Trenholm State COMMUNITY COLLEGE
The College for Real Careers

Medical Assisting Technology (MAT)

Program Information

The Medical Assisting Technology Program at H. Councill Trenholm State Community College is accredited by the Committee on Accreditation of Allied Health Education Programs (CAAHEP). The Medical Assisting Education Review Board (MAERB) is a Committee on Accreditation (CoA) of CAAHEP that makes accreditation recommendations for the status of accreditation of medical assisting programs. The Medical Assisting Technology Program offers two short-term certifications. The Phlebotomy certification is accredited by the American Medical Technologists. The Medical Billing and Coding certification allows the student to be able to qualify to become a Certified Coding Associate from the American Health Information Management Association. The curriculum is designed to provide students with theoretical instruction as well as practical application. Various methodologies are utilized in order to meet the needs of students with diverse learning styles. Some of the clinical skills covered include taking medical histories, taking and recording vital signs, assisting with examinations and treatments, providing patient teaching and performing specialized tests such as electrocardiograms (EKGs) and diagnostic laboratory testing. Administrative skills include scheduling appointments, performing manual and computerized billing, and filing insurance claims.

All graduates of the Medical Assisting Technology Program are academically eligible to take the American Association of Medical Assistants National Certification Examination and the Medical Technologist Examination. Upon successful completion of this examination, the graduate will earn the title of Certified Medical Assistant or Registered Medical Assistant. The American Association of Medical Assistants stipulates that individuals found guilty of a felony or individuals who have pleaded guilty to a felony are ineligible to sit for the National Certification Exam. The certifying board may grant a waiver based upon mitigating circumstances. Applicants who have been convicted of a felony or who have pleaded guilty to a felony may be accepted to the Medical Assisting Technology Program. However, admission to the Medical Assisting Technology Program does not guarantee in any way that the applicant will be eligible to sit for the American Association of Medical Assistants National Certification Examination or the American Medical Technologist Examination.

Occupational Choices

According to the U.S. Department of Labor, employment of medical assistants is expected to grow 23 percent from 2014 to 2024, much faster than the average for all occupations. As the healthcare industry expands because of technological advances in medicine and the growth and aging of the population, there will be an increased need for all healthcare workers. The increasing prevalence of certain conditions, such as obesity and diabetes, also will increase demand for healthcare services and medical assistants. Increasing use of medical assistants to allow doctors to care for more patients will further stimulate job growth. Job placement opportunities are numerous in the Montgomery area. Most employers prefer to hire individuals who have completed a formal program in Medical Assisting. Physicians' offices, laboratories, hospitals and ambulatory care centers are just a few of the current job opportunities.

Phlebotomy Technicians are in high demand. Vacancies have increased significantly as many places need to hire three shifts of technicians. The primary function of a Phlebotomy Technician is to obtain patient blood specimens by venipuncture or microtechniques. The Phlebotomy Technician aids in the collection and transportation of other laboratory specimens, and may be involved with patient data

Estimated Program Length & Cost *

Award	Length	Credit Hours	Tuition Fees	Books	Tools	Supplies
Associate Degree	6 Terms	71	$10,153	$1300	0	$700
Short Term Certificate 1	2 Terms	22	$3,146	$1300	0	$700
Short Term Certificate 2	2 Terms	29	$4,147	$1300	0	$700

* Tax not included. Prices are subject to change without prior notice; cost of books may vary considerably among suppliers. The length of the program is based on full-time status of 12-15 credit hours per term. Enrollment in transitional level general education courses will alter the length of the program.

entry. A Phlebotomy Technician also draws blood for transfusions, donations and research.

Medical Billing and Coding: Employment is expected to grow faster than average. Job prospects should be very good; technicians with a strong background in medical coding will be in particularly high demand. Employment is expected to increase by 29 percent through 2022-faster than the average for all occupations. Technicians will be needed to enter patient information into computer databases to comply with Federal legislation mandating the use of electronic medical records. New jobs are expected in offices of physicians as a result of increasing demand for detailed records. New jobs are also expected in home health care services, outpatient care centers, and nursing and residential care facilities.

Source: Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-2017 Edition, Survey 2014

Average Full-Time Wage

According to the U.S. Department of Labor, the earnings of medical assistants vary, depending on their experience, skill level, and location. Median 2015 annual wages of wage-and-salary medical assistants were $30,590 per year/ $14.71 per hour.

Phlebotomist earnings vary depending on experience, education and skill level. Phlebotomy Technicians are typically paid hourly and it varies by state, shift, schooling and experience. Typical hourly wages for a hospital are $13.50, for a private clinic: $13.50 and for a physician office laboratory: $14.00 (American Medical Technologist).

Medical Billing and Coding: The national average full-time wage is between $40,196 and $60,919.

Source: Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-2017 Edition, Survey 2014

Additional Requirements

Students are admitted to the Medical Assisting Technology Program each semester. Individuals who are interested in enrolling in the program must:

1. Meet all the general admission requirements of Trenholm State.

2. Schedule an appointment prior to the beginning of the anticipated date of enrollment, with the program coordinator or designee, to validate a keying speed of 30 words per minute. Individuals not meeting this requirement must enroll in MAT 100 - Introduction to Document Production. Appointments will not be scheduled once the semester begins.

3. Students must submit health information and have a complete physical examination by a licensed physician, physician assistant, or nurse practitioner prior to participation in learning experiences in any clinical facility.

4. Students must provide documentation of required immunizations (Hepatitis B, Tetanus, MMR, and TB) as well as provide documentation of a negative TB skin test no sooner than 3 months prior to the anticipated semester of enrollment and no later than 30 days after enrollment in the program. Students who have a positive TB skin test result must submit documentation of a negative chest x-ray within 30 days of enrollment in the program. Students must have the TB skin test repeated yearly until completion of the program.

6. Students must have current CPR certification to participate in learning experiences in any clinical facility. The certification must remain valid throughout the learning experience.

7. Student must have liability insurance prior to participating in learning experiences in any clinical facility. The insurance is available through the college. The cost of the liability insurance is the student's responsibility.

8. Students are required to adhere to the program's dress code when participating in laboratory and clinical activities on campus as well as off campus.

Awards Available

Associate in Applied Science Degree
Medical Assisting Technology

Short Term Certificate
Medical Assisting Technology

Short Term Certificate
Medical Billing and Coding

Program Contact

Miriam Diamond Akwuba
Program Coordinator/Instructor
334-420-4425
Location: Trenholm Campus - Bldg. J

As part of ongoing planning and evaluation, the College regularly evaluates student learning outcomes for each program.

Associate in Applied Science Degree Medical Assisting Technology

Program Prerequisite: MAT-100+ Introduction to Medical Document Production

Required Technical Courses (52 credit hours)

Course	Title	Hrs
MAT-101	Medical Terminology or BIO-120	3
MAT-102	Medical Assisting Theory I	3
MAT-103	Medical Assisting Theory II	3
MAT-111	Clinical Proc I for the Medical Asst	3
MAT-120	Medical Administrative Procedures I	3
MAT-121	Medical Administrative Procedures II	3
MAT-122	Basic Concepts - Intrprsnl Relatnshps	3
MAT-125	Lab Procedures I for the Medical Asst	3
MAT-128	Medical Law/Ethics - Medical Asst	3
MAT-200	Management of Office Emergencies	2
MAT-211	Clinical Proc II for the Medical Asst	3
MAT-215	Lab Procedures II - Medical Asst	3
MAT-216	Med Pharmacology - Medical Office	4
MAT-220	Medical Office Insurance	3
MAT-228	Medical Assisting Review Course	1
MAT-229	Medical Assisting Preceptorship	3
	Electives	6

Electives: (Please select six credit hours)

BIO-103	Principles of Biology I	4
*BIO-112	Human Reproduction & Inheritance	3
BIO-211	Human Anatomy & Physical Health	4
DPT-203	Intro to Information Highway	3
MAT-222	Medical Transcription I	2
MAT-227	Special Topics	1
MAT-239	Phlebotomy Preceptorship	3

*BIO-112 and CIS-146 – These courses were used to calculate contact hours which may vary, depending on the elective courses selected.

Required General Education (22 credit hours)

Course	Title	Hrs
CIS-146	Microcomputer Applications	3
	OR BIO-103 Principles of Biology I	
	OR BIO-112 Human Reprdctn/Inhertnc	
	OR BIO-201 Human A & P I	
CIS-149	Introduction to Computers	3
ENG-101	English Composition I	3
ENG-102	English Composition II	3
	or ENG-130 or SPH-106	
MTH-116	Mathematical Applications	3
MUS-101	Music Appreication	3
	OR ART-100 Art Appreciation	
ORI-101	Orientation to College	1
PSY-200	General Psychology	3

+Must be able to key 30 words per minute or take MAT-100 Introduction to Medical Document Production

Total Hours: 74 Credit Hours; 1,968 Contact Hours

Short Term Certificate Medical Assisting Technology

Program Prerequisite: MAT-100+ Introduction to Medical Document Production

Required Technical Courses (21 credit hours)

Course	Title	Hrs
MAT-101	Medical Terminology or BIO-120	3
MAT-102	Medical Assisting Theory I	3
MAT-122	Basic Concepts - Intrprsnl Relatnshps	3
MAT-125	Lab Procedures I for the Medical Asst	3
MAT-128	Medical Law/Ethics - Medical Asst	3
MAT-215	Lab Procedures II - Medical Asst	3
MAT-239	Phlebotomy Preceptorship	3

Required General Education (1 credit hours)

ORI-101	Orientation to College	1

*Must be able to key 30 words per minute or take MAT-100 Introduction to Medical Document Production

Total Hours: 22 Credit Hours; 608 Contact Hours

Short Term Certificate Medical Billing & Coding

Program Prerequisite: MAT-100+ Introduction to Medical Document Production

Required Technical Courses (28 credit hours)

Course	Title	Hrs
HIT-230	Medical Coding Systems I	3
HIT-231	Medical Coding Skills Laboratory	1
HIT-232	Medical Coding Systems II	3
HIT-233	Medical Coding Skills Laboratory	1
HIT-283	Medical Coding Professional Practice	2
MAT-101	Medical Terminology or BIO-120	3
MAT-102	Medical Assisting Theory I	3
MAT-103	Medical Assisting Theory II	3
MAT-120	Medical Administrative Procedures I	3
MAT-121	Medical Administrative Procedures II	3
MAT-128	Medical Law/Ethics - Medical Asst	3

Required General Education (1 credit hours)

ORI-101	Orientation to College	1

*Must be able to key 30 words per minute or take MAT-100 Introduction to Medical Document Production

Total Hours: 29 Credit Hours; 656 Contact Hours

Course Descriptions for Medical Assisting Technology (MAT)

Course #	Course Title	Theory Contact Hours/Wk	Lab Contact Hours/Wk	Credit Hours
MAT-100	**INTRO TO MEDICAL DOCUMENT PRODUCTION**	**2**	**3**	**3**

PREREQUISITE: None

This course covers basic keyboarding skills using medical terminology and format. Emphasis is placed on correct techniques and development of speed and accuracy. Upon completion, the student should be able to key medical material at an acceptable speed and accuracy level. This course is offered at least one term every year. This is a CORE course.

MAT-101	**MEDICAL TERMINOLOGY**	**3**	**0**	**3**

PREREQUISITE: None

This course is designed for medical assistants, student nurses, and others in medically related fields. The course will focus on the more common prefixes, roots, and suffixes used to construct medical terms with these word parts to determine the meanings of new or unfamiliar terms. The students will learn a system of word building which will enable them to interpret medical terms. This course is offered at least one term every year. This is a CORE course.

MAT-102	**MEDICAL ASSISTING THEORY I**	**3**	**0**	**3**

PREREQUISITE: None

A description of anatomical descriptors and the cell introduces the student to and serves as an overview of the body's systems. The structure and function of the nervous, sensory, integumentary, muscular, skeletal, respiratory, and cardiovascular systems are taught with the diseases related to these systems presented. Upon completion, students should be able to demonstrate a basic working knowledge of these body systems. This course is offered at least one term every year. This is a CORE course.

MAT-103	**MEDICAL ASSISTING THEORY II**	**3**	**0**	**3**

PREREQUISITE: None

The structure and function of the digestive, urinary, reproduction, endocrine, and immune systems are presented. Disease processes that are related to these systems will be included. Basic concepts of reproduction, growth and development, and nutrition are taught. Upon completion, students should be able to demonstrate a basic working knowledge of these body systems. This course is offered at least one term every year. This is a CORE course.

MAT-111	**CLINICAL PROC I FOR THE MEDICAL ASSISTANT**	**2**	**3**	**3**

PREREQUISITE: None

This course includes instruction in clinical examining room procedures. Topics include asepsis, infection control, assisting with examination, and patient education. Upon completion, students will be able to demonstrate competence in exam room procedures. This course is offered at least one term every year. This is a CORE course.

MAT-120	**MEDICAL ADMINISTRATIVE PROCEDURES I**	**2**	**3**	**3**

PREREQUISITE: MAT-101 or BIO-120 and college level computer course key 30 wpm or enroll in MAT-100

This course introduces medical office administrative procedures. Topics include appointment scheduling, telephone techniques, managing the physician's schedule, handling mail, preparing and maintaining medical records, and patient orientation. Upon completion, students should be able to perform basic medical secretarial skills. This course is offered at least one term every year. This is a CORE course.

MAT-121	**MEDICAL ADMINISTRATIVE PROCEDURES II**	**2**	**3**	**3**

PREREQUISITE: MAT-120

This course is the continuation of Medical Administrative Procedures I. Topics include physical plant maintenance, equipment and supplies, inventories, liability coverage, medical economics, and an introduction to insurance procedures. Upon completion, students should be able to manage the economics of the medical office and supervise personnel. This course is offered at least one term every year. This is a CORE course.

MAT-122	**BASIC CONCEPTS OF INTERPERSONAL RELATIONSHIPS**	**3**	**0**	**3**

PREREQUISITE: None

This course is designed to assist students in health occupations to learn basic principles of human behavior. Activities for developing effective interpersonal relations are included. Exploration of self-concept and the negative effect of poor self concept as they relate to one's health are presented. Upon completion, students should be able to apply these concepts to the work setting. This course is offered at least one term every year.

Course #	Course Title	Theory Contact Hours/Wk	Lab Contact Hours/Wk	Credit Hours
MAT-125	**LAB PROCEDURES I FOR THE MEDICAL ASSISTANT**	**2**	**3**	**3**

PREREQUISITE: MAT-101 or BIO-120, MAT-102

This course provides instruction in basic lab techniques used by the medical assistant. Topics include lab safety, quality control, collecting and processing specimens, performing selective diagnostic tests, such as a CBC, screening and follow-up of test results and OSHA/CLIA regulations. Upon completion, students should be able to perform basic lab tests/skills based on course topics. This course is offered at least one term every year. This is a CORE course.

MAT-128	**MED LAW & ETHICS FOR THE MEDICAL ASSISTANT**	**3**	**0**	**3**

PREREQUISITE: None

This course provides basic information related to the legal relationship of patient and physician. Topics to be covered include creation and termination of contracts, implied and informed consent, professional liability, invasion of privacy, malpractice, tort, liability, breach of contract, and the Medical Practice Act. Upon completion, students should be able to recognize ethical and legal implications of these topics as they relate to the medical assistant. This course is offered at least one term every year. This is a CORE course.

MAT-200	**MANAGEMENT OF OFFICE EMERGENCIES**	**2**	**0**	**2**

PREREQUISITE: MAT-102, MAT-103

This course is designed to instruct students in handling emergencies in the medical office. Emergencies presented will include cardiovascular emergencies, diabetic emergencies, seizures, syncope, hyperthermia and hypothermia, shock, musculo-skeletal emergencies, and poisoning. Upon completion, students should be able to recognize emergency situations and take appropriate actions. This course is offered at least one term every year. This is a CORE course.

MAT-211	**CLINICAL PROC II FOR THE MEDICAL ASSISTANT**	**2**	**3**	**3**

PREREQUISITE: None

This course includes instruction in vital signs and special examination procedures. Emphasis is placed on interviewing skills, appropriate triage and preparing patients for diagnostic procedures. Upon completion, students should be able to assist with special procedures. This course is offered at least one term every year. This is a CORE course.

MAT-215	**LAB PROCEDURES II FOR THE MEDICAL ASSISTANT**	**2**	**3**	**3**

PREREQUISITE: MAT-215

This course instructs the student in the fundamental theory and lab application for the medical office. Microbiology, urinalysis, serology, blood chemistry, and venipuncture theory as well as venipuncture collection procedures are discussed and performed. Upon completion, students should be able to perform basic lab tests/skills on course topics. This course is offered at least one term every year. This is a CORE course.

MAT-216	**MED PHARMACOLOGY FOR THE MED OFFICE**	**3**	**3**	**4**

PREREQUISITE: MAT-101 or BIO-120, MAT-102, MAT-103, MTH-116

This course teaches the commonly administered drugs used in the medical field including their classifications, actions, indications, contraindications, and side effects on the body. Correct demonstration of drug calculation, preparation, administration, and documentation are also taught. Upon completion, students should be able to demonstrate safe drug administration and recognize common medical classifications and their patient implications. This course is offered at least one term every year. This is a CORE course.

MAT-220	**MEDICAL OFFICE INSURANCE**	**2**	**3**	**3**

PREREQUISITE: MAT-101or BIO-120, MAT-120, MAT-121 and college level computer course

In this course emphasis is placed on insurance procedures with advanced diagnostic and procedural coding in the outpatient facility. Study will include correct completion of insurance forms, ICD-9, and CPT coding. Upon completion, students should be able to demonstrate proficiency in coding for reimbursements. This course is offered at least one term every year. This is a CORE course.

MAT-222	**MEDICAL TRANSCRIPTION I**	**1**	**3**	**2**

PREREQUISITE: College level computer course, acceptable keyboarding speed, ENG-101, MAT-101 or BIO-120, MAT-120, MAT-121

This course introduces dictating equipment and typical medical dictation. Emphasis is placed on correct punctuation, capitalization, and spelling. Upon completion, students should be able to transcribe physician's dictation. This course is offered at least one term every year. This is a CORE course.

MAT-227	**SPECIAL TOPICS IN MEDICAL ASSISTING**	**1**	**0**	**1**

PREREQUISITE: None

This course includes specialized study on current topics and issues in the field of medical assisting. Emphasis is placed on personal and occupational responsibilities and developing problem-solving skills encountered in the medical office. Upon completion, students should be able to apply problem-solving skills to medical office situations. This course is offered as needed.

Course #	Course Title	Theory Contact Hours/Wk	Lab Contact Hours/Wk	Credit Hours
MAT-228	**MEDICAL ASSISTANT REVIEW COURSE**	**1**	**0**	**1**

PREREQUISITE: MAT-101, MAT-102, MAT-103, MAT-111, MAT-211
This course includes a general review of administrative and clinical functions performed in a medical office. Topics will include those listed in the CMA exam content outline. The course will assist the student or graduate in preparing for the American Association of Medical Assistants National Certification Examination. This course is offered at least one term every year.

MAT-229	**MEDICAL ASSISTING PRECEPTORSHIP**	**0**	**15**	**3**

PREREQUISITE: MAT-111, MAT-125, MAT-200, MAT-211, MAT-215, MAT-216, MAT-222, plus 30 additional credit hours in MAT program and/or as required by program
This course is designed to provide the opportunity to apply clinical, laboratory, and administrative skills in a physician's office, clinic or outpatient facility. The student will gain experience in applying knowledge learned in the classroom in enhancing competence, in strengthening professional communications and interactions. Upon completion, students should be able to perform as an entry-level Medical Assistant. This course is offered at least one term every year. This is a CORE course.

MAT-239	**PHLEBOTOMY PRECEPTORSHIP**	**0**	**15**	**3**

PREREQUISITE: MAT 101or BIO-120, MAT 102, MAT 125, MAT 215, MAT-122, acceptable computer course and/or as required by program.
This course is designed to provide the opportunity to apply phlebotomy techniques in the physician's clinic and hospital setting. Emphasis is placed on training individuals to properly collect and handle blood specimens for laboratory testing and to interact with health care personnel, patients, and general public. Upon completion, students should be prepared for entry-level phlebotomy and to sit for the Phlebotomy Technician Examination (ASCP). This course is offered as needed.

HIT-230	**MEDICAL CODING SYSTEMS I**	**3**	**0**	**3**

PREREQUISITE: MAT-101 or BIO-120
This course is intended to develop an understanding of coding and classification systems in order to assign valid diagnostic and procedure codes. Instruction includes description of classification and nomenclature systems; coding diagnoses and procedures; sequencing codes; analyzing actual medical records to identify data elements to be coded; and validating coded clinical information. Student competency includes demonstration of coding principles and applications (manual and/or computer assisted). This is a CORE course.

HIT-231	**MEDICAL CODING SKILLS LABORATORY**	**0**	**3**	**1**

PREREQUISITE: MAT-101 or BIO-120
This course provides laboratory practice in medical coding. The course allows the student to become proficient at skills learned in classification and coding systems theory classes. Student competency is demonstrated by accuracy in medical coding.

HIT-232	**MEDICAL CODING SYSTEMS II**	**3**	**0**	**3**

PREREQUISITE: HIT-230, HIT-231
This course is a continuation of Medical Coding Systems I which is intended to develop an understanding of coding and classification systems in order to assign medical codes. Instruction includes coding diagnoses and/or procedures; sequencing codes; analyzing actual medical records to identify data elements to be coded; validating coded clinical information. Student competency includes demonstration of coding principles and applications (manual and/or computer assisted). This is a CORE course.

HIT-233	**MEDICAL CODING SKILLS LABORATORY**	**0**	**3**	**1**

PREREQUISITE: HIT-230, HIT-231
This course provides laboratory experience in medical coding. The course allows the student to become proficient at skills learned in medical coding systems theory classes. Student competency is demonstrated by accuracy and speed in medical coding simulation.

HIT-283	**MEDICAL CODING PROFESSIONAL PRACTICE**	**0**	**6**	**2**

PREREQUISITE: HIT-230, HIT-231
This course provides experience in medical coding of actual charts. The course allows the student to demonstrate basic competencies acquired in previous medical coding course work with on-site, online, and/or on-campus simulations and learning experiences. Student competency includes demonstrated medical coding proficiency.