problem in the field of Criminal Justice. Graded on a Satisfactory/Unsatisfactory basis. 1 – 4 Cr Hrs. Course Requirement(s): Department Approval.

**DMS1001 Introduction to Sonography**

School and clinical site policies are reviewed. The student is introduced to the function of the clinical site and imaging/ultrasound department. Career possibilities are discussed. Knobology is introduced. Patient care and safety is explained. Prepare student for scanning in the clinical setting. 2 Cr Hrs. Course Requirement(s): None.

**DMS1010 Methods of Patient Care**

This course provides the student with basic concepts of patient care, including consideration for the physical and psychological needs of the patient and family. Emphasis is placed on obtaining vital signs and significance of abnormalities. Also included is an in-depth examination of patient history taking and information management. Routine and emergency patient care procedures will be discussed; as well as infection control procedures utilizing Universal Standard Precautions. Medical and professional ethics and medical law will be discussed. 2 Cr Hrs. Course Requirement(s): None.

**DMS1020 Sonography Procedures I**

This course presents a comprehensive outline for normal anatomy, anatomical variations and basic pathologic entities in the abdominal structures that can be detected and evaluated by diagnostic ultrasound. Abdominal ultrasound procedures will be presented in lab. Breast, thyroid, prostate, and testicular ultrasound will be presented. 4 Cr Hrs. Course Requirement(s): Major Only.

**DMS1030 Sonography Procedures II**

Learn about the comprehensive outline of normal anatomy, anatomical variations and basic pathologic entities in the gravid and non-gravid uterine cavities, which can be detected and evaluated by diagnostic ultrasound. OB/GYN ultrasound procedures will be presented in laboratory. 4 Cr Hrs. Course Requirement(s): Major Only.

**DMS1040 Sonography Cross Sectional Anatomy**

The study of Sectional Anatomy for Imaging Professionals. The course is designed to provide the student with an overview of human anatomy, viewed in body sections, as it relates to the imaging professional specifically diagnostic medical sonography. Course information will be presented in a variety of methods to include, but is not limited to, PowerPoint lectures, textbook material, CT and MR images, diagrams, online assignments, Flash exercises, Cadaver Lab sessions, and testing. 1 Cr Hr. Course Requirement(s): DMS1001. DMS1020 must be taken before or concurrently with this course.

**DMS1051 Sonography Principles & Instrumentation**

Learn about acoustic physics in terms of the characteristics and properties of sound energy and the manner in which very high-frequency sound (ultrasound) is used in imaging. Physical principles examined will include wave forms, propagation, relationship of velocity of propagation to frequency and wavelength, acoustic impedance, reflection, refraction, other types of attenuation, transducers and basic layout of a pulsed-echo imaging system. Applied ultrasound physics as related to ultrasound-system design and instrumentation are covered. Principles of fluid dynamics and the fundamentals of Doppler physics and instrumentation are covered. Quantitative methods used in acoustic

output measurement and quality assurance are discussed, and the current data on the biological effects of ultrasound is reviewed. 3 Cr Hrs. Course Requirement(s): Major Only & ALH1190.

**DMS1101                      Sonography Clinical I**

This course is the first of five of clinical applications of ultrasound procedures. This includes scheduled clinical rotation assignments. All clinical courses include scheduled image analysis classes which will be held online. This course will provide the student with the necessary introductory clinical education needed to begin to practice sonography. The student will be evaluated for Lab competency. The student will be under direct supervision the entire semester. The student will follow all policies and procedures of the program. This course is oncampus lab instruction. 1 Cr Hr. Course Requirement(s): Major Only.

**DMS1201                      Sonography Clinical II**

This course is the second of five of clinical applications of sonographic procedures. This includes scheduled lab rotation assignments. All clinical courses include scheduled image analysis classes which will be held online. This course will continue to provide the student with the necessary introductory clinical education needed to begin to practice sonography. The student will be under direct supervision the entire semester. The student will follow all policies and procedures of the program. This course is oncampus lab instruction. 2 Cr Hrs. Course Requirement(s): DMS1101.

**DMS1301                      Sonography Clinical III**

This course is the third of five of clinical applications of ultrasound procedures, and the last in the junior year of the program. This includes scheduled clinical rotation assignments. All clinical courses include scheduled image analysis classes. Students are actively involved in all clinical procedures in their assigned clinical rotation. This course will continue to provide the student clinical education needed to practice sonography. This course takes place in imaging departments, with actual patient contact. The student will rotate through assigned clinical areas. The student will be evaluated for clinical competencies of the semester. The student will perform under both direct and indirect supervision the entire quarter, depending on completed competency requirements. The student will follow all policies and procedures of the program. 3 Cr Hrs. Course Requirement(s): DMS1201.

**DMS2040                      Advanced Imaging Procedures**

This course presents a comprehensive outline for abnormal anatomy, anatomical variations and basic pathologic entities in the abdominal structures that can be detected and evaluated by diagnostic ultrasound. Abnormal abdominal ultrasound procedures will be presented in laboratory. Learn about the comprehensive outline of abnormal anatomy, anatomical variations and basic pathologic entities in the gravid and non-gravid uterine cavities, which can be detected and evaluated by diagnostic ultrasound. Abnormal OB/GYN ultrasound procedures will be presented in laboratory. 2 Cr Hrs. Course Requirement(s): DMS2050.

**DMS2050                      Sonography Pathology**

This course covers the principles and procedures of abdominal, OB/GYN, small parts, musculoskeletal, and neonatal sonography, focusing on pathology of those specific areas. Each system of the body is studied with regard to major pathological diseases and how the diseases are demonstrated sonographically. Different types of cancer and treatment options are discussed. Students are required to complete oral and written case presentations. 2 Cr Hrs. Course Requirement(s): DMS1030.

**DMS2070                      Sonography Review**

DMS 2070 is a required course in the Sonography curriculum. The purpose of this course is to prepare students for the National Registry Test. This course is graded pass/fail. The grade for the course is based on completion of homework assignments, completion of mock registries, completion of physics registry, and class participation. 1 Cr Hr. Course Requirement(s): DMS2400.

**DMS2400                      Sonography Clinical IV**

This course is the fourth of five of clinical applications of ultrasound procedures. This includes scheduled clinical rotation assignments. All clinical courses include scheduled image analysis classes which will be held online. This course will



provide the student with the necessary introductory clinical education needed to begin to practice sonography. This course takes place in sonography departments, with actual patient contact. The student will rotate through assigned clinical areas. The student will be evaluated for clinical competency of the semester. The student will be under direct supervision the entire semester. The student will follow all policies and procedures of the program. 3 Cr Hrs. Course Requirement(s): DMS1301.

**DMS2500                      Sonography Clinical V**

This course is the last of five of clinical applications of sonographic procedures. This includes scheduled clinical rotation assignments. All clinical courses include scheduled image analysis classes which will be held online. This course will provide the student with the necessary clinical education needed to practice sonography. This course takes place in sonography departments, with actual patient contact. The student will rotate through assigned clinical areas. The student will be evaluated for clinical competency of the semester. The student will be under direct supervision the entire semester. The student will follow all policies and procedures of the program. 3 Cr Hrs. Course Requirement(s): DMS2400.

**DMS2990                      Individual Investigation**

This course offers independent study designed to meet a specific student need in the field of Diagnostic Medical Sonography. Graded satisfactory/unsatisfactory. 1 – 4 Cr Hrs. Course Requirement(s): Department Approval.

**ECN2000                      Microeconomics**

Students in this course will gain an understanding of the basic principles that underlie how people behave in today's economic world. Emphasis is placed on analyzing the individual's reaction to the price of a product or service, the issues of supply and demand, the level of competition for a business and its owner[s], the overall use of resources [natural resources, labor, machines, facilities, etc.], and the overall effect/impact of the government and international trade. (Online section: midterms and finals are online. Students are not required to come to campus.) 3 Cr Hrs. Course Requirement(s): None. Ohio Transfer Module (OTM) Course [TMSBS]; and, Ohio TAG Course [OSS004].

**ECN2100                      Macroeconomics**

An important and intriguing look at the overall U.S. economic system is the basis for this course. Students will study the background of economic forces that affect all citizens. U.S. economic history, the modern U.S. banking system, government spending, the Federal Reserve, GDP, unemployment, and inflation will be topics covered, as well as other vital aspects of the American economy. (Online section: Midterms and Finals are online. Students are not required to come to campus.) 3 Cr Hrs. Course Requirement(s): None. Ohio Transfer Module (OTM) Course [TMSBS]; and, Ohio TAG Course [OSS005].

**EET1000                      Introduction to Electricity**

This course will present to the student an overview of the basic fundamental elements of electrical circuits and electrical control devices and tools used in contemporary industrial electrical systems. The student will become familiar with the electrical symbols, and electrical line diagrams. Electrical circuits will be wired and tested in class lab exercises. Troubleshooting and safety is emphasized throughout the course. 2 Cr Hrs. Course Requirement(s): Placement or ENG0970.

**EET1210                      Digital Circuits**

This course will first cover the number systems and logic gates. Boolean algebra is taught and used to evaluate and simplify logic circuit applications. Then the configuration and operation of the combinational logic including adders, encoders/ decoders, and multiplexers will be introduced. Moreover, counters, shift registers and memory circuits will be discussed. The studies of these digital components lead into an investigation of the basic microprocessor architectures. Students get an introduction to assembly language and machine language to help them understand the dynamic interaction of components in the hardware architecture of microcomputers and their I/O connections to the environment around them. The integrated circuits that fulfill the logic operation will be taught. 4 Cr Hrs. Course Requirement(s): Placement or MTH0920; and, EET1000.

**EET1300 Robot Handling Tool Operations & Program**

This lab oriented course focuses on learning to program Yaskawa Motoman robots using the FS100 handheld controller and Motoman MHJF robots. Students will learn to create, modify, store, and call programs directly on the controller using Motoman-specific commands. Writing and calling subroutines will be covered as well so that students feel comfortable creating more complex programs. Upon successful completion of this course, students will be awarded an industry-backed credential from Yaskawa Motoman. 1 Cr Hr. Course Requirement(s): EET2400.

**EET1500 Circuit Analysis I**

This course will focus on the analysis of Direct Current circuits through applications of Ohm's Law, Watt's law, and Kirchoff's laws. Series, parallel, and series/parallel circuits will be analyzed. Circuit theorems such as superposition, Thevenin and Norton theorems will be used to solve the complex circuits. The effects of capacitors and inductors in direct current circuits will be studied. How to use basic electrical measuring instruments will be another component of the course. Hands- on labs are integrated in the course. 3 Cr Hrs. Course Requirement(s): EET1000. Ohio TAG Course [OET001].

**EET1550 Circuit Analysis II**

This course continues studies in alternating current circuits with a focus on RC, RL, and RLC circuits. The properties and mathematic expression of sinusoidal waves that are used to describe the AC quantities will be introduced. Devices such as capacitor, inductor and transformer and their behavior under AC conditions will be studied. Circuit analysis methods such as Superposition and Thevenin's theorems will be further applied to AC circuits. Filter and three- phase circuits will also be included in this course. This course provides the student with an understanding of AC circuit dynamics that will be seen in later studies of industrial and electronic control applications. Hands- on labs are integrated in the course. 3 Cr Hrs. Course Requirement(s): EET1500, TMT1110. Ohio TAG Course [OET003].

**EET2010 Intro to Programmable Controllers**

This course starts from the review of control systems such as relay logic control before the advent of PLC. The students will then be introduced to the fundamentals of PLC addressing, inputs and outputs configuration and interfacing to external devices such as switches, pushbuttons and motor starters etc. Basic programming skills are another important topic to be taught in this course. Various functions such as latch/ unlatch, timers and counters will be introduced. Hands- on labs are integrated in the course in which the students will design, construct, load, and run programs, simulating real applications such as motor reverse, seal-in, timed process and counters. 2 Cr. Hrs. Course Requirement(s): EET1000.

**EET2050 Advanced Programmable Controllers**

This course builds upon the student's fundamental knowledge of PLC wiring and programming. Students will be expected to wire and program PLC systems based on industrial applications. Labs will be set up for the students to learn the PLC troubleshooting. Other advanced studies will include math functions, fault location, diagnosis and repair, sequencers and shift registers, motor drive controllers, and counter applications. Prereq: EET2010.

**EET2060 Advanced Programmable Controllers**

This course builds upon the student's fundamental knowledge of PLC wiring and programming. Students will be expected to wire and program PLC systems based on industrial applications. Labs will be set up for the students to learn the PLC troubleshooting. Other advanced studies will include math functions, fault location, diagnosis and repair, sequencers and shift registers, motor drive controllers, and counter applications. 3 Cr Hrs. Course Requirement(s): EET2010.

**EET2200 Electrical Distribution Systems**

This course introduces industrial power distribution techniques and devices and how to properly interpret and use pertinent sections of the National Electrical Code. It includes the study and selection of conductors required for main trunk and branch circuits, service entrances, and grounding, with a focus on types of loads such as motor loads, lighting loads, and utility circuit loads and the required protective devices. The entire electric power systems including generation and transmission systems will also be introduced. 2 Cr Hrs. Course Requirement(s): EET1500.

**EET2300                      Electronics**

This course introduces the student to basic semiconductor electronic devices such as diodes and transistors. Two types of transistors, the bi-polar transistor (BJT) and field effect transistors (FET), will be mainly covered. Their operation, biasing, amplifying circuits and frequency response will be introduced in detail. Other electronic devices and circuits such as thyristors, oscillators, op-amps and electronically regulated power supplies, as well as their operations and applications will be covered. Oscilloscopes and other types of test instruments will be used in lab exercises to support the theories taught. 4 Cr Hrs. Course Requirement(s): EET1550. Ohio TAG Course [OET005].

**EET2400                      Robotics I**

This course gives a project oriented introduction to the field of robotics. It will guide the student through the challenges of robotic construction and various methods and languages of programming. Since types of robots vary widely, the course will focus on common elements that are found in all robotic applications: drive train mechanisms, sensory mechanisms and circuits, manipulators and other external effectors, and control and programming methods. The course will begin studies of robotic manipulation, their characteristics, and how they are controlled. Each student will program a robot for prescribed assignments and apply various external effectors to accomplish design solutions to typical robotic problems. Humanoids and industrial applications and programming will be introduced and discussed in preparation for more advanced studies in specific robotic applications. 2 Cr Hrs. Course Requirement(s): EET1000.

**EET2460                      Robotics II**

This course is a continuation of Robotics I. Students will learn the application of pendant boxes. The control of the robot by both computer and pendant box will be practiced. Advanced programming skills such as subroutine and external input will be taught. This is a heavily hands-on involved course. The above skills will be exercised on various robot models including Scorbot, Vex and Mitsubishi in order to expose the students to a variety of robots. Students will learn how to program the industrial robot for it to properly respond to the external stimulation and react accordingly. 3 Cr Hrs. Course Requirement(s): EET2400.

**EET2510                      Automated Process Control**

This course is designed to provide a comprehensive review of automated systems. Various aspects of the systems will be covered, such as the components, layouts and communication. The function and operation of various sensory and actuating devices will be explained. Industrial standards and communication protocols of the systems will be introduced. In addition to the hardware, popular automation software will be demonstrated as well as its applications. A selection of case studies is used to illustrate the key concepts of real world automation systems. 3 Cr Hrs. Course Requirement(s): EET2400.

**EET2980                      Special Topics**

This course presents a special project in the area of Electrical Engineering Technology designed to give a group of students the opportunity to pursue studies not otherwise offered in the degree program. EET2980 is repeatable to a maximum of 10 Cr Hrs. Graded on a satisfactory/unsatisfactory basis. 1-5 Cr Hrs. Course Requirement(s): Department Approval.

**EET2990                      Individual Invstgtn**

EET2990 is an independent investigation of an appropriate problem in the student's major field of interest. EET2990 is repeatable to a maximum of 10 Cr Hrs. Graded on a satisfactory/unsatisfactory basis. 1-5 Cr Hrs. Course Requirement(s): Department Approval.

**ENG0920                      My Foundation Lab**

This course is for students who score within the decision zone range on the COMPASS placement test. Students work independently in this computer-assisted class. My Foundations Lab provides instruction, exercises, and activities to strengthen student skills in the areas of math, writing, and reading. All work is completed on-line and on the computer. Students may work in all three areas of the course, or they may work only in the area(s) of need. Students must have basic computer skills to participate in this course. 1 Cr Hr. Prerequisite(s): Advisor recommendation.

**ENG0970                      Reading Enrichment II**

ENG0970 provides instruction and practice that will allow the student to have increased comprehension and retention of written communication. The concepts of main ideas, implied main ideas, location of main ideas, supporting details, inferences, transitions, relationships (involving examples, comparison and/or contrast, and cause and effect), organizational patterns, and argument evaluation are introduced and reinforced throughout the term. Using a word-in-context approach with abundant practice, the student will develop an increased vocabulary of 280 essential words. 3 Cr Hrs. Prerequisite(s): Placement.

**ENG0990                      Preparation for College Writing II**

This course provides instruction to enable students to develop writing skills necessary to succeed in college courses. It focuses on paragraph and essay writing, and it offers an intensive review of basic grammar and usage and a study of various sentence and paragraph patterns. It also provides experience in the composing process through the activities of drafting, revising, and peer review. 3 Cr Hrs. Course Requirement(s): Placement or ENG0980.

**ENG0991                      Prep for College Writing Co-Req**

This course provides instruction to enable students to develop writing skills necessary to succeed in college courses. It focuses on paragraph and essay writing, and it offers an intensive review of basic grammar and usage and a study of various sentence and paragraph patterns. It also provides experience in the composing process through the activities of drafting, revising, and peer review. 3 Cr Hrs. Prerequisite(s): Placement or ENG0980.

**ENG1000                      English Composition I**

In this composition course, you will write themes and essays based on your own experience. This class includes an analysis of the formality needs of Standard English, the study of effective organization and style, the analysis of writing for logic and reason, and a strong concentration on developing clear and concise writing skills. Online specifications: All assignments, including the midterm and final, are to be completed online. This course is part of the Ohio Transfer Module (OTM) and approved to transfer to any state college or institution. 3 Cr Hrs. Course Requirements: ENG0990 or Appropriate Placement Score. Ohio Transfer Module (OTM) Course [TME001].

**ENG1100                      English Composition II**

As a continuation of English Composition I, students will expand their knowledge through reading, thinking, and writing assignments. Through essay writing, students will demonstrate their ability to analyze and evaluate ideas and integrate those ideas into their own writing. Students will engage in writing both independently and collaboratively while participating in discussions and reading assigned literature. The course places emphasis on the research essay as a fundamental form of writing in which students will document sources while integrating research into their writing. Online specifications: assignments, including tests, are submitted through CANVAS. All assignments are the same as the traditional class. This course is part of the Ohio Transfer Module (OTM) and will transfer to any state college or university in Ohio. 3 Cr Hrs. Course Requirement(s): ENG1000. Ohio Transfer Module (OTM) Course [TME002].

**ENG1109Z                      Intensive Writing and Reading**

Provides intensive practice in integrating academic reading and writing. Credit may not count toward graduation in some degree programs. 4 Cr Hrs. Course Requirement(s): English Placement score of 6. Not open to students with credit for 1110.01 (110.01), 1110.01H (110.01H), 1110.02 (110.02), 1110.02H (110.02H), 052, 060, or 110.03, or equivalent.

**ENG1200                      Business Communications**

A focus on customer and reader needs is essential for effective business communication. In this course, you will learn how to write clear, friendly messages tailored to specific situations with the customer and reader in mind. You will also learn to write effective e-mail and a formal report with graphics based on primary research. Other lessons include information on conducting and arranging good business meetings and on creating good visual aids for presentations. In addition, you will construct a personal job package consisting of a resume, cover letter, and thank-you letter and you will study and practice interviewing skills. All of these projects are designed to develop vital job skills. Online section: All assignments, including the midterm and final, are online. 3 Cr Hrs. Course Requirement(s): ENG1000. Ohio TAG Course [OBU005].

**ENG1400 Oral Communications**

This class prepares the student for communication for the job. Topics included are listening, questioning, nonverbal communication and business presentations. Students will give four speeches. 3 Cr Hrs. Course Requirement(s): None. Ohio Transfer Module (OTM) Course [TMCOM]; and Ohio TAG Course [OCM004].

**ENG1500 Interpersonal Communications**

This course focuses on communication in all areas of life including family, community, and work. The role of creating, maintaining, and ending interpersonal relationships is emphasized. This course is part of the Ohio Transfer Module (OTM) and will transfer to any state college or university in Ohio. 3 Cr Hrs. Course Requirement(s): None. Ohio TAG Course [OBU002].

**ENG2000 Early American Literature**

This course is one of two courses comprising a selected survey of American literature. In this course we will focus on the literature of British-influenced North America written in English during the 1700s and 1800s. The time period will be roughly 1600-1860. We will explore the invention and formation of "American-ness" and "American literature" during this time of change during the development of the United States as an early nation, examining some of the fundamental ideas, myths, assumptions, intellectual concepts, and popular perceptions that still influence the ways in which Americans think about themselves. Some of the authors that may be included are as follows: Anne Bradstreet, Ben Franklin, Thoreau, Emerson, Poe, Washington Irving, Hawthorne, Melville, and Longfellow. 3 Cr Hrs. Course Requirement(s): None. Ohio Transfer Module (OTM) Course [TMAH]; and Ohio TAG Course [OSH053].

**ENG2100 Modern American Literature**

In this course, students will initially discuss the movement away from literary romanticism in American literature in the mid-1800s, and the mood for change in literary style. In this half of the course such works as *The Adventures of Huckleberry Finn* will be studied in detail. Students will then also explore the regional realists as a transition between the old romanticism and the new realism. Time will be spent on a discussion of the social and philosophical influences upon the American literary scene, especially through the rise of realism and naturalism in the late 1800s. Authors of note in this segment include Jack London, Stephen Crane, and Kate Chopin. Students will also explore the reevaluation of American values and the rise of social criticism through the extension of naturalism and the development of expressionistic and stream of consciousness techniques. Authors in this group include Robert Frost, Ernest Hemingway, and F. Scott Fitzgerald. An extended study of Fitzgerald's *The Great Gatsby* will be included. Sometime will be spent on considering the alienation and dissatisfaction expressed during the 1920s and 1930s and the works that demonstrate that trend. Finally there will be a brief survey of recent trends in contemporary 20th and 21st century American fiction and poetry. 3 Cr Hr. Course Requirement(s): None. Ohio Transfer Module (OTM) Course [TMAH]; and, Ohio TAG Course [OAH054].

**ENG2200 British Literature I**

This course is parallel to ENG2000, Early American Literature. It provides a survey of British Literature from the Old English to the Romantic periods, roughly 700 to 1789 AD. Students will read, discuss, and analyze poetry, plays and fiction by canonical authors, including Chaucer, Shakespeare, Milton and Austen. The course will emphasize the development of the British literary tradition, with a particular focus on situating texts in their historical and cultural context, but students will also be supported in the development of close reading and analytical skills.

**ENG2210 British Literature II**

This course is parallel to ENG2100, Modern American Literature. It provides a survey of British Literature from the Regency period through today. Students will read, discuss, and analyze poetry, plays and fiction by canonical authors, including Dickens, Woolf and Eliot. The course will emphasize the development of the British literary tradition, with a particular focus on situating texts in their historical and cultural context, but students will also be supported in the development of close reading and analytical skills.

**ENR2100Z Intro to Environmental Science**

Introduction to environmental science, the ecological foundation of environmental systems, the ecological impacts of

environmental degradation by humans, and strategies for sustainable management of environment and natural resources. Au, Sp, Su Sems. Prereq: Not open to students with credit for 201. This course is available for EM credit. GE nat sci bio course.

**FIN1000                      Personal Finance**

The course is a study of the techniques for personal financial management. Topics include budgeting and financial decision-making; credit rating systems; relationships with financial institutions, health, life, and property insurance; retirement planning; and other related topics. 3 Cr Hrs. Course Requirement(s): OIS1200 or successful completion of Technology Skills Test.

**FIN2100                      Corporate Financial Management**

This course provides an introduction to the theory, methods, and concerns of corporate finance. Emphasis is placed on achieving wealth maximization through the use of analytical skill, financial analysis, forecasts, cash and capital budgeting, operating and financial leverage, the cost of capital, and dividend policy. 3 Cr Hrs. Course Requirement(s): ACC1400.

**GET1000                      Intro to Engineering**

This course will cover the varied aspects of engineering from scientist to technician. It will explore the disciplines and functions within those disciplines. Problem-solving will be stressed. The course focuses on providing direction for the students in career choices within the engineering field with special focus on Mechanical, Electrical, and Alternative Energy Engineering. 2 Cr Hrs. Course Requirement(s): Placement or ENG0970. Ohio TAG Course [OES001].

**GET1100                      Industrial Safety**

This course involves a study of safety as applied to the workplace. Students will learn how to recognize safety hazards and begin practicing safe work habits including use of Personal Protective Equipment, HAZMAT awareness, and First Aid and basic CPR awareness. This course is a blended series of textbook and hands-on activities modules. 2 Cr Hrs. Course Requirement(s): None.

**GET2200                      Technical Writing**

This course will teach students to communicate as technical professionals in business, industry, service, or government organizations. It will develop students' abilities to produce clear, concise correspondence, reports, instructions, proposals, and resumes that will be effective in a work setting. The course covers technical writing basics including typical formats, as well as special techniques, document design, and graphics. 3 credit hours. Prerequisite: ENG1100

**GET2300                      Engineering Statistics**

This course will introduce the student to the relationship between statistical methods and process control by exposing the students to data collection techniques, organization, interpretation, and application. Although the course concentrates on the manufacturing environment, the concepts may be applied to a variety of situations in engineering and business alike. 2 Cr. Hrs. Course Requirement(s): MTH1245 and OIS1240. Ohio TAG Course [OES004].

**GET2700                      Engineering Cooperative Work Experience**

Cooperative education is a learning experience which integrates the student's academic field of study with work experience in business and industry. Co-op students receive college credit for structured, on-the-job learning experiences related to their academic field. 1 Cr Hr. Course Requirement(s): Department Approval.

**GET2800                      Engineering Applied Project**

This capstone course allows students to apply and integrate previous coursework by planning and designing a device or system related to the student's field of study. 2 Cr Hrs. Course Requirement(s): Department Approval. .

**GET2990                      Engineering Individual Investigation**

This course offers independent study designed to meet a specific student need in the field of Engineering. Graded satisfactory/unsatisfactory. 1 – 4 Cr Hrs. Course Requirement(s): Department Approval.

**HIT1200 Health Record Management I**

This course is an introductory course in Health Information Technology/Management. Topics include the evolution of the health information management profession, the purpose and function of the health record; data stewardship, ethical obligations and core values of the profession; healthcare delivery systems, and organizational principles and work planning classification systems; data management; revenue management and reimbursement; ethical issues; management; human resource management; and fraud and abuse.. 2 Cr Hrs. Course Requirement(s): Department Approval.

**HIT1301 Clinical Classifications ICD10-CM/PCS**

This course focuses on ICD-10-CM/PCS classification systems. The focus within this course will be on rules, conventions, instructions and coding guidelines for each body system (circulatory, injury, pregnancy), including criteria for assignment of principal and additional diagnoses in various patient settings. Healthcare case studies, manual and computerized coding methods, and coding references will be utilized in the coding process. 4 Cr Hrs. HIT1200 must be taken before or concurrently with this course.

**HIT1302 Current Procedural Terminology**

This course is designed as a comprehensive course for the student requiring advanced information in CPT-4 Coding. The student is introduced to the current purposes and uses of CPT-4, applying the basic coding guidelines in evaluation and management services along with surgical and ancillary coding and is completed with practical experience coding from case studies. Students will be introduced to the value of the quality of coded data within a data quality improvement plan and for the prevention of fraud and abuse. 3 Cr Hrs. HIT1200 must be taken before or concurrently with this course..

**HIT1400 Healthcare Reimbursement**

This course introduces the student to reimbursement policies and procedures in the use of clinical data, organization of healthcare delivery system including managed care and capitation: issues and systems, including the compliance environment; and payers. The theory and use of reimbursement vocabulary and systems such as Diagnostic Related Groups (DRGs), Resource-Based Relative Value Score (RBRVS) are applied, Ambulatory Payment Classifications (APCs) are applied. Revenue cycle discussions and analysis include data flow from admission to billing and the analysis of casemix. In addition, other external forces, such as Health Insurance Portability and Accountability Act and Recovery Audit Contractors are reviewed. Other topics covered/applied include, CMS 1500 and UB92 billing forms; charge masters, EDI, billing technologies, and application programs. Students will learn the value of using established guidelines to comply reimbursement and reporting requirements, to perform data quality reviews to validate code assignments. 2 Cr Hrs. Course Requirement(s): HIT1200 and HIT1301 can be taken concurrently. Ohio TAG Course [OHL022].

**HIT1500 Advanced Clinical Classification System**

This course provides the student with advanced knowledge and coding practice in clinical classification systems. This course builds upon concepts learned in ICD-10-CM/PCS and CPT coding course. Students will study in depth topics on Principles of Nomenclatures, Terminologies, Clinical Vocabularies, Taxonomies and other data sets (OASIS, HEDIS, UHDD, & DEEDS) and applications of Classification Systems (ICD/CPT, HCPCS, SNOMED, and DSM). Other topics studied include RX Norm; LOINC; International Classifications of Functioning, Disability, and Health; Data Standards; Data Interchange Standards; Centralized Locations and Tools for Servers, Databases, and Registries; and the Use of Vocabulary, Terminology, and Classification Systems. 3 Cr Hrs. Course Requirement(s): HIT1301.

**HIT1900 HIT Professional Practice I**

This course provides the student with practical experience in an affiliated healthcare facility or in a simulated environment in a health information technology lab. Students will apply their knowledge and skills of billing and coding under the instruction of health information professionals. Students will maintain contact and supervision with a full-time faculty through online discussions, assignments, and journaling. The student will also develop the skills necessary to communicate effectively across the full range of roles that will be encountered in health care and public health settings

necessary to communicate effectively across the full range of roles that will be encountered in health care and public health settings. Students have an opportunity to prepare for a coding certification exam through the use of professional review guides. 1 semester hour. 1 Cr Hr. Course Requirement(s): Department Approval.

#### **HIT2000                      HIT Legal Issues**

The student will study the policies and procedures for processing health records as a legal document based upon legal and regulatory requirements. The importance of maintaining confidentiality of health information, access to information, transfer of health information, subpoenas for patient information, legal terminology and court systems, liability, and retention will be discussed. Students will learn about user access, logs and systems to track access to and disclosure of identifiable patient data, conduct privacy and confidentiality training programs, and how to investigate and recommend solutions to privacy issues and problems. Ethical standards of practice will be applied and promoted. 2 Cr Hrs. Course Requirement(s): HIT1200. Ohio TAG Course [OHL021].

#### **HIT2100                      Health Record Management II**

This course is a continuation of HIT1200 Health Records Management I. Topics include the content of the health record and documentation requirements; components of specialized records and content, different record formats, health record documentation requirements for accreditation and government review bodies; filing and storage systems; electronic health records; policies and procedures required to collect, analyze, interpret, report and maintain healthcare data including the different types of data sets and data abstracting, the purposes and uses of secondary data for internal and external use. Students will further understand the legal and ethical guidelines for the release of information. The student will perform chart reviews and will be introduced to the requirements for establishing, operating, and maintaining various indices and registries. 4 Cr Hrs. Course Requirement(s): HIT1200 and Department Approval.

#### **HIT2200                      Health Information Technology Systems**

This course will provide an in-depth look at the use of information technology in the healthcare delivery system including the role, purpose and use of health information systems, computer-based patient record, various health information system applications, information system life cycle and future technologies. Topics include defining the EHR, identify early attempts at development, challenges to the adoption of the EHR, and relates current status of the EHR, hardware, software, proprietary applications used in Health Information Management, and clinical inpatient information systems, and learn new initiatives in healthcare computing such as health information exchange and the personal health record. 4 Cr Hrs. Course Requirement(s): HIT2100

#### **HIT2301                      HIT Statistical Analysis**

The student is introduced to procedures for properly collecting, organizing, displaying, and interpreting healthcare data to meet the needs of various users while complying with standards of the healthcare facility. Topics include statistical formulas, spreadsheet applications, data mining, data analysis, and data presentation. 2 Cr Hrs. Course Requirement(s): HIT1200.

#### **HIT2350                      Project Management for HIT**

In this beginning course, you will learn the basic application of knowledge, skills and techniques to execute projects effectively and efficiently in health information technology. Project management processes fall into five groups: initiating, planning, executing, monitoring and controlling, and closing. 3 semester hours. Pre-requisite: HIT2200

#### **HIT2400                      HIT Quality Assessment**

The student will be introduced to procedures for facility-wide quality management and performance improvement programs. Emphasis will be place on analyzing clinical data to identify trends that demonstrate healthcare quality, safety, and effectiveness utilizing performance improvement tools. 2 Cr Hrs. Course Requirement(s): HIT2100.

#### **HIT2500                      Health Infor Mgt & Data Governance**

The student is introduced to the evolution of health information systems and the complexities of data flow. Students will learn the roles, functions, and practices for successfully managing healthcare data as an enterprise set. Students will explore enterprise functions such as data governance, data architecture, metadata management, master data



management, data security management, business intelligence, and terminology and classifications systems within healthcare departments or business unit context. Students will apply policies and procedures to ensure the accuracy and integrity of healthcare data. 3 Cr Hrs. Course Requirement(s): HIT1200 and OIS1240.

**HIT2900                      HIT Professional Practice II**

This course is a review of theory and practice in health information management in preparation for national examination. Case studies will be used to emphasize analytical skills of HIT processes and ethical/legal situations. Issues and concerns facing the graduate along with resume and interview skills will be discussed. After successful completion of this course, and graduation fulfillments, the student will be prepared to take the national certification exam through the American Health Information Management Association. The student will also develop an e-Portfolio highlighting accomplishments for future use. 2 Cr Hrs. Course Requirement(s): Department Approval.

**HIT2980                      Special Topics**

This special course in the area of health information is designed to give groups of students the opportunity to pursue studies not otherwise offered in the degree program. Graded on a Satisfactory/Unsatisfactory basis. 1 – 4 Cr Hrs. Course Requirement(s): Department Approval.

**HIT2990                      Individual Investigation**

This course offers independent study designed to meet a specific student need in the field of Health Information. Graded satisfactory/unsatisfactory. 1 – 4 Cr Hrs. Course Requirement(s): Department Approval.

**HLT1100                      Health Terminology**

Health Terminology is an online course designed for the student to learn medical terms, their uses, and pronunciations. 1 Cr Hr. Course Requirement(s): None

**HSS1000                      Introduction to Addiction Studies**

This introductory course is an overview of the addictions field including drug abuse, addictive disorders, and the prevention. Treatment approaches, service coordination, documentation, professionalism and ethics are also explored by the students. This course meets the content requirements for the Chemical Dependency Counselor Assistant Certificate issued by the Ohio Chemical Dependency Professionals Board. Students will study models of prevention and intervention strategies used with various populations. Risk factors associated with use, abuse, and dependence will be examined. This course must be completed with a grade of "C" or higher. 3 Cr Hrs. Course Requirement(s): HSS and CJ majors only or Department Approval. Placement or ENG0970.

**HSS1010                      Introduction to Social Welfare**

In this course, the student will receive an overview of the dimensions, functions, and challenges of the contemporary social welfare system. The course addresses the various social problems that exist in America and the extensive human service networks that have been established to address these problems. The student will also investigate the values, ethical guidelines, and the legal regulations of the human services worker. There will also be an overview of the career options for human services workers. 3 Cr Hrs. Course Requirement(s): HSS and CJ majors only or Department Approval. Placement or ENG0970. Ohio TAG Course [OSS030].

**HSS1030                      Interviewing Techniques**

Students will learn basic principles and practices of interviewing clients in a variety of human services settings. Students will demonstrate the ability to utilize active listening skills and the process of structuring an interview. The course introduces students to working with clients from a multicultural perspective, motivational interviewing, positive psychology, and wellness assessments in the interviewing process. Students will engage in role playing throughout the class. 3 Cr Hrs. Course Requirement(s): HSS majors only and Department Approval. Placement or ENG0970.

**HSS1040                      Intro to Social Work**

This course introduces students to the history, values and ethics of social work practice. It will address social work practice as a wide range of value-guided, knowledge-based, change-oriented actions which help people to alleviate distress, accomplish life tasks, and achieve individual and collective aspirations. It introduces the systems perspective,

examines professional values in the context of societal values, as well as to acquaint students with the generalist framework. 3 Cr Hrs. Course Requirement(s): HSS majors only and Department Approval. Placement or ENG0970. Ohio TAG Course [OSS029].

**HSS1050                      Family Development**

Students will explore issues related to family structures, dynamics and functioning, with an emphasis on family systems theory. Within this context, consideration will be given to how families deal with issues such as divorce, substance abuse, chronic illness and mental disorders, poverty and, death and dying. 3 Cr Hrs. Course Requirement(s): HSS1010.

**HSS1060                      Abnormal Psychology**

In this course students will learn the basic concepts of abnormal psychology. The diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) for the major categories of psychological disturbances will be presented. Facts about etiology, prognosis, and treatment modalities using the DSM V as a basis will be presented and discussed. 3 Cr Hrs. Course Requirement(s): PSY1100, Placement or ENG0970. Ohio Transfer Module (OTM) Course [TMSBS], and, Ohio TAG Course [OSS017].

**HSS2010                      Introduction to Counseling**

This course is an introductory course in counseling designed to expand the students' understanding and knowledge of basic counseling theories, group process, and intervention strategies most commonly used by human services professionals. Additionally, students will explore the ethical issues related to the profession and will be introduced to issues concerning boundary setting, counter-transference and characteristics of effective helpers. 3 Cr Hrs. Course Requirement(s): HSS1030.

**HSS2020                      Ethnic and Cultural Diversity**

This course will introduce the student to the richness of diversity within the United States. The course will examine the similarities and differences of people of various racial and cultural heritages. Topics that will be examined include: the origin and effects of prejudice and discrimination, and investigations into the historical experiences of the major racial and ethnic groups in America. Students will have the opportunity to assess their own attitudes regarding the diversity this nation offers. Students will gain information that will assist in improving their ability to relate to people of diverse backgrounds. 3 Cr Hrs. Course Requirement(s): Placement or ENG0970. Ohio Transfer Module (OTM) Course [TMSBS]; and, Ohio TAG Course [OSS024].

**HSS2030                      Introduction to Case Management**

This course serves as an introduction to the concept of case management; working with individuals from the intake interview to termination of services. There is an emphasis on documentation and the responsibilities and skills of the effective case manager. In addition, students will gain an awareness of the legal and ethical issues confronting case managers today. . 3 Cr Hrs. Course Requirement(s): HSS1040.

**HSS2040                      Human Services-Practicum I**

Students will begin to apply knowledge and skills obtained from the classroom setting to a field placement site within the human and social service community. Students will be involved in observational experiences that progress toward "hands-on" learning experiences. Each student will develop a practicum learning plan that will consist of goals and objectives, and maintain a log of practicum activities. Students will devote a total of 105 hours to their practicum and attend weekly lab. 4 Cr Hrs. Course Requirement(s): HSS1040 and HSS1060.

**HSS2050                      Human Services-Practicum II**

Students will apply their knowledge and skills in structured, on-the-job placements in selected social service agencies, gaining educationally-supervised experiences. Students will develop a practicum plan with relevant goals and objectives, and maintain a log of the practicum experiences. Students will devote a total of 25 hours to their practicum and attend weekly lab. 4 Cr Hrs. Course Requirement(s): HSS2040 and Department Approval.

**HSS2610                      Crisis Intervention**

In this course students will be introduced to basic crisis intervention skills that will include an examination of the nature

of crisis, and the use of models of assessment. Students will explore specific areas of crisis including lethality, post-traumatic stress disorder, sexual assault, partner violence, chemical dependency, bereavement and grief, violent behavior in institutions, and issues related to burnout of human service workers. 3 Cr Hrs. Course Requirement(s): Department Approval. Placement or ENG0970.

**HSS2620                      Aging**

An introductory course in the study of adult development and aging pertaining to psychological and developmental issues, as well as changes and adjustments that occur physically, cognitively and socially during adulthood. The course covers current psychological and psychosocial theories and research findings relevant to adult development and aging. 3 Cr Hrs. Course Requirement(s): Placement or ENG0970.

**HSS2630                      Chemical Dependency: Ethics**

This is an online course in which ethical standards for counselors, particularly chemical dependency counselor assistants and licensed chemical dependency counselors, will be examined. Students will study a wide variety of ethical issues and topics. Topics include counselor values and attitudes, ethical dilemmas, ethical decision making, professional standards, client rights and counselor responsibilities, confidentiality, counselor competence, boundaries and dual relationships, ethical misconduct, and multicultural issues. 3 Cr Hrs. Course Requirement(s): None

**HSS2640                      Chemical Dependency: Intro Pharmacology**

Students will learn the pharmacology of drugs of abuse, as well as those used in detoxification, addiction treatments, and the treatment for mental and emotional disorders. There will be an emphasis on the action of pharmaceuticals and the physiological response, the interaction of pharmaceuticals, tolerance, the appropriate use of psychotropic medication with addicted persons, and the effects of drugs on sensation and perception, learning and memory, human growth and development, sexual functioning, and behavior. 3 Cr Hrs. Course Requirement(s): HSS1000.

**HSS2650                      Juvenile Delinquency**

Why do some juveniles become delinquent? This course examines the causes and effects of juvenile delinquency in American society. Students will learn the social and institutional factors influencing delinquent behavior. This course will also analyze a variety of intervention and treatment strategies. 3 Cr Hrs. Course Requirement(s): Placement or ENG0970, and CRJ1000.

**HSS2660                      Chemical Dep- Etlgy, Assmnt, Diagnosis**

Students will study methods of diagnostic interviewing and the use of testing/screening instruments for psychoactive substance abuse. Emphasis includes criteria for determining diagnosis and the appropriate level of treatment, adapting treatment strategies to individual needs, and relapse prevention. Other areas of study include techniques utilized in the treatment of dysfunctional relationships, cultural influences, and dual diagnosis. 3 Cr Hrs. Course Requirement(s): Department Approval.

**HSS2680                      Orientation to Deafness**

This course is designed to provide students with an overview of the deaf community. Students will explore social, cultural, and educational issues confronting the hearing impaired within our society. Additionally, students will learn basic sign language skills. 3 Cr Hrs. Course Requirement(s): Placement or ENG0970.

**HSS2900                      Field Placement I**

Students will begin to apply knowledge and skills obtained from the classroom setting to a field placement site within the human and social service community. Students will be involved in observational experiences that progress toward "hands-on" learning experiences. Each student will develop a practicum plan that will consist of goals and objectives, and maintain a log of practicum activities. Students will devote a total of 105 hours to their practicum and attend weekly classes. 4 Cr Hrs. Course Requirement(s): Department Approval.

**HSS2910                      Field Placement II**

Students will apply their knowledge and skills in structured, on-the-job placements in selected social service agencies,

gaining educationally-supervised experiences. Students will develop a practicum plan with relevant goals and objectives, and maintain a log of the practicum experiences. 4 Cr Hrs. Course Requirement(s): Department Approval.

**HSS2980 Special Topics**

This special course in the area of human and social services is designed to give groups of students the opportunity to pursue studies not otherwise offered in the degree program. Graded on a satisfactory/unsatisfactory basis. 1 – 4 Cr. Hrs. Course Requirement(s): Department Approval.

**HSS2990 Individual Investigation**

This course offers independent study designed to meet a specific student need in the field of Human and Social Services. Graded satisfactory/unsatisfactory. 1 – 4 Cr Hrs. Course Requirement(s): Department Approval.

**HST1500 Early American History**

This course is an introduction to the political, social, and cultural development of the American nation. HST1500 studies American civilization from the Age of Exploration through the Civil War. In addition, this course will focus on central themes and issues noted in the growth of the U.S. with the enduring theme being Life in Early America. The student will be asked to read supplementary analyses and critiques, and apply historical issues to modern topics. HST1500 will investigate the various dreams held by early Americans for the new nation and how these notions are interpreted by contemporary historians. 3 Cr Hrs. Course Requirement(s): None. Ohio Transfer Module (OTM) Course [TMSBS]; Ohio TAG Course [OHS043]; and, Ohio TAG Sequence Course HST1500 & HST1600 [OHS010].

**HST1600 Modern American History**

This history course is an introduction to the political, economic, and social (with an emphasis on race, gender, and class) development of the American nation starting with Reconstruction. The primary objectives of this course are to develop your skills as a critical reader and provide you with fundamental knowledge about the events, people and institutions that have influenced and created America. We will examine how the perceptions of freedom and equality shifted and thus shaped American History. In addition, the course will investigate the various "dreams" Americans had as the nation progressed and how these are interpreted by contemporary historians. Key topics include the rise of industrialism and capitalism, the impact of immigration and urbanization, the rise of the US as a global power (including foreign relations) and how populism, civil rights and feminism shaped our culture, political and social institutions. 3 Cr Hrs. Course Requirement(s): None. Ohio Transfer Module (OTM) Course [TMSBS]; Ohio TAG Course [OHS044]; and, Ohio TAG Sequence Course HST1500 & HST1600 [OHS010].

**HST1700 Western Civilization I**

This course is a survey of Western Civilization from the start of recorded history through the Eighteenth Century A.D. It deals mainly with the historical developments that took place in Europe and the colonial Americas, but it also touches on the Near East as the place of origin for the first civilizations. Although the main goal of this course is to study the political and social events, it also will place strong emphasis on the development of the arts, architecture and humanities as a direct consequence of the different historical movements. It will cover such topics as the rise of the first human settlements, the creation of the first human complex cultures in the Near East, and their influence over Greek civilization. Greece's influence in philosophical thought and art, as well as its impact on future civilizations. It will also deal with the coming of the Roman Republic, its institutions and their impact on modern life, and its eventual transformation into the Roman Empire and its influence in religious thought through the rise of Christianity. The contributions of the Medieval world will be also studied here. This includes the rise of Christianity and the church as an organized hierarchy. Finally, this survey will explore the Early Modern period and the Renaissance. 3 Cr Hrs. Course Requirement(s): None. Ohio Transfer Module (OTM) Course [TMAH].

**HST1800 Western Civilization II**

This is the second in a series of two courses on Western Civilization. It begins during the mid-Eighteenth Century A.D., on the eve of the French Revolution. This survey course will explore the most relevant events of the last 250 years, focusing on Europe and the Americas. This includes the Transatlantic Economy between Europe and the Americas during colonial times, as well as the Age of Enlightenment and its impact in philosophical and scientific thought.

Although much of this course deals mainly with political and social events, special attention will be given to the development of the arts, architecture and humanistic thought, as these topics reflect and portray important historical trends. This course will cover the causes and consequences of the French Revolution and the Napoleonic Era and the advent of Romanticism. The Industrial Revolution and its enduring impact in Western culture. This course will cover the rise of Western Imperialism and the birth of modern European thought. This course will conclude with the Twentieth Century, and the two World Wars that defined it, as well as the Cold War era and the process of European decolonization. 3 Cr Hrs. Course Requirement(s): None. Ohio Transfer Module (OTM) Course [TMAH].

**HUM000X                      Humanities Elective**

This course is used for the transfer-in of a course from another institution that does not equate to a course in our course inventory but could be used as a humanities elective for the arts and science program. 1 – 4 Cr Hrs.

**HUM1200                      Critical Thinking and Problem Solving**

Become a more experienced critical thinker by learning about your thought processes and producing and enhancing your ideas. Learn where you stand on personal and social issues, and understand why others have opposing stances. Skills learned in this course will apply to your academic and professional careers. Online specifications: weekly assignments are submitted online. Requirement to participate in weekly discussion board forums and submission of papers via CANVAS. 1 Cr Hr. Course Requirement(s): None.

**HUM1400                      Introduction to Logic**

An introduction to symbolic analysis and logic. In this course, students will recognize basic logic, distinguish arguments from non-arguments, recognize mistakes in reasoning, understand the construction of logic problems, understand inductive and deductive reasoning, evaluation and criticism of current media and political sources, and the role of language in reasoning and logic. 3 Cr Hrs. Course Requirement(s): None. Ohio Transfer Module (OTM) Course [TMAH].

**MED1010                      Medical Assisting Clinical Procedures I**

This is the first of a two part series to instruct students in the clinical techniques and procedures performed by an MA in a physician's office. These procedures may include preparing patients for procedures, height, weight, vital signs, first aid, respiratory testing, eye and ear testing/irrigation/instillation and patient history. 4 Cr Hrs. Course Requirement(s): Department Approval. Ohio CTAG Approved Course [CTMAT008]; and, Ohio CTAG Sequence Courses MED1010 & MED1040 [CTMAT011].

**MED1021                      Medical Office Procedures**

This course emphasizes the administrative duties of medical office personnel. Topics of instruction include HIPAA, medical ethics and law, patient records, scheduling appointments, credit and collection, bookkeeping, health insurance, office maintenance, telephone techniques and communications. Students will be utilizing electronic health records for patient demographics, messages and billing. 4 Cr Hrs. Course Requirement(s): Department Approval.

**MED1040                      Medical Assisting Clinical Procedures II**

This is the second of a two part series to instruct students in the clinical skills performed by a Medical Assistant in a physician's office. Students will prepare patients for procedures and/or treatments, calculate and administer oral and parenteral medications, and perform electrocardiograms and sterilization procedures. 4 Cr Hrs. Course Requirement(s): MED1010 and Medical Assisting majors only. Ohio CTAG Approved Sequence Courses MED1010 & MED1040 [CTMAT011]; and, Ohio CTAG Sequence Courses MED1010, MED1040, MED1050 [CTMAT010].

**MED1050                      MA Lab Procedures**

Medical assisting students will perform quality control and waived laboratory testing in chemistry, hematology, immunology, urinalysis, and microbiology. Students will also perform venipuncture and capillary punctures. Standard precautions, CDC regulations, laboratory/physician's office safety, and fire safety will be covered and practiced. 2 Cr Hrs. Course Requirement(s): MED1010 and Department Approval. Ohio CTAG Approved Course [CTMAT009]; and, Ohio CTAG Sequence Courses MED1010, MED1040, MED1050 [CTMAT010].

**MED1061 Medical Asst. Insurance and Billing**

Students will be able to identify types of insurance plans and apply third party guidelines. In this introductory course, ICD-10-CM diagnostic coding and CPT-4 procedural coding will be performed. Completion of CMS-1500 forms and claims processing along with the legal aspects of the insurance industry including Medicare, Medicaid, managed care plans, private and employer based insurance plans. Through case studies and role play, students will learn how to maximize physician reimbursement while learning proper communication with patients, providers, and third-party administrators. Coding, pre-certifications, and pre-authorizations will be assessed. 3 Cr Hrs. Course Requirement(s): ALH1110 and Department Approval.

**MED1070 Medical Assisting Capstone**

This course is in preparation for the Medical Assisting Practicum and preparation for the job search. Topics include health and wellness, performance evaluations, employment strategies, continuing education and completion of a professional eportfolio. 1 Cr Hr. MED1040 must be taken before or concurrently with this course.

**MED1080 Medical Assisting Issues and Review**

This course consists of review and correlation of knowledge taught in the technical courses, and preparation for the AAMA certification examination. 1 Cr Hr. Course Requirement(s): Department Approval.

**MED1085 RMA Review**

Employees with 5 years' experience as a medical assistant are eligible for the course based on American Medical Technologists guidelines. The course will prepare the student for taking the examination for Registered Medical Assistant. Completion of the certification exam will be a requirement of the course. Students will only be eligible to take course if eligible for certification through AMT. 3 Cr Hrs. Course Requirement(s): 5 years experience as an MA.

**MED1091 Medical Assisting Practicum**

Students will complete a 196 hour practicum in a physician's office utilizing clinical, administrative, and affective skills learned. Focus is on application of classroom knowledge and performance of skills learned in the MA program while in a patient setting. 2 Cr Hrs. Course Requirement(s): Department Approval.

**MED2990 Individual Investigation**

This course offers independent study designed to meet a specific student need in the field of Medical Assisting. Graded satisfactory/unsatisfactory. 1 – 4 Cr Hrs. Course Requirement(s): Department Approval.

**MET0001 Mechanical Engineering Elective 01****MET1010 Technical Drawing with CAD**

Technical Drawing with CAD instruction for Engineering and Manufacturing is a practical comprehensive course designed for students to gain an understanding of reading and developing industrial prints as related to common practices used today. A practical approach to reading and developing prints will focus on technical sketching skills, orthographic alignment, part design assembly modeling, dimensioning symbols and abbreviations used in mechanical and electrical applications. A basic understanding of ANSI Y 14.5 2009 Drawing Standards and Geometric Dimensioning and Tolerancing will be studied throughout the course. 3 Cr Hrs. Course Requirement(s): Placement or ENG0970.

**MET1100 General Aptitude Preparation**

This course prepares students to take tests required for entry into apprenticeship programs. Covered are a wide range of basic concepts of physics, tools encountered in a traditional maintenance shop, basic concepts of geometry, freehand sketching, and spatial relationships. Successful completion of this course does not guarantee that students will be successful with industrial trades. Graded on a satisfactory/unsatisfactory basis. 1 Cr Hrs. Course Requirement(s): None.

**MET1200 Computer Aided Drafting (CAD)**

MET 1200 is a hands-on course that will emphasize the basic concepts of parametric part and assembly modeling using the latest computer aided design (CAD) software. Students will learn to create and modify three-dimensional (3D) parts

and combine these parts into assemblies. Students will make fully dimensioned two-dimensional (2D) detail drawings from 3D parts and use part assemblies to make exploded scene drawings. The concepts covered and skills developed in this course can easily be adapted to the many parametric modeling software programs currently used in industry. . 3 Cr Hrs. Course Requirement(s): MET1010. Ohio TAG Course [OET012]; and, Ohio CTAG Approved Course [CTMET005].

### **MET1300 CAD Parametric Parts and Assembly**

This hands-on course introduces the basic concepts of parametric part and assembly modeling using the latest computer aided design [CAD] software. Students learn to create and modify three-dimensional [3-D] parts, and combine these parts into assemblies. Topics include producing fully dimensional 2-D detail drawings from 3-D parts, and using part assemblies to make exploded scene drawings. Students will create an assembly in virtual space as a project. The concepts covered and skills developed in this course can be easily applied to any parametric modeling program currently used in industry. 3 credit hours. Prerequisite: MET1000 or concurrent, and MET1200.

### **MET1400 Geometric Dimensioning and Tolerancing**

Geometric Dimensioning and Tolerancing (GD&T) uses a system of reference planes and special symbols to communicate the relationship between the surfaces and features on manufactured parts. This course will focus on the symbology, terminology, and application of GD&T, as described in standards ASME Y14.5 1994 and ASME Y14.5 2009. Students will learn the role that GD&T plays in both design and manufacturing; will learn to recognize, interpret, and apply tolerances of form, location, and orientation; and will learn to build feature control frames and properly use modifiers. 2 Cr Hrs. Course Requirement(s): MET1010.

### **MET1500 Mechanical Drives**

A thorough understanding of mechanical devices is important for designing and troubleshooting equipment. This course will focus on mechanical drive mechanisms and components, such as chain and belt drives, gears, bearings, couplings, brakes, and clutches. Students will learn to size, select, and to some degree, design these components and the systems that utilize them. Additionally, students will get to know general design procedures, building-block mechanisms, mechanical fasteners, safety, and ergonomics. 3 Cr Hrs. MET1010 and TMT1110 must be taken before or concurrently with this course.

### **MET2100 Fluid Mechanics**

In this course, hydraulic and pneumatic fluid power applications are used to cover many topics in the subject of fluid mechanics. Through the study of these systems and the various components involved, the student will not only gain an understanding of the basic principles of fluid statics and dynamics, but will also learn to create and read fluid power schematics, size and select components, and troubleshoot hydraulic and pneumatic systems. Regular hands-on lab exercises will reinforce classroom discussions. 3 Cr Hrs. Course Requirement(s): None

### **MET2200 Statics**

The term “static” means “at rest.” This very important, fundamental MET course investigates how bodies at rest interact with one another, and how applied forces are distributed throughout structural members, machine components, and various other objects that are in a state of static equilibrium. Students will utilize mathematical tools and problem solving ability to analyze forces systems applied to trusses and frames, and determine the magnitude, direction and sense of forces seen in individual structural members. The concepts learned in this course will provide an important foundation for success in future MET courses. 3 Cr. Hrs. Course Requirement(s): PHY1110. Ohio TAG Course [OET007].

### **MET2300 Strength of Materials**

This course builds on the concepts learned in MET2200 Statics, now analyzing the effects of forces on structural members and machine components. These effects, seen in various forms of mechanical stress, will be studied by the students so that they may understand how to properly size components and select materials for particular design applications, including beams, columns, and shafts, as well as bolted, riveted, and welded connections. Students will also gain an understanding of the importance of safety, and how it plays a role in component design and selection. 3 Cr. Hrs. Course Requirement(s): MET2200. Ohio TAG Course [OET008].

**MET2400                    Machine Design**

In this course, students will combine their accumulated knowledge and skill sets with new topics in design to better understand the design and selection of various mechanical components, including chain and belt drives, gears, shafts, bearings, couplings, brakes, and clutches. Other topics discussed will include general design procedure, building-block mechanisms, endurance strength, and methods of stress analysis. 3 Cr. Hrs. Pre-Req: MET2300

**MET2800                    Applied CAD/CAM Project**

This capstone course allows students to apply and integrate previous coursework by planning and designing a mechanical system. 2 credit hours. Prerequisite: Department approval

**MET2980                    Mechanical Special Topics**

This course offers a special project in Mechanical Engineering Technology designed to give students the opportunity to pursue special studies not otherwise offered. MET2980 is repeatable to a maximum of 10 Cr Hrs. Graded on a satisfactory/unsatisfactory basis. 1-5 Cr Hrs. Course Requirement(s): Department Approval.

**MET2990                    Individual Investigation**

This course is an independent investigation of an appropriate problem in the field of Mechanical Engineering. MET2990 is repeatable to a maximum of 10 Cr Hrs. Graded on a satisfactory/unsatisfactory basis. 1-5 Cr Hrs. Course Requirement(s): Department Approval.

**MFT1000                    Intro to Machine Tools**

In this course students will study basic machine tool operations used in modern industry. Students will learn how to operate the lathe, vertical mill, horizontal mill, drill press, and surface grinder. They will also learn how to use precision measuring instruments. After studying various machining processes students will be given the opportunity to make several useful projects. This course has much hands-on emphasis. 3 credit hours. Prerequisite: None

**MFT1100                    Manufacturing Processes**

This course is designed to give students an overview of the vast world of manufacturing. Many aspects of manufacturing will be discussed, including manufacturing methods, metrology, and material properties, in order to provide the students with a strong foundation of knowledge for use in future MET and MFT courses. 3 Cr. Hrs. Course Requirement(s): MET1400. Ohio TAG Course [OET010].

**MFT1400                    CAD/CAM**

This is an introductory course that demonstrates the integration of Computer-Aided-Design (CAD) and Computer-Aided-Manufacturing (CAM). It is a study of modern prototyping and machining methods, teaching the use of CAM software. This software converts 2D and 3D CAD drawing geometry directly into tool path information that is used to drive numerically controlled turning and milling machines 3 credit hours. Prerequisite: None

**MFT1500                    Basic Machinist Training**

This course provides the basic machinist and CNC operator skills necessary for new employees to become productive more quickly. It contains five, relatively equal in length, modules of instruction in Blueprint Reading and GDT, Applied Technical Math, Metrology, Introduction to Machine Tools, and CNC Machining: Set-up and Operation. 14 credit hours. Prerequisite: None

**MFT2100                    Computer Numerical Control**

This course will introduce the various types of machines that commonly use Computer Numerical Control (CNC) programming. Students will learn general concepts common to all CNC machines such as machine control systems, machine and part coordinate systems, use of referencing, shifts and offsets, calculation of speeds and feeds, and word address (G and M code) programming. They will apply these concepts by completing actual programming, simulation, and machine projects using a CNC machining center with GE Fanuc 21 control. Other machines studied include: turning centers, Electric Discharge Machining (EDM), and abrasive water jet and laser cutting. Students will be able to see these machines in operation through the SME "Fundamental Manufacturing Process" video series. 3 Cr Hrs. Course Requirement(s): MFT1100 and MET1200.



**MGT1400 Introduction to Management**

Students will learn the fundamental principles of first-line management and their application in different work situations. This course introduces the five functions of the management process: planning, organizing, staffing, leading, and controlling. The focus of MGT1400 is to prepare the student for a supervisory role, emphasizing communication, delegation, motivation, stress and time management, and problem solving. 3 Cr Hrs. Course Requirement(s): None.

**MGT1410 International Business**

This course applies a cross-functional, integrated approach to the study of international business. Using examples of companies from around the world, case studies, current events, videos, and classroom discussions, students will study business from an international perspective. Students will complete a research project to analyze a country for business opportunities. Topics include international business environments, culture, management, international trade, investment, as well as financial and political systems. 3 Cr Hrs. Course Requirement(s): MGT1400.

**MGT1420 Principles of Industrial Distribution**

This course will introduce students to the flow of industrial products and the role that wholesalers and distributors play in the supply chain. Topics will include distribution careers; channels of distribution; inventory control and management; and how Industrial Distribution relates to the operational and financial effectiveness of an organization. 3 Cr Hrs. Course Requirement(s): MGT1400. OIS1240

**MGT1430 Principles of Transport. and Logistics**

This course focuses on transportation and logistics as part of supply chain management. An emphasis will be placed on intermodal transportation management. Students will be introduced to the development of the global transportation system, modes of transportation and how they interact with each other, shipper issues, and the future of transportation. 3 Cr Hrs. Course Requirement(s): MGT1400.

**MGT2210 Human Resource Management**

This course provides an understanding of the role and importance of strategic human resource management within organizations. Students will gain the necessary human resource management knowledge and skills to be effective supervisors or managers in their organizations. Topics covered include social and legal considerations, job analysis, recruitment, staffing, human resource development, performance management, compensation, safety and health, and effective employee relations. 3 Cr Hrs. MGT1400 must be taken before or concurrently with this course.

**MGT2230 Employee and Labor Relations**

Provides an introductory analysis of the employment relationship and the interrelated interests of management, workers, unions, and the public. Includes an overview of basic legal principles underlying the employment relationship and their social, political, and economic bases. 3 Cr Hrs. Course Requirement(s): MGT2210.

**MGT2400 Training and Development**

Training and Development focuses upon strategic planning to attract and retain organizational talent in alignment with organizational missions, goals, and objectives. Key topics include training and development design and delivery, as well as analysis of learner needs and styles. Social media and other technology tools will be utilized. Projects, lectures, case studies, and cross-course collaboration will be used. 3 Cr Hrs. Course Requirement(s): MGT2210, OIS1240.

**MGT2410 Organizational Behavior**

This course is an advanced study of the field of management with an emphasis on the interaction between individuals and organizations. Topics covered include foundations of individual behavior, motivation and performance management, leadership, conflict and negotiation, organizational culture and change, power and politics in organizations and group/team dynamics. Case studies, current events, decision making models, and self-assessments are used to aid in application of organizational behavior theories. 3 Cr Hrs. Course Requirement(s): MGT1400.

**MGT2500 Entrepreneurship and Small Business**

In this capstone course a study of the special opportunities and risks relating to the small business is presented. Students will develop business plans geared toward entrepreneurial startups which will include organizational brand

development, marketing plans, financial management plans. The course underscores the importance of planning and other informational resources for small businesses. Students will learn how to effectively leverage social media to promote small business through the development of a final project that includes cross-course collaboration. 3 Cr Hrs. Course Requirement(s): MGT1400, MKT2030, ACC1400.

**MGT2510                      Project Management**

This course is an introduction to the discipline of project management in which students utilize a combination of general management techniques and project management-specific techniques to plan individual and team projects. Students will learn how to utilize project management software to allocate resources and track projects from the planning stage to project completion. Students will develop an understanding of project critical timelines, allocation of resources, task dependencies, and the impact of each of these elements on the successful project completion. 3 Cr Hrs. Course Requirement(s): OIS1240.

**MGT2540                      Leadership**

This course is a study of leadership fundamentals essential for understanding, developing, strengthening, and practicing good leadership skills. Classroom focus is on enhancing the student's ability to lead, influence, motivate, empower, and foster positive attitudes through maximizing human relationships, effective communication, and key decision-making. Cases, exercises, self-assessments, and other interactive activities are included in this course. 3 Cr Hrs. Course Requirement(s): MGT1400

**MKT2030                      Principles of Marketing**

This course is an analysis of marketing role in organizations and society. MKT2030 includes development of marketing concepts related to the four P's of marketing and the role of the marketing process in fulfilling consumer needs and the planning of marketing activities by the firm. Other topics include techniques for providing customer satisfaction and developing long-term customer relationships. Development of a marketing plan is included in this course. 3 Cr Hrs. Course Requirement(s): OIS1240 must be taken before or concurrently with this course. Ohio TAG Course [OBU006]

**MKT2150                      Principles of Advertising and Promotion**

In this class students will study the basic principles of advertising and promotion as they relate to the marketing mix and, in particular, the communication function of promotion. Students will comprehend the strategic function of advertising within the broader context of business and marketing. Basic advertising considerations will be introduced as well as writing advertising copy, design and layout, production, planning, and coordination. 3 Cr. Hrs. MKT2030 must be taken before or concurrently with this course.. Ohio TAG Course [OCM012].

**MKT2200                      Public Relations & Social Media**

This course covers the role of public relations in today's business organizations. MKT2200 includes an examination of the nature of public relations and the various tools of the field, including social media. The course incorporates theory with case studies as well as the practical nature of public relations work - effectively communicating, writing, and solving PR problems. A public relations social media project is incorporated into this course. 3 Cr. Hrs. MKT2030 must be taken before or concurrently with this course.

**MKT2250                      Consumer Behavior**

This course examines the products and services we buy and use, and the ways these fit into our lives. It is the study of people and the products that impact our lives and society as a whole. Students will learn to critically analyze the consumer buying process and understand not only how marketers influence consumers, but how consumers influence the field of marketing as well. 3 Cr. Hrs. Course Requirement(s): MKT2030.

**MLT1010                      Basic Medical Laboratory Techniques**

This course provides a basic introduction in the various areas of the clinical laboratory including phlebotomy, hematology, urinalysis, immunology, microbiology and chemistry. Pipettes, glassware, safety, metrics, quality assurance, medical ethics, and instrumentation are also discussed. Upon successful completion of this course, the

student will be able to perform basic laboratory testing in the clinical/practicum experience. 2 Cr Hrs. Course Requirement(s): Department Approval. Ohio TAG Course [OHL008].

**MLT1020                      Body Fluids**

This course is a study of the physical, chemical and microscopic evaluation of urine and other non-blood body fluids and the correlation of results with disease. Upon successful completion of this course, the student will be able to recognize normal and abnormal results and will be able to perform routine urinalysis and evaluate the results in the clinical experience. 2 Cr Hrs. Course Requirement(s): Dept Approval. Ohio TAG Course [OHL010].

**MLT1030                      Phlebotomy Theory and Techniques**

This course provides the student with the theory and hands-on training to perform venipunctures and capillary skin puncture. The student is instructed in the anatomy and physiology of the circulatory system, specimen collection, specimen processing and handling, safety and quality control. Upon successful completion of this course, the student will be able to perform phlebotomy in the clinical experience. 2 Cr Hrs. Course Requirement(s): MLT1010, Department Approval.

**MLT1040                      Hematology and Coagulation**

This course is a study of normal and abnormal blood cells. Blood smears are prepared and studied for the identification of blood cells that aid in the diagnosis of anemia, leukemia, hemoglobinopathies, and other disease states. Included is the study of coagulation and the routine procedures used to evaluate hemostasis. Upon successful completion of this course, the student will be able to perform routine hematology and coagulation procedures in the clinical experience. 4 Cr Hrs. Course Requirement(s): MLT1020. Ohio TAG Course [OHL009].

**MLT1050                      Clinical Chemistry**

This course applies introductory chemistry theory to the clinical chemistry laboratory. Topics include analysis of the chemical constituents in blood and body fluids, application of this information to health and disease, basic statistical methods and quality assurance. Techniques performed include manual and automated chemistry procedures. Upon completion of this course, the student will be able to perform routine clinical chemistry procedures and evaluate the results in the clinical experience. 4 Cr Hrs. Course Requirement(s): MLT1020, CHM1000.

**MLT1060                      Advanced Medical Laboratory Techniques**

This course provides advanced instruction in the various areas of the clinical laboratory including phlebotomy, hematology, urinalysis, immunology, microbiology and chemistry. The course will focus on medical theory, waived and point-of-care testing, quality assurance, and problem-solving in each technical area. Upon successful completion of this course, the student will be able to perform waived and point-of-care laboratory testing in the clinical/practicum experience. 2 Cr Hrs. Course Requirement(s): MLT1010

**MLT1400                      Phlebotomy Practicum and Seminar**

This course provides the student with 100 hours of clinical experience in phlebotomy. The student must perform 100 successful venipunctures and skin punctures and participate in clinical laboratory orientation. Included in the course is a review and correlation of knowledge taught in the curriculum and preparation for the Registry Exam. Students will investigate professional development opportunities. 2 Cr Hrs. Course Requirement(s): MLT1060.

**MLT2000                      Clinical Microbiology I**

This course provides a brief introduction to general microbiology followed by advanced instruction in clinical bacteriology. The course will focus on bacteria associated with disease. The student will learn to examine and culture various specimens, isolate and identify clinically significant bacteria, and perform antibiotic susceptibility tests. Upon successful completion of this course, the student will be able to perform routine clinical microbiology procedures and evaluate the results in the clinical/practicum experience. 4 CrHr Prerequisites: MLT1040, MLT1050.

**MLT2010                      Immunology and Serology**

This course provides a study of the immune system, the nature of immune responses and the application of this theory

to laboratory testing, health and disease. Upon successful completion of this course the student will be able to perform routine immunological testing in the clinical experience. 2 Cr Hrs. Course Requirement(s): MLT1040 and MLT1050.

**MLT2020                      Immunohematology**

This course is an in-depth study of the serological procedures included in pre-transfusion testing. Procedures in ABO/Rh typing, antibody screen and identification, phenotyping of red blood cells and cross-matching will be presented and practiced. Additional topics included are: collection, processing, storage and shipment of blood, blood transfusion practices, adverse effects of blood transfusions, and fetal/maternal incompatibilities. Students who successfully complete this course will be prepared to perform routine clinical blood bank and transfusion service procedures and evaluate test results in the clinical experience. 4 Cr Hrs. Course Requirement(s): MLT1040 and MLT1050.

**MLT2030                      Clinical Microbiology**

This course is a study of the identification of microorganisms associated with disease. The student will learn to examine and culture various specimens, isolate, identify clinically significant microorganisms and perform antibiotic susceptibility tests. The student will also be introduced to medical mycology and parasitology. Upon completion of this course, the student will be able to perform routine clinical microbiology procedures and evaluate the results in the clinical experience. 4 Cr Hrs. Course Requirement(s): MLT1040, MLT1050, SCI1300.

**MLT2080                      MLT Case Studies**

This capstone course provides students with the opportunity to apply their technical knowledge to laboratory case studies and to review major areas of the curriculum. Students will take exams similar to the Registry Exam. 2 Cr Hrs. Course Requirement(s): Department Approval.

**MLT2090                      MLT Clinical Experience & Seminar**

This course provides the student with practical clinical experience in an affiliated clinical laboratory. Students will practice clinical procedures and correlate their results in the laboratory setting under the guidance of laboratory professionals. Students will be required to journal activities and will complete professional development assignments and finalize their preparation for the Registry Exam. 8 Cr Hrs. Course Requirement(s): MLT2100

**MLT2100                      Clinical Microbiology II**

This course provides an introduction to medical mycology, mycobacteriology, parasitology, and virology in the aspects of fundamental epidemiology, disease transmission routes, clinical correlation of microbial diseases, as well as diagnostic tests to identify commonly encountered and clinically important viruses, fungi, and parasites. 2 Cr Hrs. Course Requirement(s): MLT2000.

**MLT2990                      Individual Investigation**

This course offers independent study designed to meet a specific student need in the field of Medical Laboratory Science. Graded satisfactory/unsatisfactory. 1 - 4 Cr Hrs. Course Requirement(s): Department Approval.

**MTH0910                      Mathematical Literacy**

Mathematical Literacy is designed to prepare students for a course in Quantitative Reasoning, Statistics, or Algebraic Literacy. Numeracy, proportional reasoning, algebraic reasoning, and functions will be integrated throughout the course. 4 Cr Hrs. Course Requirement(s): Placement.

**MTH0920                      Algebraic Literacy**

Algebraic Literacy is designed to prepare students for College Algebra or another STEM focused mathematics course. Functions, quadratic equations, exponential functions, logarithmic functions, radicals, complex numbers, and an introduction to vectors will be covered. 4 Cr Hrs. Course Requirement(s): Placement or MTH0910.

**MTH0930                      Quantitative Reasoning Co-Requisite**

This co-requisite course is designed to increase student success in MTH1230 Quantitative Reasoning. This course may include reviewing linear equations, percent, proportions, measurement, exponents, and descriptive statistics. Content

may vary to meet students' needs. 2 Cr Hrs. Prerequisite(s): Placement. MTH1230 must be taken concurrently with this course..

**MTH0940                      Statistics Co-Requisite**

This co-requisite course is designed to increase student success in MTH 1240 Statistics. This course may include reviewing properties of real numbers, basic algebra concepts, summation notation, sets, inequalities, and radicals. Content may vary to meet students' needs. 2 Cr Hrs. Course Requirement(s): Placement. MTH1240 must be taken concurrently with this course.

**MTH0945                      College Algebra Co-requisite**

This co-requisite course is designed to increase student success in MTH1245, College Algebra. This includes reviewing pre-requisite topics such as linear graphs, linear equations, solving quadratic equations and inequalities, radicals, and laws of exponents 2 Cr Hrs. Course Requirement(s): Placement. MTH1245 must be taken concurrently with this course.

**MTH1075Z                      Precollege Mathematics II**

Algebraic, rational, and radical expressions; functions and graphs; quadratic equations; absolute value; inequalities; and applications. Credit for this course will not count toward graduation in any degree program. This course is available for EM credit. GE quant reason basic computation course. 4 Cr Hrs. Course Requirement(s): 1074 or 075; or a grade of C- or above in 1050; or Math Skills Assessment Level R or S; or ACT math subscore of 22 or higher that is less than 2 years old. Not open to students with credit for any Math course above 1075, except for 1116; or for any quarter-system course above 075, except for 116.

**MTH1148Z                      College Algebra**

Functions: polynomial, rational, radical, exponential, and logarithmic. Introduction to right-angle trigonometry. Applications. Prereq: A grade of C- or above in 1075, or credit for 104 or 148, or Math Placement Level N, or ACT math subscore of 22 or higher that is less than 2 years old, or permission of department. Not open to students with credit for 1144, or for Math courses numbered 1150 (150) or above. This course is available for EM credit. GE quant reason math and logical only course.

**MTH1215                      Excursions in Mathematics**

This course is designed to expose students to a variety of modern mathematical ideas and to develop mathematical problem-solving skills. It is intended for students with interests in the liberal arts and social sciences. Topics covered include the mathematics of Elections, Apportionment, Getting Around, Touring, Networks, Population Growth, Symmetry, Fractal Geometry, Fibonacci Numbers, The Golden Rule, Graphs, Probabilities, Odds, and Expectations. 3 Cr. Hrs. Course Requirement(s): Placement or MTH0910.

**MTH1230                      Quantitative Reasoning**

Quantitative reasoning allows students to explore mathematical topics encountered on a day-to-day basis. Students will learn to communicate with numbers effectively through real-life problems and situations. Topics include ratios, rates, percentages, units, descriptive statistics, linear and exponential modeling, personal finance, and probability. 3 Cr Hrs. Course Requirement(s): Placement or MTH0910.

**MTH1240                      Statistics**

Statistics is an introduction to descriptive and inferential statistical methods including sampling, probability, point and interval estimation, hypothesis testing, and regression. Real data and appropriate technology will be used. 3 Cr Hrs. Course Requirement(s): Placement or MTH0910.

**MTH1245                      College Algebra**

College Algebra emphasizes the use of algebra and functions in problem solving and modeling. Appropriate use of technology and applying mathematics to real-world situations is emphasized. Topics include relations, functions, graphs, polynomial functions, rational functions, exponentials, logarithms, and systems of equations. 3 Cr. Hrs. Course Requirement(s): Placement or MTH0920.

**MTH1250**                      **Precalculus**

This course is a continuation of College Algebra (MTH1200). Topics covered include analytic trigonometry, applications of trigonometric functions, polar coordinates and vectors, analytic geometry, systems of equations and inequalities, sequences, induction, the binomial theorem and a preview of calculus. Students are required to have a TI-83 Plus, TI-84 Plus or equivalent graphing calculator. 3 Cr. Hrs. Course Requirement(s): Placement or MTH1245. Students cannot test into this class. Ohio Transfer Module (OTM) Sequence Courses MTH1245 & MTH1250 [TMM002].

**MTH2000**                      **Calculus I**

This is the first course in Calculus. Topics include a) Functions including a review of functions, representing functions, and trigonometric functions; b) Limits including definitions and techniques for computing limits, infinite limits, limits at infinity, and continuity; c) Derivatives including the rules of differentiation, derivatives of trigonometric functions, implicit differentiation, and the chain rule; d) Applications of the Derivative including maxima and minima, graphing functions, optimization problems, the mean value theorem, and L'Hopital's rule; e) Integration including area under curves, definite integrals, the fundamental theorems of calculus, and the substitution rule; f) Applications of Integration including velocity and net change, regions between curves, volumes by slicing and shells, length of curves and physical applications. Students are required to have a TI-83 Plus, TI-84 Plus, or equivalent graphing calculator. 5 Cr Hrs. Course Requirement(s): Placement or MTH1250. Ohio Transfer Module (OTM) Course [TMM005]; and, OTM Sequence Courses MTH2000 & MTH2050 [TMM017].

**MTH2050**                      **Calculus II**

This is the second course in Calculus. Topics include a) Logarithmic and Exponential Functions including inverse functions, natural logarithmic and exponential functions, exponential models, inverse trigonometric functions, and L'Hopital's rule. b) Integration Techniques including integration by parts, trigonometric integrals, trigonometric substitution, partial fraction, numerical integration, improper integrals and an introduction to differential equations. c) Sequences including infinite series, divergence, integral, ratio, root, and comparison tests. d) Power Series including approximating function and polynomials, and Taylor series. e) Parametric and Polar Curves including parametric equations, polar coordinates, and conic sections. f) Vectors and Vector-Valued Functions including vectors in planes and three dimensions, dot and cross products, lines and curves in space, calculus of vector-valued functions, motion in space, length of curves, and curvature and normal vectors. Students are required to have a TI-83 Plus, TI-84 Plus, or equivalent graphing calculator. 5 Cr Hrs. Course Requirement(s): MTH2000. Ohio Transfer Module (OTM) Course [TMM006]; and, OTM Sequence Courses MTH2000 & MTH2050 [TMM017].

**MTH2990**                      **Individual Investigation**

This course offers independent study designed to meet a specific student need in the field of Mathematics. Graded satisfactory/unsatisfactory. 1 – 4 Cr Hrs. Course Requirement(s): Department Approval.

**NTR1100**                      **Nutrition**

The emphasis of this course is placed on the physiological processes of digestion, absorption and transport of carbohydrates, lipids (fats), and proteins in the human body. The role of vitamins, minerals and water in metabolic processes will be discussed. Students will receive an introduction to nutritional research, dietary reference intakes, nutritional assessment, diet planning and food labeling. Scientific evidence of current topics in nutrition will also be addressed. 3 Cr Hrs. Course Requirement(s): None. Ohio TAG Course [OHL016].

**NUR1002**                      **Introduction to Nursing Care**

The lecture component will cover basic concepts related to basic nursing care. Contents 1) an overview of the role of the nurse and nurse assistant, 2) communication and interpersonal skills, 3) infection control, 4) safety and emergency procedures, 5) promotion of residents' independence, 6) protection of and respect for residents' rights 7) psychosocial needs and interaction, and 8) basic nursing, personal care, and restorative care skills. Prerequisite: None.

**NUR1003**                      **Nurse Assistant Certification Prep**

This course includes the guidelines set forth in the Omnibus Budget Reconciliation Act of 1987 (OBRA 1987) and focuses on care of elderly resident in the long-term care (LTC) facilities. Content includes an overview of the role of the nursing

assistant, communication and interpersonal skills, infection control, safety and emergency procedures, promotion of residents' independence, protection of and respect for residents' rights, psychosocial needs and interactions, and basic nursing, personal care, and restorative care skills. Critical thinking situations are an integral part of each class discussion. 3 Cr Hrs. Course Requirement(s): None.

**NUR1004                      Nursing Test Success**

This course is an introduction to Test Taking Skills to assist nursing students to develop skills for effective test-taking in the nursing program and for NCLEX. Some topics that will be covered include how to effectively study for exams, how to manage time, review of test-taking strategies, and how to manage test anxiety. A variety of testing formats will be discussed with a major focus on NCLEX style questions. Dosage testing will also be discussed. 2 Cr Hrs Prerequisites: NUR1011 must be taken before or concurrently with this course.

**NUR1009                      Basic Nursing Skills**

This course is an introduction to the field of nursing. The course is based on an integrated approach of basic nursing content that is patient/family centered. Special emphasis is placed on the beginning skills of the nurse. Content includes communication and interpersonal skills, infection control, safety, promotion of patient's independence, protection of and respect for patient's rights, psychosocial needs, and interactions, and basic nursing, personal care, and restorative care skills. Critical thinking situations are an integral part of each class discussion. The clinical component of the course provides the student the opportunity to validate nursing skills and content for patients in a long-term facility. 2 Cr Hrs. Course Requirement(s): Major Only.

**NUR1011                      Foundations of Adult Nursing Care I**

This course provides an introduction to the field of nursing. The course is based on an integrated approach of basic nursing content areas that is patient centered. Special emphasis is placed on the roles of the nurse, utilization of the nursing process, and the categories of human functioning. This course also focuses on the needs of geriatric and adult acute-care medical-surgical patients. The student is assisted in the development of psychomotor skills for nursing care of patients and pharmacology principles and skills. The clinical component of the course provides the student the opportunity to validate nursing skills and content for adults in long-term care. 6 Cr Hrs. Course Requirement(s): Major Only. NUR1003 or STNA or equivalent must be taken before this course.

**NUR1021                      Foundations of Adult Nursing Care II**

This course continues an introduction to the field of nursing. The course is based on an integrated approach of basic nursing content areas that is patient-family centered. Special emphasis is placed on the roles of the nurse, utilization of the nursing process, and the categories of human functioning. Students will also be assisted in the development of psychomotor skills and pharmacology principles/skills. The clinical component of the course provides the student the opportunity to validate nursing skills and content for medical-surgical patients in an acute care setting. 4 Cr Hrs. Course Requirement(s): NUR1011.

**NUR1032                      Nursing Care of Women and Children**

This course contains two parts which include maternal/child and female reproductive health (OB) and pediatric nursing (PEDS). The student is assisted in the further development of psychomotor skills for nursing care of patients and families and pharmacology principles and skills. The clinical component of the course provides the student the opportunity to validate nursing skills and content for the pediatric and maternal/infant patients. 3 Cr Hrs Course Requirement(s): NUR1021.

**NUR1040                      Transition**

This blended course is designed to assist the Licensed Practical Nurse (LPN) in the transition into second year courses. This course will also assist the LPN to make the transition in the role from LPN to that associated with professional nursing. The content will include the core threads from NUR1011, NUR1021 and NUR1032. A review of basic skills and their clinical application will also be included. 6 Cr Hrs. Course Requirement(s): STNA or equivalent, and unrestricted Ohio LPN License.

**NUR1111                    Interpreting Basic Electrocardiograms**

Interpreting Basic ECG's will prepare nurses, medical, allied health and nursing students, emergency medical technicians (EMT's) and EMT students, and telemetry monitor technicians to acquire the knowledge and skills essential for identifying basic arrhythmias. The student will learn to interpret and analyze normal rhythm strips and basic dysrhythmias. The ECG tracings serve as valuable diagnostic tools that allow the student to recognize potentially life-threatening situations. 1 Cr Hr. Course Requirement(s): None.

**NUR1150                    CPR & First Aid**

This CPR course will include background information about heart disease, risk factors, prudent heart, and heart/lung function. One and two rescuer cardiopulmonary resuscitation (CPR) and foreign body airway obstruction management for adult, child, and infant resuscitation will be taught. This course will consist of lecture and practice on CPR adult, child, and infant manikins. Satisfactory completion will result in certification in basic life support (CPR). The course will also have a lecture on Basic First Aid. The American Heart Association standards are used for both CPR and First Aid. 1 Cr Hr. Course Requirement(s): None..

**NUR2001                    Alterations in Mental Health Nursing**

Mental Health Nursing is introduced from a historical perspective continuing through current treatment trends, often community-based. Patients' rights with mental health care, standards of mental health nursing practice, and types of therapies are presented. Student nurses will have the opportunity to apply knowledge to patients with mental illness such as mood disorders, anxiety-related disorders, substance abuse, anger and domestic violence, schizophrenia, cognitive disorders, personality disorders, and somatoform disorders. Additional information is provided by the study of children and adolescents with common mental health disorders, treatment, medications, and family issues. Behaviors associated with eating disorders are also discussed. Each area of study provides the student the opportunity to examine cultural considerations. The psycho-pharmacology and nutritional needs for each category of disruptions in mental health are also covered. Students will have the opportunity to examine their own feelings related to each topic. 3 Cr Hrs. Course Requirement(s): NUR1021 and NUR1032 or NUR1040 (if applicable), and SCI1250, PSY2100.

**NUR2011                    Alterations in Functioning I**

Nursing roles, nursing process, and categories of human functioning are emphasized for the client/family with common chronic alterations in functioning. Additional knowledge will be gained for the maintenance of high level wellness and the prevention of disease. Beginning management and leadership theory is introduced and continued in the clinical experience including critical thinking, delegation, and prioritization.. Students will practice advanced nursing skills in the campus laboratory. Students will have the opportunity to validate nursing knowledge in a variety of health care settings. Topics include diseases and surgical intervention for the respiratory, cardiac, gastrointestinal, and skeletal systems, as well as cancer. 8 Cr Hrs. Course Requirement(s): NUR2001, SCI1300.

**NUR2021                    Alterations in Functioning II**

Nursing roles, nursing process, and categories of human functioning are emphasized for the client/family with acute and chronic alterations in functioning. Additional knowledge will be gained for the maintenance of high level wellness and the prevention of disease. Students will practice advanced nursing skills in the campus laboratory. Students will have the opportunity to validate nursing knowledge in a variety of health care settings and a preceptorship. Topics include diseases, surgical intervention and emergency situations in the cardiac, respiratory, endocrine, and renal systems, burn therapy, multi-system failure and blood dyscrasias. 8 Cr Hrs. Course Requirement(s): NUR2011.

**NUR2040                    Nursing Issues**

The change from student nurse to beginning practitioner of nursing will be addressed in this course. Marion Technical College resources for resumes and interviewing for nursing employment will be provided. Mastery of curricular material in preparation for the NCLEX exam must be accomplished. Students will receive instructions on how to register for the NCLEX-RN. 1 Cr Hr. Course Requirement(s): ENG1000. NUR2021 must be taken concurrently with this course.



**NUR2990 Individual Investigation**

This course offers independent study designed to meet a specific student need in the field of Nursing. Graded satisfactory/unsatisfactory. 1 - 4 Cr Hrs. Course Requirement(s): Department Approval.

**OIS1200 Computer Basics**

With learner-centered instruction in this beginning course, students will learn the Windows operating system and the fundamentals of touch keyboarding techniques. OIS1200 will teach students to use Windows to organize data using files and folders, manipulate menus, customize the desktop, and work with application programs. In addition, students will learn to navigate the Internet and use e-mail. 1 Cr. Hr. Course Requirement(s): None.

**OIS1210 Fundamentals of Computer Applications**

This course is being proposed due to the limitations presented in the prison environment on the standard OIS1240 course as taught on main campus. With the unavailability of the internet and actual experience with email and browsers, it will benefit the student to focus more on the applications. The course is being revised to include more instruction on the individual Microsoft Office applications of Word, Excel, and PowerPoint and the basic functions of the Microsoft Operating System. 3 Cr Hrs. Course Requirement(s): Placement requirements or OIS1200.

**OIS1220 Healthcare and Nursing Informatics**

This online course is offered to explore the field of technology and its use in health care. Health care and technology are both ever-changing fields. This course provides learning to pre-nursing and associate level nursing students related to the use of technology in the delivery of health care. Students will complete hands on projects using software applications including but not limited to: Microsoft Word, Excel, PowerPoint, and Access. 3 Cr Hrs. Course Requirement(s): Placement or OIS1200.

**OIS1240 Computer Applications**

This integrated, project-based course will help students use the software applications Microsoft® Word, Excel, PowerPoint, and Access for a PC, to solve business problems. Students will use the Internet and e-mail as they research topics and prepare documents using the appropriate software applications. Course topics include technology history, future trends in technology, and the role of technology in a professional environment. 3 Cr Hrs. Course Requirement(s): OIS1200 or Placement. Ohio TAG Course (for HIT program only) [OBU003].

**OIS1255 Business Integrated Technologies**

Students will use business information management tools to communicate with others, manage information, meet virtually, and schedule daily activities. Digital tools including collaboration software applications, Cloud Computing, and mobile devices will be explored. Other emerging technologies used in the office environment will be integrated throughout the course. 3 Cr Hrs. Course Requirement(s): OIS1240 and BUS1010.

**OIS1260 PowerPoint**

PowerPoint graphics software will be used to create multimedia presentations that capture an audience's attention. Students will create, design, and modify presentations; work with visual elements; integrate data from other sources; create output options; and deliver presentations both synchronously and asynchronously. 1 Cr Hr. OIS1240 must be taken before or concurrently with this course.

**OIS1280 Records and Data Management**

This course is the study of the life cycle of business records with emphasis on the principles and procedures of creation, maintenance, storage, retrieval, retention, and disposal of these business records. The principles and procedures include the operation and control of manual and database systems using tangible systems with simulated data. Students will integrate Microsoft® Office applications throughout the record control process and explore industry policies and procedures. 2 Cr Hrs. Course Requirement(s): OIS1240.

**OIS1320 Word Advanced**

Students will use advanced Microsoft® Word features to create a variety of business publications including brochures, fliers, and newsletters. This course also covers expert-user Word features such as creating fill-in forms; working with

shared documents; and integrating Microsoft® Office applications for a PC. Students will create both traditional and e-portfolios. 3 Cr Hrs. Course Requirement(s): OIS1240.

**OIS1340 Excel Advanced**

Using Excel the student will organize, analyze, interpret, and present data. Expert Excel features covered include manipulating named ranges within formulas, using advanced functions, data validation, pivot tables, importing and exporting data, and integrating Microsoft® Office applications. 3 Cr Hrs. Course Requirement(s): Placement or MTH0910; and OIS1240.

**OIS1500 Web Page Authoring I**

Students will learn to create, manage, and publish Web pages to the World Wide Web. Students will complete an extended study of audiences, design principles, copyrights, and accessibility concepts. Adobe Dreamweaver, a Web page authoring and site management software application will be introduced. Students will create an e-resume and a Web site as a final project. 3 Cr Hrs. Course Requirement(s): OIS1240.

**OIS1520 Scripting**

Web languages will be introduced and utilized to create and modify Web sites. You will use Hypertext Mark-up Language (HTML) to develop Web pages and Java Script to provide interactivity on Web sites. PHP, a general-purpose scripting language, will be introduced. Students create a final portfolio of Web assignments, demonstrating their skills. 3 Cr Hrs. OIS1240 must be taken before or concurrently with this course.

**OIS1600 Design Fundamentals for Visual Media**

In this introduction to design, you will explore the fundamentals and principles of art, and develop problem-solving skills. Music and visual arts are explored and critiqued. Students demonstrate an understanding of art and design concepts and principles through the use of visually oriented projects using Adobe Illustrator and drawing techniques. 3 Cr. Hrs. Course Requirement(s): OIS1200 or successful completion of the Technology Skills Test (TST).

**OIS1620 Digital Image Manipulation**

The basics of Adobe Photoshop will be introduced and utilized in this class. You will use layering, channels, selection, and paint-related tools. Image correction and re-touching techniques are practiced. Students demonstrate their learning through mini-portfolio projects. 3 Cr. Hrs. OIS1240 must be taken before or concurrently with this course.

**OIS2011 Video and Photography Technologies**

The principles and techniques of desktop video and photography production are explored in this course. You will utilize cameras, basic digital image manipulation software and movie editing software to create and edit multimedia projects. Planning for a video production is a focus topic, and includes audience evaluation, project proposal, and storyboarding. Principles of lighting, staging, camera use, postproduction, and distribution will be covered. Students plan, shoot, edit, and post several digital media projects to the Web. 3 Cr. Hrs. OIS1240 must be taken before or concurrently with this course.

**OIS2980 Special Topics**

This is a special course in the area of office information designed to give groups of students the opportunity to pursue studies not otherwise offered in the degree program. Graded on a Satisfactory/Unsatisfactory basis. 1 - 4 Cr. Hrs. Course Requirement(s): Department Approval.

**OTA1000 Directed Clinical Practice Level 1**

Level I academic fieldwork experience designed to provide the OTA student the opportunity to apply didactic learning and theory of occupational therapy in an OT setting, under the supervision of an OTR or COTA. Students must meet objectives designed through collaboration of academic and clinical educators. 1 Cr Hr. Course Requirement(s): OTA1020.

**OTA1010 Conceptual Foundations of OTA**

This course discusses knowledge on the nature, the history and the philosophy of occupational therapy in the United States. Students will also learn about meaningful occupation, purposeful activity, and domains of practice. Concepts like

practice models and theoretical frameworks will be discussed. We will also discuss the basic tenets of occupational therapy and how they are applied, along with what roles meaningful occupation and purposeful activity have as related to health and human well-being. We also discuss and learn the ethics of practice, reimbursement procedures, best practices, promoting occupational therapy, the collaborative relationship between the occupational therapist and the occupational therapy assistant through the occupational therapy process, licensure, credentialing, and laws and policies regulating the practice of occupational therapy. The Occupational Therapy Framework: Domain and Process will be studied. 3 Cr Hrs (lecture). Course Requirement(s): None.

**OTA1020                      Fundamental Skills for the OTA**

This course serves as the first building blocks for the OTA's professional foundations, including the teaching/learning process and therapeutic use of self. Social and cultural influences will be explored as they affect practice in occupational therapy. Students will explore the use of occupation, purposeful activity and activity/task analysis as means for assessment and intervention with clients. Students will also demonstrate competencies in the assessment of vital statistics, biomechanical components, professional communication skills, patient/caregiver/family education, body mechanics, documentation and other skills important for practice in clinical settings. Methods and techniques for screening, assessing and evaluation for occupational therapy performance strengths and problems will be introduced. The course will also study human performance and growth in areas of occupation (social participation, ADL, education, work, play and leisure) throughout the life span. 3 Cr Hrs (2 lecture/1 lab). Course Requirement(s): Program Accepted.

**OTA1530                      Functional Anatomy**

In this class, students will learn functional anatomy as it relates to the field of physical therapy. Emphasis is placed on the study of the skeletal system, arthrology, and the origin, insertion, action, and innervation of major muscles.. 3 Cr Hrs (2 lecture/1 lab). Course Requirement(s): OTA1020.

**OTA2000                      Practicum Level II A**

First eight-week fieldwork experience designed to provide the OTA student the opportunity to work in an OT setting, under the supervision of an OTR or COTA. Students must meet objectives designed by academic and clinical educators. 3 Cr Hrs. Course Requirement(s): OTA 2020; Grade of "C" or better in all academic coursework, satisfactory rating on Professional Behavior Competence document, and program director approval are required.

**OTA2001                      Practicum Level II B**

Second eight-week fieldwork experience designed to provide the OTA student the opportunity to work in an OT setting, under the supervision of an OTR or COTA. Students must meet objectives designed by academic and clinical educators. 3 Cr Hrs. Course Requirement(s): OTA 2020; Grade of "C" or better in all academic coursework, satisfactory rating on Professional Behavior Competence document, and program director approval are required.

**OTA2010                      The Child and Occupational Performance**

The course is a study of limitations and obstacles to occupational engagement (self-care, play, school) for persons from birth to age 22. Topics include common diagnoses, evaluation methods, treatment environments, and treatment for areas of occupation (ADL, IADL, education, work, play, leisure, and social participation), considering performance skills, performance patterns, client factors and context. Students will build practice skills in models of practice related to persons 0-22. 3 Cr Hrs (3 lecture). Course Requirement(s): OTA2040.

**OTA2020                      Physical Disability & Performance**

This course involves the study of physical health limitations and obstacles to occupational engagement for individuals and populations. Topics include common diagnoses and treatment environments, interventions and treatments under areas of occupation (BADL, IADL, education, work, leisure and social participation). Students will be required to develop applications for enabling function and physical well-being. Topics include major medical, orthopedic, and neurological diagnoses, with emphasis on symptoms, physical conditions, and medical and social supports related to those diagnoses. Evaluations and treatment planning for the physical health population are practiced. Course will focus on the development of observation skills; assessment; documentation; teaching; adapting; grading self-care, work, and play/leisure occupations for individuals with physical challenges. Additional topics include techniques and equipment to

maximize participation in meaningful occupations, improve independence, ensure safety, and prevent deformity. 3 Cr Hrs (2 lecture/1 lab). Course Requirement(s): OTA2040.

**OTA2030                      Psycosocial Intervention & Occ. Perfomnce**

The course is a study of mental health limitations and obstacles to occupational engagement for individuals and populations. Topics include common diagnoses and treatment environments, treatment for areas of occupation (ADL, IADL, education, work, play, leisure, and social participation), consideration of habits, performance patterns, component skills and context. The course studies individuals who are limited in their ability to engage in life activities due to challenges to their mental health. Topics include major DSM V diagnoses with emphasis on symptoms, behaviors, cultural influences, and medical and social supports related to those diagnoses. Evaluations and treatment planning for the mental health population are practiced. Students will research various psychosocial conditions with the focus on interventions, therapeutic activities, adaptations, and compensations that can be made to facilitate human performance. Students will build practice skills in models of practice and treatment techniques related to psychosocial dysfunctions and will learn to apply therapeutic use of self, knowledge of group dynamics, and other key techniques related to occupational therapy in mental health. 2 Cr Hrs. Course Requirement(s): OTA1020.

**OTA2040                      BioMechanical Intervention & Occ. Prfmnc**

This course focuses on the structure, function and movement of the musculoskeletal system as they apply to occupations of daily living skills. Technical proficiency of manual muscle testing, goniometric skills, treatment techniques and modalities are incorporated into this course. The course will study the kinetics of human motion of the musculoskeletal system of torso and upper extremities. Topics include evaluation procedures for range of motion, functional muscle strength and coordination testing, principles and techniques of body mechanics, transfers, positioning and motor learning theory. Splinting, physical agent modalities and other orthopedic interventions will be studied as they relate to occupational therapy, occupational performance and the upper extremity. 4 Cr Hrs (3 lecture/1 lab). Course Requirement(s): OTA1020.

**OTA2500                      The Elderly and Occupational Performance**

The course studies physical and mental health limitations and obstacles to occupational engagement for elderly individuals and populations living at home and in other geriatric settings. Topics include common diagnoses and treatment environments, treatment for areas of occupation (ADL, IADL, education, work, play, leisure, and social participation). Students will consider performance skills, performance patterns, client factors, and context. Students will be required to develop applications for enabling function, as well as promoting mental health and physical well-being in the geriatric population. Driving and community mobility will be key topics discussed in the course. 2 Cr Hrs (2 lecture). Course Requirement(s): OTA1000.

**OTA2510                      Clinical Conditions in Occ. Therapy**

This course involves study of common pathological disorders that often necessitate occupational and physical therapy intervention. Emphasis is placed upon inflammatory, metabolic, neoplastic, genetic and infectious disorders affecting the systems of the body.. 3 Cr Hrs. Course Requirement(s): OTA2040.

**OTA2600                      Neural Plasticity and Occupational Perf**

This course will develop knowledge of the neural plasticity, motor learning theory, teaching and learning theory during therapy, therapeutic use of self, and clinical skills related to neurological rehabilitation within the context of occupation. . Students will gain knowledge and skills necessary to improved the lives and occupational engagement of clients with neurological disorders from CVA, traumatic brain injury, spinal cord injury, and birth defects. Use of PNF and NDT techniques in the treatment of neurological patients are discussed. 2 Cr Hrs (2 lecture). Course Requirement(s): Major Only.

**OTA2980                      Special Topics**

This special course in the area of occupational therapy is designed to give groups of students the opportunity to pursue studies not otherwise offered in the degree program. Graded on a Satisfactory/Unsatisfactory basis. 1 – 4 Cr Hrs. Course Requirement(s): Department Approval.

**OTA2990 Individual Investigation**

This course offers independent study designed to meet a specific student need in the field of Occupational Therapy. Graded satisfactory/unsatisfactory. 1 – 4 Cr Hrs. Course Requirement(s): Department Approval.

**OTM0001 OTM Electives 1**

This course is used for the transfer-in of a course from another institution that does not equate to a course in our course inventory but could be used as an elective for the arts and science program. 1 - 4 Cr Hrs.

**PHY0001 Physics Elective 1****PHY1000 Principles of Electricity and Magnetism**

This course introduces the student to the basic principles of physics with an emphasis on electricity and magnetism. The course is designed to provide the student with not only a basic knowledge of electricity and magnetism but also an understanding of real world applications. To prepare the student to understand electricity and magnetism, additional topics include forces, work, energy, power, sound, and the atomic nature of matter. Topics in electricity and magnetism include electrical forces and fields, currents, electrical circuits, magnetic forces and fields, capacitance, electromagnetic induction and transformers. 2 Cr Hrs. Course Requirement(s): MTH0910.

**PHY1110 Applied Physics**

Physics is the study of natural phenomenon. Course will utilize experiments and various forms of media to instruct students in addition to the textbook content. Topics include vectors, motion, force, momentum, concurrent and parallel forces, work and energy, rotational motion, simple machines, matter, fluids, temperature/heat, waves/sound and electricity. 4 Cr Hrs. Course Requirements(s): TMT1110 must be taken before or concurrently with this course.

**PHY1200 Physics I**

This is the first in a two course series in algebra based physics. Topics include motion in one and two dimensions, projectile motion, circular motion, Newton's laws, drawing and analyzing free-body diagrams, gravity, torque, static equilibrium, elasticity, impulse, linear and angular momentum, work, kinetic energy, potential energy, power, heat, the first and second laws of thermodynamics, atomic model of matter, thermal expansion, pressure, specific heat, calorimetry, heat transfer, fluids, density, and buoyancy. Students are required to take Physics I Lab (PHY1210) with this course. 4 Cr Hrs. Course Requirement(s): Instructor permission. MTH1245 must be taken before or concurrently with this course. Ohio Transfer Module (OTM) Course [TMNS]; Ohio TAG Sequence Courses PHY1200 & PHY1210/Lab [OSC014]; and, Ohio TAG Sequence Courses PHY1200, PHY1210/Lab, PHY1250, PHY1260/Lab [OSC021]

**PHY1200Z Mechanics, Kinematics, Fluids, Waves**

Algebra-based introduction to classical physics: Newtons laws, fluids, waves. Prereq: A grade of C- or above in Math 1148 (148), or Math Placement Level M. Not open to students with credit for 111. This course is available for EM credit. GE nat sci phys course. NS Admis Cond course.

**PHY1210 Physics I Lab**

This lab class supports topics and concepts covered in the Physics I (PHY1200) lecture class. Students will complete hands-on experiments that will help them verify physical principles like projectile motion, static and kinetic friction, Newton's laws, air resistance, work, rotation and moments of inertia, energy, momentum, and the law of cooling. Students are required to completely document each lab and keep a comprehensive notebook consisting of all data and reports. In these reports students will be required to show how the data supports each concept covered in that lab. Students must sign up for both the lecture class and this lab class during the same semester. 1 Cr Hr. Co-Requisite: PHY1200. Ohio Transfer Module (OTM) Sequence Courses PHY1200 & PHY1210 [TMNS]; Ohio TAG Sequence Courses PHY1200 & PHY1210/Lab [OSC014]; and, Ohio TAG Sequence Courses PHY1200, PHY1210/Lab, PHY1250, PHY1260/Lab [OSC021].

**PHY1250 Physics II**

This is the second in a two course series in algebra based physics. Topics include harmonic motion, pendulum motion,

traveling waves, sound waves, light waves, energy and intensity, Doppler effect, standing waves, interference of waves, beats, interference of light, reflection, refraction, ray diagrams, color, dispersion, images from mirrors and lenses, charges and forces, Coulomb's law, electric fields, electric potential energy, the electric potential, capacitance and capacitors, polarization and dielectrics, direct current, resistors, Ohm's law, circuit elements and diagrams, Kirchhoff's laws, parallel and series circuits, complex circuits, magnetism, magnetic fields, forces on moving charges, induced currents, magnetic flux, Faraday's law, electromagnetic waves, photons, the electromagnetic spectrum alternating current, transformers, capacitor circuits, inductors, inductor circuits, RLC circuits, and oscillator circuits. Students are required to take Physics II Lab (PHY1260) with this course. 4 Cr Hrs. Course Requirement(s): PHY1200. Co-Requisite: PHY1260. Ohio Transfer Module (OTM) Sequence Courses PHY1250 & PHY1260/Lab [TMNS]; Ohio TAG Sequence Courses PHY1250 & PHY1260/Lab [OSC015]; and, Ohio TAG Sequence Courses PHY1200, PHY1210/Lab, PHY1250 & PHY1260/Lab [OSC021].

**PHY1260                      Physics II Lab**

This lab class supports topics and concepts covered in the Physics II (PHY1250) lecture class. Students will complete hands-on experiments that will help them verify physical principles like pendulums, simple harmonic motion, sound waves, the speed of sound, the polarization of light, Ohm's law, series and parallel circuits, capacitance, magnetic fields, and electric energy. Students are required to completely document each lab and keep a comprehensive notebook consisting of all data and reports. In these reports students will be required to show how the data supports each concept covered in each lab. Students are required to sign up for both the lecture class and this lab class during the same semester. 1 Cr Hrs. Co-Requisite: PHY1250. Ohio Transfer Module (OTM) Sequence Courses PHY1250 & PHY1260/Lab [TMNS]; Ohio TAG Sequence Courses PHY1250 & PHY1260/Lab [OSC015]; and, Ohio TAG Sequence Courses PHY1200, PHY1210/Lab, PHY1250, PHY1260/Lab [OSC021].

**PSY1100                      General Psychology**

This class is an introduction to theories and techniques used by psychologists for describing, explaining, predicting and influencing human behavior. Topics covered include learning, cognition, intelligence, motivation, emotion, personality and abnormal behavior. Also, available ONLINE: Completely online except for make-up tests must be proctored. 3 online tests over 3 separate units. Must be able to complete discussion board forums and submit assignments via CANVAS. 3 Cr Hrs. Course Requirement(s): None. Ohio Transfer Module (OTM) Course [TMSBS]; and, Ohio TAG Course [OSS015].

**PSY1500                      Social Psychology**

This course is designed to balance research and application, covering social cognition, attitude formation and change, conformity/obedience, group processes, pro-social behavior, aggression, and stereotyping/prejudice. Also offered ONLINE. 3 Cr Hrs. Co-Requisite: PSY1100. Ohio Transfer Module (OTM) Course [TMSBS]; and, Ohio TAG Course [OSS016].

**PSY2100                      Human Growth and Development**

This class provides an advanced study of human development over the life span, from conception to death. Included are emotional, intellectual, moral, physical, and social development. PSY2100 offers an analysis of the interaction of human characteristics within the individual and the relationship between individuals and their environment at various stages in development. Also available On-Line. 3 Cr Hrs. Course Requirement(s): PSY1100. Ohio Transfer Module (OTM) Course [TMSBS]; and, Ohio TAG Course [OSS048].

**PTA1000                      Introduction to Physical Therapy**

The student will learn about the profession of physical therapy including its current and historical role within the healthcare system. Topics covered include the roles of the PT, PTA, and Aide; career exploration; standards of practice; evidence-based practice; communication; diversity; and the legal and ethical delivery of physical therapy services. 2 Cr Hrs (2 hrs lecture). Course Requirement(s): None.

**PTA1010                      PTA Medical Documentation**

The student will learn common medical abbreviations and will learn to perform basic documentation of common

treatments rendered in physical therapy. The legal and professional ramifications of physical therapy documentation will also be discussed. 1 Cr Hr. (2 hrs lab). Course Requirement(s): PTA Program Accepted.

**PTA1100                      PTA Patient Care Skills**

In this course students will learn basic patient care skills including infection control, vital sign assessment, patient positioning, draping, and transfer techniques. Students also learn and apply theories of physics in regards to proper body mechanics, gait instruction and postural analysis. Selection and fitting of assistive ambulatory devices is taught. 3 Cr Hrs (2 hrs lecture, 3 hrs lab). Course Requirement(s): PTA Program Accepted.

**PTA1102                      PTA Modalities**

This course introduces students to modalities utilized in physical therapy including the physical properties, theory, indications and contraindication of each. This course utilizes a lab and lecture format to introduce the application of heat, cold, light, water, ultrasound, spinal traction, and electrical stimulation for pain relief and muscle stimulation. Ultrasound with electrical stimulation and iontophoresis techniques are also learned. 3 Cr Hrs (2 hrs lecture/3 hrs lab). Course Requirement(s): PTA Program Accepted.

**PTA1104                      Therapeutic Exercise**

This course covers the theory and skills of the practical application of Therapeutic Exercise. The application of manual muscle testing results and instruction in the areas of ROM, AROM, AAROM, Progressive Resistive Exercise, stretching, coordination, balance, relaxation, aquatic therapy, general fitness, and sports medicine are included. Continued study of posture and its relationship with exercise, as well as a multitude of orthopedic pathologies and appropriate therapeutic exercise programs, are included. 4 Cr Hrs [3 hrs lecture/3 hrs lab]. Course Requirement(s): PTA1000, PTA1010, PTA1100, PTA1102, SCI1200. SCI1250 must be taken before or concurrently with this course.

**PTA1105                      PTA Kinesiology & Orthopedic Cnsdrtn**

This course involves the review of basic functional anatomy and an in-depth analysis of human motion. The biomechanics of each joint will be discussed along with common orthopedic joint dysfunctions, pathologies and special tests. Students will examine the gait cycle and identify possible causes for abnormal gait. An overview of peripheral joint mobilization will be introduced. Detailed goniometry and manual muscle testing will be the focus of lab content. 4 Cr Hrs [3 hrs lecture/3 hrs lab]. Course Requirement(s): PTA1000, PTA1010, PTA1100, PTA1102, SCI1200. SCI1250 must be taken before or concurrently with this course.

**PTA2010                      Clinical Practicum I**

This course serves to introduce the student to the actual practice of the physical therapist assistant using skills learned in the first year of academics. Students are mentored by a licensed physical therapy clinician for 5 weeks. The purpose of this course is to enable the student physical therapist assistant to begin practicing those PTA skills learned in the laboratory environment in the PT clinic under the guidance of a licensed physical therapy clinician. Students are expected to meet safe and effective practice standards on those skills available by affiliation end. [35-40 clinical hours per week for 5 weeks]. 1 Cr Hr. Course Requirement(s): ALH1103, PTA1104, PTA1105, SCI1250 must be taken before or concurrently with this course.

**PTA2105                      PTA Seminar I**

Students relate clinical highlights and experiences through classroom presentations, share a collective diary of clinical experiences, and review journal notations. Students also participate in a written and oral case study and complete cumulative discussions regarding aspects of clinical education. 1 Cr Hr. (12 contact hours of intensive study following PTA 2010). Course Requirement(s): ALH1103, PTA1104, PTA2105, SCI1250. PTA2010 must be taken before or concurrently with this course.

**PTA2221                      PTA Pathophysiology**

This course involves study of common pathological disorders that often necessitate occupational and physical therapy intervention. Emphasis is placed upon inflammatory, metabolic, neoplastic, genetic and infectious disorders affecting the systems of the body. 3 Cr Hrs. Course Requirement(s): PTA2010 and PTA2105.

**PTA2223                      Rehabilitation for Specific Populations**

Orthopedic, cardiac, pulmonary, and integumentary dysfunctions are studied. The aging process is explored as well as its relationship to the practice of physical therapist assisting. Students will study postural drainage and percussion techniques, gain knowledge and skills in the topics of cardiac rehabilitation, wound care, prosthetics, orthotics, obesity, and women's health. 4 Cr Hrs. (3 hrs lecture/3 hrs lab). Course Requirement(s): PTA2010 and PTA2105.

**PTA2224                      Neurological Rehabilitation**

Students will gain knowledge and skills necessary to treat clients with neurological disorders from CVA, traumatic brain injury, spinal cord injury, and birth defects. The lecture and lab format is used to explore sensory and reflex integration, developmental sequence, and neonatal care. Use of PNF and NDT techniques in the treatment of neurological patients are discussed and practiced in a lab setting. 4 Cr Hrs (3 hrs lecture/3 hrs lab). Course Requirement(s): PTA2010 and PTA2105.

**PTA2310                      Clinical Practicum II**

A licensed physical therapist or physical therapist assistant clinician serves as mentor and clinical instructor. Students work in an off-campus clinical environment where they continue to apply skills gained from classroom instruction. [35-40 clinical hours per week for 6.5 weeks]. 2 Cr Hrs Course Requirement(s): PTA2221, PTA2223, PTA2224. PTA2320 and PTA2350 must be taken before or concurrently with this course.

**PTA2320                      Clinical Practicum III**

This course is a continuation of the clinical practice experience gained in PTA 2310. A licensed physical therapist or physical therapist assistant serves as a mentor and clinical instructor. This course offers the student the opportunity to safely use skills gained during classroom instruction in an off-campus setting. [35-40 clinical hours per week for 6.5 weeks]. 2 Cr Hrs Course Requirement(s): PTA2221, PTA2223, PTA2224. PTA2310 and PTA2350 must be taken before or concurrently with this course.

**PTA2350                      PTA Seminar II & III**

This course serves to review the PTA curriculum in preparation for the National Physical Therapy Examination for licensure. Discussion of the experiences and learning encountered during the final clinical experiences is included. A mock licensure examination and cumulative written examinations will be conducted. Students will also explore issues affecting the practice of physical therapist assisting within the modern health care system. Résumé, cover letter, and resignation letter composition is learned. Mock employment interviews will be conducted. A variety of related topics will be presented, including licensing procedures. [16 contact hours of intensive study following completion of PTA 2320]. 1 Cr Hr. Course Requirement(s): PTA2221, PTA2223, PTA2224. PTA2310 and PTA2320 must be taken before or concurrently with this course.

**PTA2990                      Individual Investigation**

This course offers independent study designed to meet a specific student need in the field of Physical Therapist Assisting. Graded satisfactory/unsatisfactory. 1-5 Cr Hrs. Course Requirement(s): Department Approval.

**RAD1001                      Intro to Radiologic Technology**

This is an orientation to Radiologic Technology. Student and Technologist responsibilities are outlined, as well as their role in the health care delivery system. Basic principles of radiation protection are introduced. 2 Cr Hrs. Course Requirement(s): None.

**RAD1010                      Methods of Patient Care**

This course will provide the student with basic concepts of patient care, including consideration for the physical and psychological needs of the patient and family. Routine and emergency patient care procedures will be described, as well as infection control procedures utilizing standard precautions. Methods and techniques of contrast administration, as well as categories will be discussed. Medical ethics is included. 2 Cr Hrs. Course Requirement(s): None.

**RAD1020                      Radiographic Positioning & Procedures I**

This unit is designed to provide the student with the knowledge and skills necessary to perform standard radiographic



procedures of the chest, abdomen, upper and lower extremities, pelvis and hip. Also spine and bony thorax are included. Positioning terminology is defined and applied clinically. 4 Cr Hrs. Course Requirement(s): RAD1000 program acceptance.

**RAD1030                      Radiographic Positioning & Procedures II**

This course includes a study of procedures of the skeletal, digestive, biliary, urinary systems, mobile, surgical, headwork, pediatric, reproductive, and respiratory systems. Trauma situations are presented. Contrast media is discussed. 4 Cr Hrs. Course Requirement(s): RAD1020.

**RAD1052                      Radiation Physics**

This course will provide the student with knowledge of basic physics. Fundamentals of x-ray generating equipment are discussed. Information on x-ray generating equipment is discussed. Information on x-ray production, beam characteristics, and units of measurement is provided. 2 Cr Hrs. Course Requirement(s): ALH1190.

**RAD1061                      Principles of Radiographic Exposure**

This course will provide the student with knowledge of factors that govern and influence the production of the radiographic image on the image receptor. Processing the image and computed radiography are included. Concepts in exposure technique are discussed. 2 Cr Hrs. Course Requirement(s): RAD1052.

**RAD1100                      Radiologic Technology Clinical I**

This course is the first of five of clinical applications of radiographic procedures and includes scheduled clinical rotation assignments. All clinical courses include scheduled image analysis classes. A clinical lab is required in most clinical courses. This course will provide the student with the necessary introductory clinical education needed to begin to practice radiography. This course takes place in imaging departments with actual patient contact. The student will rotate through assigned clinical areas. The student will be evaluated for clinical competency of the semester. The student will be under direct supervision the entire semester. The student will follow all policies and procedures of the program. 3 Cr Hrs Course Requirement(s): RAD1000.

**RAD1200                      Radiologic Technology Clinical II**

This course is the second of five of clinical applications of radiographic procedures. This includes scheduled clinical rotation assignments. All clinical courses include scheduled image analysis classes; clinical lab is required in most clinical courses, and student meetings. This course will provide the student with the necessary clinical education needed to continue to practice radiography. This course takes place in imaging departments, with actual patient contact. The student will rotate through assigned clinical areas. The student will be evaluated for clinical competency during the semester. The student will be under direct and indirect supervision during the semester. The student will follow all policies and procedures of the program. 3 Cr Hrs. Course Requirement(s): RAD1100.

**RAD1300                      Radiologic Technology Clinical III**

This course is the third of five clinical applications of radiographic procedures. Students are assigned scheduled clinical rotation assignments. All clinical courses include scheduled image analysis classes. Students are actively involved in all clinical procedures in their assigned clinical rotation. A clinical lab is required in all clinical courses. This course provides the student clinical education needed to practice radiography. This course takes place in imaging departments, with actual patient contact. The student will rotate through assigned clinical areas. The student will be evaluated for clinical competencies in the semester. In the senior year students are primarily under indirect supervision, however direct supervision still continues depending on completed competency requirements. The student will follow all policies and procedures of the program. Students will be assessed by technologists and school faculty. 4 Cr Hrs. Course Requirement(s): RAD1200.

**RAD2000                      Advanced Imaging Procedures&Equipment**

This course provides an in depth description of diagnostic procedures within the following areas: cardiovascular/interventional, computed tomography, mammography, MRI, ultrasound, nuclear medicine, and radiation therapy. Emphasis is placed on anatomy and the diagnostic and therapeutic value of each examination. Venipuncture

and sectional anatomy are included. This course will provide the student with knowledge of equipment routinely utilized to produce a diagnosis. The course includes explanation and discussion on conventional and digital fluoroscopy, tomography, computed tomography, magnetic resonance imaging, interventional and mammography equipment. Quality assurance is included. 2 Cr Hrs. Course Requirement(s): RAD1061 and RAD1030.

**RAD2030 Principles of Radiobiology**

This is an advanced study of the interaction of radiation on living systems. Included with biological responses are chronic and acute radiation effects, and a more in-depth look at radiation safety practices. 1 Cr Hr. Course Requirement(s): RAD2000.

**RAD2050 Radiographic Pathology**

Each system of the body is studied with regard to major pathological diseases and how the diseases are demonstrated radiographically. Different types of cancer and treatment are discussed. Students are required to give a case presentation. 1 Cr Hr. Course Requirement(s): RAD2000.

**RAD2060 Radiographic Review**

Radiographic review of all required program courses. A comprehensive test is used to evaluate comprehension of course material at the end of each semester. The comprehensive tests from previous semester are averaged for a final grade. Students will be required to take mock registry tests. RAD2060 is graded on a satisfactory/unsatisfactory basis. 1 Cr Hr. Course Requirement(s): RAD2000.

**RAD2071 CT: Principles and Protocol**

This course provides an in depth description of diagnostic procedures within computed tomography. Emphasis is placed on anatomy, and the diagnostic and therapeutic value of each examination. Patient care interactions and management. Administration of contrast media. Practicing ALARA. Image production, physics, and instrumentation. Venipuncture and sectional anatomy are included. This course also includes a review to prepared student for the ARRT National Registry. This course meets requirements of the ARRT regarding structured education for post primary Computed Tomography. Students completing this course must have successfully completed the ARRT National Registry for Radiography. 2 Cr Hr. Course Requirement(s):.None

**RAD2101 Radiologic Technology Clinical IV**

This course is the fourth of five of clinical applications of radiographic procedures. Students are assigned scheduled clinical rotation assignments. All clinical courses include scheduled image analysis classes. Students are actively involved in all clinical procedures in their assigned clinical rotation. A clinical lab is required in all clinical courses. This course provides the student clinical education needed to practice radiography. This course takes place in imaging departments, with actual patient contact. The student will rotate through assigned clinical areas. The student will be evaluated for clinical competencies of the semester. In the senior year students are primarily under indirect supervision, however direct supervision still continues depending on completed competency requirements. The student will follow all policies and procedures of the program. Students will be assessed by technologists and school faculty. 2 Cr Hrs. Course Requirement(s): RAD1300.

**RAD2201 Radiologic Technology Clinical V**

This is a continuation of Clinical IV. In this final clinical rotation, the students may be tested randomly over any required competency. This is done to ensure that the student is retaining the necessary skills required of a radiographer. Clinical rotations are scheduled. 2 Cr Hrs. Course Requirement(s): RAD2101.

**RAD2301 CT: Clinical**

This is a clinical course for Computed Tomography. This course provides the student the clinical education needed to practice Computed Tomography. This course takes place in imaging departments, with actual patient contact. The student will rotate through assigned clinical areas. The student will be completing clinical competencies. The student will follow all policies and procedures of the program. 3 Cr Hrs. Course Requirement(s): Department Approval

**RAD2990 Individual Investigation**

This course offers independent study designed to meet a specific student need in the field of Radiography. Graded satisfactory/unsatisfactory. 1 – 4 Cr Hrs. Course Requirement(s): Department Approval.

**REA1010 Real Estate Principles and Practices**

This is an introductory course designed for those interested in entering the real estate field as sales persons or brokers as well as for the general public. REA1010 covers the general background of real estate sales, licensure, terminology, mathematics, practice, and procedures. 3 Cr. Hrs. Course Requirement(s): None.

**REA1100 Real Estate Law**

This course focuses on the areas of law pertinent to real estate and those interested in becoming sales persons and brokers as well as the general public. This includes land as property, fixtures, estates and interests in land, deeds, contracts, finance, foreclosure, liens, the real estate closing, proof of title, agency, fair housing, zoning, landlord-tenant law, ethics, and decedents' estates. 3 Cr. Hrs. Course Requirement(s): None.

**REA1200 Real Estate Finance**

REA1200 explores the financial aspects of real estate with primary consideration being toward the fundamentals of mortgage banking, sources of funds for mortgage lending, loan application procedures and processing, inspection and appraisal of collateral, attracting new business, investing, and the effects of governmental monetary and fiscal policies. 2 Cr. Hrs. Course Requirement(s): REA1010.

**REA1300 Real Estate Appraisal**

This class includes definitions and terminology of real estate appraising, analyzing the real estate market, and explaining the appraisal process. Students will explore basic approaches to an estimate of value-cost, income and market data as well as the mechanics of inspecting and measuring improvements, and cost estimating. A term case study project is assigned providing practical experience in writing an appraisal report for a single family residence. 2 Cr. Hrs. Course Requirement(s): REA1010.

**SCI0001 Science Elective 1**

This course is used for the transfer-in of a course from another institution that does not equate to a course in our course inventory but could be used as a science elective for the arts and science program. 1 – 4 Cr Hrs.

**SCI0002 Science Elective II**

This course is used for the transfer-in of a course from another institution that does not equate to a course in our course inventory but could be used as a science elective for the arts and science program. 1 – 4 Cr Hrs.

**SCI1050 Principles of Biology & Chemistry**

This is an introductory science course for non-science majors or for students who lack the appropriate science background necessary to succeed in future two-semester chemistry, biology, or anatomy and physiology courses required for science majors or health programs. This course is designed to present concepts in chemistry and biology, and to promote scientific literacy.

**SCI1100 Basic Anatomy & Physiology**

The student will learn to recognize the structure, describe the physiological processes, and use the correct terminology to describe components of each of these body systems: integumentary, skeletal, articular, muscular, nervous, cardiovascular, immune/lymphatic, endocrine, respiratory, digestive, urinary, and reproductive. Online Section: Students must be able to use discussion board and submit assignments online. Assignments must be submitted in a readable format. Students need to consistently check MTC email. 4 Cr Hrs. Prerequisites: ALH1110 or HLT1100 can be taken concurrently.

**SCI1150 Exercise Physiology**

This course presents human anatomy and physiology as related to physical activity, exercise, and work. Students will learn the functional changes and adaptations that occur in response to short-term and long-term exercise. These

changes and adaptations will be studied as related to several organ systems of the body. Nervous, Muscular, Endocrine, Cardiovascular and Respiratory Systems will be included. Also studied will be basic principles of epidemiology, exercise terminology, metabolism, body composition, and nutrition as they relate to exercise. Adaptations to environmental stresses will also be discussed. 3 Cr Hrs. Course Requirement(s): SCI1100, or SCI1200 and SCI1250.

**SCI1200 Anatomy & Physiology I**

This is the first of a two-semester sequence. This course has a laboratory component which focuses on the structures & functions of cells and tissues, then the integumentary, skeletal, muscular & nervous systems using models, cadavers, and BioPac physiology equipment. The lecture component emphasizes the major organic molecules in the body, cells & tissues, and the physiology of the above systems. relates chemistry to anatomy. The lab then focuses on the structures of tissues and the skeletal, muscular and nervous systems. The lecture component emphasizes the physiology of these systems. 4 Cr Hrs. Course Requirement(s): SCI1050 or equivalent. Ohio Transfer Module (OTM) Course [TMNS].

**SCI1250 Anatomy & Physiology II**

This is the second of a two-semester sequence. This course has a laboratory component which focuses on the structures & functions of the special senses and the endocrine, cardiovascular, respiratory, digestive, urinary, and reproductive systems using models, cadavers, and BioPac physiology equipment. The lecture component emphasizes the physiology of all the above plus metabolism, acid-base balance, and fluid & electrolytes. 4 Cr Hrs. Course Requirement(s): SCI1200. Ohio Transfer Module (OTM) Course [TMNS].

**SCI1300 Microbiology**

This is an introductory course designed to give the student an understanding of microorganisms which have a relation to the health sciences. Principles of infection and resistance will be included. The laboratory component allows the student to become proficient in basic microbiological techniques. 4 Cr Hrs. Course Requirement(s): SCI1250 (with min grade of "C:") or Department Approval. Ohio Transfer Module (OTM) Course [TMNS].

**SCI2000 Advanced Human Physiology**

This course consists of units dealing with cellular organization, homeostasis, intercellular communication, and acid/base chemistry. The physiology of the respiratory, excretory, digestive, cardiovascular, and endocrine systems will also be presented. The lab will demonstrate physiologic principles. 4 Cr Hrs. Course Requirement(s): SCI1250. Ohio Transfer Module (OTM) Course [TMNS].

**SOC1200 Sociology**

This course will introduce students to the sociological study of society. Sociology focuses on the systematic understanding of social interaction, social organization, social institutions, and social change. Major themes that will be examined in this course include the interplay between the individual and society, how society is both stable and changes, the causes and consequences of social inequality, and the social construction of human life. Students will be able to identify and explain social patterns and how such patterns change over time and in different settings. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups and societies. Online Classes: Students must have regular access to a computer, the Internet and be able to use discussion boards and to submit assignments online. Assignments must be submitted in a readable format. Students need to consistently check MTC email/Canvas. 3 Cr Hrs. Course Requirement(s): None. Ohio Transfer Module (OTM) Course [TMSBS]; and, Ohio TAG Course [OSS021].

**SOC1400 Personal and Family Relations**

This course is an exploration of the development and maintenance of effective intimate relationships. SOC1400 includes a study of the effect of role expectations, attitudes, values, socioeconomic factors and stress on joint decision making and conflict resolution in dating, marriage, and family relations. By taking this course, students will increase their knowledge about developing, maintaining, and changing relationships in their personal and family life. SOC1400 will explore the numerous choices individuals make throughout the different stages of relationships, and the potential

consequences of those choices. 3 Cr Hrs. Course Requirement(s): None. Ohio Transfer Module (OTM) Course [TMSBS]; and, Ohio TAG Course [OSS023].

**SOC2200 Social Problems**

This class will examine a variety of contemporary social problems. Topics may include drug abuse, crime, juvenile delinquency, divorce and other family challenges mental illness, and other health problems, social class and selected social issues. Upon completion, students will be able to identify how sociologists define, study and interpret social problems and be able to discuss some of the causes and consequences as well as some of the potential interventions to alleviate some of the problems identified. Online Classes: Students must have regular access to a computer, the Internet and be able to use discussion boards and to submit assignments online. Assignments must be submitted in a readable format. Students need to consistently check MTC email/Canvas. 3 Cr. Hrs. Course Requirement(s): None. Ohio Transfer Module (OTM) Course [TMSBS]; and, Ohio TAG Course [OSS025].

**SOC2400 Gender Studies**

This course is designed to introduce students to the sociological study of gender identity and gendered representation. It will explore sex and gender as they relate to the major social institutions and how the experiences differ for men and women. In addition, this course illuminates the intersection of gender, race, social class and sexual orientation in our diverse world. Online Classes: Students must have regular access to a computer, the Internet, and to be able to use discussion boards and submit assignments online. Assignments must be submitted in a readable format. Students need to consistently check MTC email/Canvas. 3 Cr. Hrs. Course Requirement(s): None. Ohio Transfer Module (OTM) Course [TMSBS].

**SSKL0006 NC Resume Workshop**

This course will cover the basic principles of resume development and creating cover letters.

**STE1011 Level One Electrician**

Level One Electrician is a course designed to give the student a comprehensive overview of the electrical trade as well as overall grounding in electrical fundamentals, the National Electrical Code, electrical safety issues, applied mathematics, and many other details involved in becoming an electrician. The course emphasizes hands-on activities in electrical labs that simulate real world problems and projects. 9 Cr Hrs. Course Requirement(s): None.

**STE1012 Level Two Electrician**

Level Two Electrician is a course designed to give the student a comprehensive understanding of electrical fundamentals, the National Electrical Code, electrical safety, applied mathematics, electrical motors, basic control systems, circuit installation, and many other details involved in becoming an electrician. The course emphasizes hands-on activities in electrical labs that simulate real world problems and projects. 9 Cr Hrs. Course Requirement(s): STE1011.

**STE2013 Level Three Electrician**

Level Three Electrician is a course designed to give the student a comprehensive understanding of the National Electrical Code, electrical safety, applied mathematics, circuit design and installation, electrical distribution systems, electric motor controls, electrical installations in hazardous locations, and many other details involved in becoming an electrician. The course emphasizes hands-on activities in electrical labs that simulate real world problems and projects. 9 Cr Hrs. Course Requirement(s): STE1012.

**STE2014 Level Four Electrician**

Level Four Electrician is a course designed to give the student a comprehensive understanding of the National Electrical Code, electrical safety, service design, fire alarm installation, standby and emergency generators, advanced motor controls, HVAC Controls, and high voltage terminations and splicing. The course emphasizes hands-on activities in electrical labs that simulate real world problems and projects. 9 Cr Hrs. Course Requirement(s): STE1013.

**STL1011 Level One Line Erector**

This course prepares the student for linework by beginning with rigorous wood pole training. It continues with an introduction to the Electrical Power Industry. Students will then learn basic electrical theory, applied mathematics, and

transformer basics. The course concludes with an introduction to the basic construction forms used in electrical power distribution. 9 Cr Hrs. Course Requirement(s): None.

**STL1012                      Level Two Line Erector**

Safety is always a primary concern in line erector work and is emphasized in this course. The Personal Protective Equipment (PPE), rigging methods, equipment used in live line construction are all components of this course. After intensive classroom studies students will build a test line and learn about the specifications required for these lines. Students will compete with other apprentices in a rodeo that will emphasize excellence in line worker training. 9 Cr Hrs. Course Requirement(s): STL1011.

**STL2013                      Level Three Line Erector**

Students will learn about the protective fusing systems, electrical power metering, and other special elements in the distribution infrastructure. Crew leadership, trouble investigation, and vegetation management studies will follow. The course concludes with studies of pad mount transformers, underground distribution systems (URD) and the construction of various three-phase transformer configurations. 9 Cr Hrs. Course Requirement(s): STL1012.

**STM1011                      Level One Sheet Metal**

This course begins with a summary of the history and development of the sheet metal trades. It continues by describing the tools and materials, machines, and processes used in the industry. Students are taught the math and geometry needed to successfully install all forms of architectural ductwork. The course emphasizes hands-on activities that simulate real world problems and projects. 9 Cr Hrs. Course Requirement(s): None.

**STM1012                      Level Two Sheet Metal**

This course continues with math applications and practical instruction in the use of protractors, calipers, and micrometers in solving field problems in sheet metal work. The principles of radial line layout are used to develop the forms required for specific applications. Other studies include blueprint and specification reading, properties of air distribution, and bend allowances. 9 Cr Hrs. Course Requirement(s): STM1011.

**STM2013                      Level Three Sheet Metal**

More advanced math applications, methods of field measuring, and triangulation are the focus of this course. Included also is the welding and brazing of some metal joints. The principles of refrigeration and the role of heat pumps and detailed studies of blueprints and specifications complete these studies. The course emphasizes hands-on activities that simulate real world problems and projects. 9 Cr Hrs. Course Requirement(s): STM1012.

**STM2014                      Level Four Sheet Metal**

Students complete their studies in this program by participating in advanced projects covering air balance, fume and exhaust system design, and installation of access doors, louvers, and dampers. This course also prepares students in shop organization and crew leadership skills. 9 Cr Hrs. Course Requirement(s): STM2013.

**STP1011                      Level One Pipefitting**

This program of study begins with an introduction to the tools of this trade and instruction on how to properly inspect, use, and maintain them. Students will be taught fundamental oxyfuel cutting and welding as well as operation of power equipment and scaffolding procedures. 9 Cr Hrs. Course Requirement(s): None.

**STP1012                      Level Two Pipefitting**

Piping systems that include chemical, fuel oil, compressed air, steam, and water are studied in the beginnings of this course. Technical studies include applied math and drawing and detail interpretations. Underground installation and excavation are also a part of this course. 9 Cr Hrs. Course Requirement(s): STP1011.

**STP1211                      Level One Plumbing**

Level One Plumbing introduces trainees to the many career options available in today's plumbing profession, discusses plumbing safety and the causes of accidents and their consequences, and instructs trainees in the care and use of the different types of hand and power tools they will use on the job. The course reviews basic math concepts, plumbing

drawings and demonstrates how they apply on-the-job. Level One Plumbing also introduces trainees to the different types of plastic, copper, cast-iron, carbon steel, corrugated stainless pipes and tubes, and associated fittings, fixtures and faucets. The course concludes with an introduction to drain, waste, vent, and water distribution systems. 9 credit hours. Prerequisite: None

**STP1212                      Level Two Plumbing**

Level Two Plumbing discusses and reviews methods for calculating angles, offsets, and for hanging, supporting, penetrations, and applying fire stopping materials on the various piping systems. The course teaches trainees how to interpret and use civil, architectural, structural, mechanical, and plumbing drawings and how to locate, install, connect, and test the various piping systems in residential and commercial applications. The course concludes with methods of installing and servicing fixtures, valves, faucets, fuel gas systems, and water heaters. 9 credit hours. Prerequisite: STP1211

**STP2013                      Level Three Pipefitting**

This course begins with studies in rigging practices including slings, wire rope, chains, crane load charts, and load balancing. Advanced math uses trigonometry to calculate solutions to piping problems. The course concludes with studies in pipe hanger fixtures and supports and the testing of piping systems. 9 Cr Hrs. Course Requirement(s): STP1012.

**STP2014                      Level Four Pipefitting**

Level Four Pipefitting covers the skills needed to layout and fabricate mitered bends, laterals, wyes, and many other challenging connections. More advanced studies focus on pipe misalignment and the resulting strain, stress relief, and other pipefitting concerns. The course concludes with studies in the basic requirements of supervisors as well as investigation into ethical issues. 9 Cr Hrs. Course Requirement(s): STP2013.

**STP2213                      Level Three Plumbing**

Level Three Plumbing introduces trainees to math concepts they will use on the job including area and volume, temperature, pressure, and force. The course also teaches techniques for sizing water supply lines including calculating system requirements and demand, backflow preventer devices, sizing drain, waste, venting installation techniques, and sizing of storm systems. The course concludes with discussion of sewage pumps, sump pumps, corrosive-resistant waste piping and compressed air systems. 9 credit hours. Prerequisite: STP1212

**STP2214                      Level Four Plumbing**

Level Four Plumbing introduces trainees to business principles for plumbers including concepts and practices that are essential for successful plumbing businesses and to the knowledge and skills required for team leadership. The course also explains code requirements and discusses the practices of installing water pressure booster and recirculation systems, indirect and special waste treatment, hydronic and solar heating systems, private water supply and waste disposal systems, swimming pools and hot tubs, and describes the location and layout of plumbing systems for mobile homes and mobile home parks. The course concludes with instruction on diagnosis and repair of piping systems. 9 credit hours. Prerequisite: STP2213

**STS1011                      Level One Substation**

The Substation Technician training program begins with studies in core skills: Safety, Power Tools, Basic Communication Skills, and Blueprint reading. The course continues with an introduction to electrical power delivery, substation equipment, and substation infrastructure. Cad welding of the grounded grid concludes this portion of substation training. 9 Cr Hrs. Course Requirement(s): None.

**STS1012                      Level Two Substation**

The rules found in OSHA 1910.269 begin the focus of this substation training course. Safely clearing equipment for maintenance and repair, overhead and underground conductors, and rigging are essential subjects reviewed in this year. Substation construction and the essential elements of construction such as interpreting drawings and standards,

transformers and regulators receive major emphasis in this second year of study. 9 Cr Hrs. Course Requirement(s): STS1011.

**STS2013                      Level Three Substation**

The third year of study continues with emphasis on safety in the substation. The operation of the substation system apparatus such as circuit breakers, regulators, disconnects, and transformer configurations are a focus of the course. The load infrastructure that the substation serves is featured so students have an understanding of the nature of power load demands. 9 Cr Hrs. Course Requirement(s): STS1012.

**STS2014                      Level Four Substation**

More advanced studies of system automation, circuit breakers and protective devices, relays and regulators are at the beginning of this last year. Typical construction requires pulling of wire, high voltage terminations and splices, crew leadership, and build of emergency systems which the students will practice during these studies. The course concludes with studies in electronics and state-of-the-art control and data handling systems. 9 Cr Hrs. Course Requirement(s): STS2013.

**SUR1000                      Intro Surgery Tech & Sterile Processing**

This is an introductory course in the theory and application of the necessary functions of a beginning scrub and assistant circulating surgical technologist or sterile processor along with all hazards preparation. Specific scientific principles that underlie the daily work in the operating room and central service departments will be discussed. Students will be exposed to the Healthcare Facility organization and management, the physical environment, decontamination of instruments and supplies along with sterilization of the same. Aseptic technique and its application to the operating room along with prevention of infection utilizing standard and universal standards will be covered. 2 Cr Hrs. Course Requirement(s): Program accepted.

**SUR1100                      Surgical Technology 1**

This course provides the student with basic concepts of patient care, including considerations for the physical and psychological needs of the patient. Students will also develop skills needed in the operating room. Emphasis is placed on surgical case planning and management, and knowledge of aseptic technique. Also included is an in-depth study of instrumentation and suture material and techniques.

**SUR1150                      Surgical Technology II**

Students will learn several diagnostic procedures as well the benefits and challenges of endoscopic surgery to include robotic-assisted surgery. The students will learn the concepts that are integral to both general, genitourinary, obstetric and gynecologic surgery. Topics will include patient positioning, skin preparation, draping, incisions, anatomy, instrumentation, special supplies and equipment, the scheme of the procedures and steps necessary to properly assist the surgeon in performing the most common procedures in these specialties.

**SUR1200                      Sterile Processing Clinical**

This course is the first of four clinical applications of surgical technology. During this clinical students will be functions as a sterile processing technician in the sterile processing department. Students will be required to attend their clinical hours off campus at an affiliated hospital.

This course will provide the student with the necessary clinical, hands on, experience needed to understand the sterilization process and its importance. The student will follow all policies and procedures of the program, MTC and the affiliated hospital system.

**SUR1300                      Surgical Technology Clinical 1**

This course allows the student to apply their knowledge of general, genitourinary, obstetrics and gynecology to practical use in a healthcare facility under the direct supervision of a preceptor on the site. Through the externship experience, the student gain first-hand knowledge of the workplace and perform the assigned duties to meet the expectations in a professional setting. Students are expected to adapt to the work environment and reflect regularly on their learning and observations. The student will follow all policies and procedures of the program, MTC and the affiliated hospital system.



**SUR2000 Surgical Technology III**

The students will learn the concepts that are integral to plastics, ophthalmic, ENT, oral, maxillofacial, and neurological surgery. Topics will include patient positioning, skin preparation, draping incisions, anatomy, instrumentation, special supplies and equipment, the scheme of the procedures, and steps necessary to properly assist the surgeon in performing the most common procedures in these specialties.

**SUR2100 Surgical Technology IV**

The students will learn the concepts that are integral to orthopedics, cardiovascular, thoracic and trauma surgery. Topics will include pharmacology, patient positioning, skin preparation, draping incisions, anatomy, instrumentation, special supplies and equipment, the scheme of the procedures, and steps necessary to properly assist the surgeon in performing the most common procedures in these specialties. Students will also be exposed to common the common types of medications, agents and drugs used for surgical procedures. The course will introduce students learning the appropriate procedures for handling drugs in the surgical setting, the functions of anesthesia care intraoperatively and postoperatively, the medications and drugs used to provide general, regional and local anesthesia, patient monitoring, and the role of the surgical technologist in monitoring such drugs.

**SUR2200 Surgical Technology Clinical II**

This course allows the student to apply their knowledge of ophthalmic, ENT, oral, maxillofacial, plastics and neurology to practical use in a healthcare facility under the direct supervision of a preceptor on the site. Through the externship experience, the student gain first-hand knowledge of the workplace and perform the assigned duties to meet the expectations in a professional setting. Students are expected to adapt to the work environment and reflect regularly on their learning and observations. The student will follow all policies and procedures of the program, MTC and the affiliated hospital system.

**SUR2300 Surgical Technology Clinical III**

This course allows the student to apply their knowledge in orthopedics, trauma, cardiothoracic and vascular surgery to practical use in a healthcare facility under the direct supervision of a preceptor on the site. Through the externship experience, the student gain first-hand knowledge of the workplace and perform the assigned duties to meet the expectations in a professional setting. Students are expected to adapt to the work environment and reflect regularly on their learning and observations. The student will follow all policies and procedures of the program, MTC and the affiliated hospital system.

**SUR2800 Surgical Technology Capstone**

This course provides additional review of the core surgical technology curriculum. The lecture and activities are designed to reinforce and review the program content from inception to completion with a focus on student performance, comprehension, and group information sessions. In addition, the students will learn the necessary skills to create a professional resume, cover letter, and skills to interview effectively, and prepare to enter into the workforce during the Career Development section. The students will sit for and be required to pass a practice certification exam as a precursor to the NBSTSA Certified Surgical Technologist Certification Exam. Students will be required to sit for the NBSTSA Certified Surgical Technologist Certification Examination at the conclusion of this course.

**TEC0001 Technical Elective**

This course is used for the transfer-in of a course from another institution that does not equate to a course in our course inventory but could be used as a technical elective. 1 – 4 Cr Hrs.

**TENG007 Basic Writing**

Transitions English (TENG 007 ) helps students prepare for the COMPASS placement test before they transition to college classes. TENG007 provides practice in effective sentence writing with an emphasis on clarity, common sentence patterns and punctuation. No Fees. Non-Credit course. Students who successfully complete the course are encouraged to retest on the COMPASS Writing. This class meets at MTC starting on the second half semester and lasts eight weeks. There are no fees, no credit or grades. ABLE orientation is required and occurs in the first two class sessions, therefore, there is no late entry to the class.

**TMT1110 Applied Technical Math**

This course will immerse students into the world of technical problem solving. Various mathematical principles will be investigated through the use of applied problems that occur in the fields of Physics, Engineering Mechanics, Electronics, and Alternative Energy. Neatness and organization will be emphasized as students utilize algebra, geometry, trigonometry, and systems of equations equations to both hone their skills and develop confidence in their ability to understand and solve technical problems. 3 Cr. Hrs. Course Requirement(s): Placement or MTH0920.

**TMT1150 Applied Technical Math II**

In this the second and final course of the series, students are introduced to new applications of algebra, geometry, and trigonometry by solving problems involving sets of three or more linear equations, quadratic equations, complex numbers, exponential functions, and logarithms. Students will also learn to understand the formation of sine waves by graphing sine and cosine functions. Just as in TMT1100, the application of these concepts is emphasized to increase the students' problem solving ability. 3 Cr. Hrs. Pre-Req: TMT1100

**TMTH008 Basic Math**

Transitions Math (TMTH 008) helps students prepare for the COMPASS placement test before they transition to college classes. TMTH 008 provides a review of decimals, fractions, exponents, ratio and percentages. Mastery of basic operations, without a calculator, is emphasized. No credit or grades are given. Students who successfully complete the course are encouraged to retest on the COMPASS Math. This class meets at MTC starting on the second half semester and lasts eight weeks. There are no fees. Non-credit course. ABLE orientation is required and occurs in the first two class sessions, therefore, there is no late entry to the class.

**TMTH009 Pre Algebra**

**TRIG1149Z Trigonometry**

Trigonometric functions and their properties. Vectors, polar coordinates and complex numbers. Prereq: A grade of C- or above in 1148, or permission of department. Not open to students with credit for 1144, or for any Math course numbered 1150 (150) or above. This course is available for EM credit. GE quant reason math and logical only course.



Academic Catalog 2019-20 Addendum

**Veterans Benefits and Transition Act Policy**

Marion Technical College, in accordance with the Veterans Benefits and Transition Act of 2018, will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries or other institutional facilities, or the requirement that a Chapter 31 or Chapter 33 recipient borrow additional funds to cover the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement of a payment by the U.S. Department of Veteran Affairs. This policy is limited to tuition funds paid by the U.S. Department of Veteran Affairs.