



Program Information



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Program Curriculum Details

Following are the Detail Program Curriculums approved by Office of Higher Education. Program length in months may vary depending on holidays, vacations, state emergency holidays, emergency early closing etc. Program lengths in hours are as follow.

The total hours per course are as follows:

COURSE	Hours	Credit Hours
CARDIOVASCULAR TECHNOLOGIST	2220	92.5
CERTIFIED NURSE ASSISTANT	150	NA
DIAGNOSTIC MEDICAL SONOGRAPHY	2440	101.0
MEDICAL ASSISTANT	720	32.5
MEDICAL BILLING & CODING SPECIALIST	340	18.5
PATIENT CARE TECHNICIAN	300	NA
VASCULAR TECHNOLOGIST	1760	70.0

CARDIOVASCULAR TECHNOLOGIST

2220 Contact Hours, 92.5 Semester Credit Hours

Approximate Duration in Weeks: 91 (for Day classes) and 107 (for Evening classes)

Program description

Cardiovascular Technologists conduct tests on cardiovascular systems of patients for diagnostic purposes. They may conduct or assist in electrocardiograms, and cardiac catheterizations, and similar tests.

In this program the students will learn about the normal physiology as well as the pathology of the heart and blood vessels. The program comprises of modules like Medical Terminology, Anatomy & Physiology, Ultrasound Physics, Scanning modules like vascular and echocardiography. The coursework also includes 800 hours of externship which will give students an opportunity to practice what they learned in the class. Students can also learn plenty of job related situations and how to handle these situations while working under the supervision of a trained professional in the field. The course utilizes the instructor-led method of teaching. Each module in the program will have a particular set of books and materials to serve as the fundamental reference guide of the subject. A step-by-step procedure is employed to walk the students through each chapter or topic.

Program Objective

The objective of the program is to provide the required knowledge and skills to students in order to become successful Cardiovascular Technologists in the future.

Professional Credentials

After completion of the program student may appear for certification examinations offered by: [Cardiovascular Credentialing International](#) (CCI) and/or American Registry for Diagnostic Medical Sonography (ARDMS)

Students may appear for Registered Cardiac Sonographer (RCS) exam or Registered Vascular Specialist (RVS) exam through [Cardiovascular Credentialing International](#) (CCI).

For more information, please visit <http://cci-online.org/content/examinations-offered>.

Students may also appear for Registered Diagnostic Cardiac Sonographer (RDMS) exam and/or Registered Vascular Technologist (RVT) exam through American Registry for Diagnostic Medical Sonography (ARDMS). Students without a bachelor's degree and who wish to apply for the ARDMS specialty exam will need to first gain additional clinical experience to become eligible to take the ARDMS specialty exam. The additional clinical experience could be gained by working as an ultrasound/vascular sonographer for a minimum of 12 months or 1680 hours. ARDMS does not accept volunteer, instructorship, unpaid, barter or veterinarian experience. Clinical experience earned to document the education requirement cannot also be used to support the clinical requirement. To learn more about the pre-requisites, please visit: <http://www.ardms.org/ARDMS%20Documents/Prerequisites/ARDMS-461%20General%20Prerequisites%202018.pdf>.

Employment

A Cardiovascular Technologist performs echocardiography according to the established practices and procedures, providing preliminary diagnostic evaluation and notifying

cardiologists of results of examinations. The technician consults with cardiologist to establish requirements for non-standard examinations and determines technical factors to satisfy requirements. He or she is familiar with standard concepts, practices and procedures within a particular field; Relying on experience and judgment to plan and accomplish goals as well as performing a variety of related tasks. The technician usually works under general supervision and typically reports to a manager.

Program Layout

Term	Module	Course Title	Sem Credit	Theory	Lab	Clinical
Term I						
	Mod 1	BIO110 Medical Terminology	2.5	40		
	Mod 2	BIO111 Anatomy and Physiology 1	6.0	90		
	Mod 3	BIO112 Anatomy and Physiology 2	3.0	50		
	Mod 4	PTC 110 Patient Care	1.0	20		
	Mod 5	UHC 111 Understanding Healthcare	2.5	40		
Term II						
	Mod 1	SPI 222 Ultrasound Physics & Doppler	10.5	160		
	Mod 2	SPI 223 Instrumentation and Doppler	10.0	120	60	
Term III						
	Mod 1	AEC 233 Adult Echo	22.5	230	230	
Term IV						
	Mod 1	DMS 243 Vascular Scanning	16.0	150	190	
Term V						
	Mod 1	CVT 254 Pre - Clinical	1.0		40	
	Mod 2	CVT 255 CVT Externship	17.5			800
			92.5	900	520	800

Total Semester Credits - 92.5

Total Contact Hours - 2220

Course Description

BIO110 Medical Terminology

This module will cover a comprehensive study of the more common medical roots, prefixes and suffixes. The topic will relate medical language used in medical field.

BIO111 Anatomy and Physiology 1

This is an introduction to anatomy, the science of body structure, and the physiology, the study of body function. The anatomy and physiology of the body are closely related and this topic is the basic introduction to all those relationships.

The introduction covers following topics:

Introduction to Human Body, The Skeletal System, Lymphatic System, The Muscular System, The Endocrine System, The Circulatory System, The Respiratory System, The Digestive System Cell & its Structure & functions, The Urinary System and The Reproductive System.

BIO112 Anatomy and Physiology 2

This is an introduction to anatomy, the science of body structure, and the physiology, the study of body function. The anatomy and physiology of the body are closely related and this topic is the basic introduction to all those relationships.

The introduction covers following topics:

The Spinal cord and Spinal Nerves, Development and Inheritance and Vascular Anatomy.

Required pre-requisite for the module: BIO 111.

PTC 110 Patient Care

The topics covered under this module are:

Patient Care Techniques, Safety & Communication: bio-effects of ultrasound, monitoring of patient, common emergency handling, vital signs, assisting patient transfer and movement, and communication modes; Infection Control: terminology and basics of asepsis, cycle of infection, standard Precautions - hand washing, wearing gloves, gowns, masks, precautions for transmission of infection and disposal of contaminated material used; Legal and Ethical Principles: patient identification, clinical indication comparison, terminology of legal issues, patient's rights- includes informed consent, confidentiality (HIPAA), Patient's bill of rights and ethics of ultrasound technologist.

UHC 111 Understanding Health Care

In this module, the student will learn about ICD diagnostic codes, medical insurance, office administration, PACS& DICOM. Students will also gain knowledge about record keeping, personnel & fiscal management. The student also learns about latest & future trends in ultrasound imaging, understanding other modalities, statistics & transducer disinfection.

SPI 222 Ultrasound Physics & Doppler (core module)

The student will learn about the parameters of sound wave, pulsed ultrasound, interaction of sound with different media, range equation, axial resolution, types of transducers, characteristics of sound beams, display modes, two-dimensional imaging, real-time imaging, displays and image storage, dynamic range, and harmonics.

Required pre-requisite for the module: BIO 112.

SPI 223 Instrumentation and Doppler (core module)

Students will also cover various sections of instrumentation and by the end of the class will have a complete understanding of Doppler.

Required pre-requisite for the module: SPI 222.

AEC 233 Adult Echo (core module)

In this module covers the basic introduction to echocardiography which includes the Heart Doppler - velocities and pressures Trans esophageal and stress echo Cardiac masses, infection and congenital abnormalities. The students are made aware about the various features of echocardiography and the ultrasound production and detection and interpretation, echo techniques in common clinical use, the indication of echo.

Required pre-requisite for the module: BIO 112, and SPI 223.

DMS 243 Vascular Scanning (core module)

This module covers the basic introduction to the vascular ultrasound. The module covers the basic concept about vasculature, the vascular anatomy and pathology related to vessels. *Required pre-requisite for the module: BIO 112 and SPI 223.*

CVT 254 Pre - Clinical (core module)

In this module, the student will be required to practice the clinical protocols learned in all the core scanning modules. The student will practice and review the protocols under the supervision of the clinical instructor covering the scanning protocols of Echocardiography and Vascular modules.

Required pre-requisite for the module: AEC 233 and DMS 243.

CVT 255 CVT Externship (core module)

This course will provide the student with hands-on experience in a physician's office, hospital, or imaging centers under the supervision and control of the AIHT, overseen by a designated site supervisor. Externships allow students to develop skills and contacts within the profession while they explore various career opportunities.

Required pre-requisite for the module: CVT 254.

CERTIFIED NURSE ASSISTANT

150 Clock Hours

Approximate Duration in Weeks: 7 (for Day classes), 8.5 (for Evening classes)

Program Description

This course is designed for students that want to become certified Nurse Assistant in the State of Connecticut by meeting the standard curriculum suggested by the Department of Public Health, State of Connecticut. The program aims to provide the required knowledge and skills in order to become successful certified nurse assistants in the future.

Graduates are trained to work in the acute hospital/clinic setting, as well as Chronic, long-term care settings. The students will learn about the topics that will help them attain comprehensive knowledge and skills related to the nurse assistant job duties.

After completion of the program, student may appear for the Connecticut Nurse Aide Exam. The program utilizes the instructor-led method of teaching. The program has a particular set of books and materials to serve as the fundamental reference guide for the subject.

Program Objective

The objective of the CNA program is to prepare students for entry-level jobs providing them with skills and knowledge required to assist in direct patient care.

Professional Credentials and Graduation Requirement

After completion of the program, students must appear for the Connecticut Nurse Aide Exam. Successful completion of the state nurse aide exam is required in order to be considered a graduate. You are not considered "Certified Nurse Assistant" until you successfully passed the State of Connecticut, Nurse Aid exam.

Employment

CNA is employed at any long-term health care facilities including convalescent centers and hospitals.

Program Layout

Term	Module	Course Title	Theory	Lab	Clinical
Term I					
	Mod 1	CNA 110 Nursing Assistant	80	40	
	Mod 2	CNA 255 CNA Externship			30
			80	40	30

Total Clock Hours - 150

Course Description

CNA 110 Nursing Assistant

In this module, the students will be provided with the knowledge and skills necessary to become certified as a Nurse Aide in the State of Connecticut, by meeting the standard curriculum suggested by the state of CT.

CNA 255 CNA Externship (core module)

This course will provide the student with hands-on experience to practice the skills learned in the CNA 110 module in a long-term care center in the observation of clinical instructor.

Externships allow students to develop skills and contacts within the profession while they explore various career opportunities.

Required pre-requisite for the module: CNA 110

DIAGNOSTIC MEDICAL SONOGRAPHY

2440 Contacts Hours, 101.0 Semester Credit Hours

Approximate Duration in Weeks: 98 (for Day classes) and 113 (for Evening classes)

Program Description

Diagnostic Medical Sonographers, work towards conducting sonographic exam to create images in order to help physicians assess and diagnose medical conditions. Sonographers schedule and coordinate tests, records test results, and prepares and maintains operational logs.

In this program, students learn to perform diagnostic sonographic examinations utilizing ultrasonic equipment to locate, evaluate and record critical functional, pathological, and anatomical data. The program comprises of modules like Medical Terminology, Anatomy & Physiology, Ultrasound Physics, Scanning modules like abdomen, vascular and Ob/gyn. The coursework also includes 800 hours of externship which will also give students an opportunity to practice what they learned in the class. Students can also learn plenty of job related situations and how to handle these situations while working under the supervision of a trained professional in the field. Each module in the program will have a particular set of books and materials to serve as the fundamental reference guide of the subject. A step-by-step procedure is employed to walk the students through each chapter or topic.

Program Objective

The objective of the Diagnostic Medical Sonography Program is not only to prepare students to become skilled sonographers but also to equip them with the essential knowledge of the vital principles and instrumentation of Diagnostic Ultrasound.

Professional Credentials

After completion of the program student may appear for certification examinations offered by: [Cardiovascular Credentialing International](#) (CCI) or American Registry for Diagnostic Medical Sonography (ARDMS) or [American Registry of Radiologic Technologists](#) (ARRT)

Students may appear for Registered Vascular Specialist (RVS) exam through [Cardiovascular Credentialing International](#) (CCI). For more information, please visit <http://cci-online.org/content/examinations-offered>.

Students may also appear for Registered Vascular Technologist (RVT) exam and Registered Diagnostic Medical Sonography (RDMS) exam through American Registry for Diagnostic Medical Sonography (ARDMS). Students without a bachelor's degree and who wish to apply for the ARDMS specialty exam will need to first gain additional clinical experience to become eligible to take the ARDMS specialty exam. The additional clinical experience could be gained by working as an ultrasound/vascular sonographer for a minimum of 12 months or 1680 hours. ARDMS does not accept volunteer, instructorship, unpaid, barter or veterinarian experience. Clinical experience earned to document the education requirement cannot also be used to support the clinical requirement. To learn more about the pre-requisites, please visit: <http://www.ardms.org/ARDMS%20Documents/Prerequisites/ARDMS-461%20General%20Prerequisites%202018.pdf>.

Students with Associates degree may also appear for the Sonography exam through the American Registry of Radiologic Technologists (ARRT). For more information, please visit

<https://www.arrrt.org/earn-arrrt-credentials/types-of-credentials/primary-pathway/sonography>.

Employment

Many Diagnostic Medical Sonographers are employed in hospitals, ambulatory centers, and radiology centers. The education focus of the student allows them to function well in their field. The Medical Sonographers not only scan parts of the body but are also responsible for maintaining equipment and orders supplies when needed. They rely on limited experience and judgment to plan and accomplish goals. They should be able to perform a variety of tasks, and typically report to a chief technologist or manager.

Program Layout

Term	Module	Course Title	Sem Credit	Theory	Lab	Clinical
Term I						
	Mod 1	BIO110 Medical Terminology	2.5	40		
	Mod 2	BIO111 Anatomy and Physiology 1	6.0	90		
	Mod 3	BIO112 Anatomy and Physiology 2	3.0	50		
	Mod 4	PTC 110 Patient Care	1.0	20		
	Mod 5	UHC 111 Understanding Healthcare	2.5	40		
Term II						
	Mod 1	SPI 222 Ultrasound Physics & Doppler	10.5	160		
	Mod 2	SPI 223 Instrumentation and Doppler	10.0	120	60	
Term III						
	Mod 1	DMS 233 Abdomen and Small Parts	16.0	130	210	
Term IV						
	Mod 1	DMS 243 Vascular Scanning	16.0	150	190	
Term V						
	Mod 1	DMS 253 Ob/GYN	15.0	150	190	
Term VI						
	Mod 1	DMS 264 Pre - Clinical	1.0		40	
	Mod 2	DMS 265 DMS Externship	17.5			800
			101.0	950	690	800

Total Semester Credits - 101.0

Total Contact Hours - 2440

Course Description

BIO110 Medical Terminology

This module will cover a comprehensive study of the more common medical roots, prefixes and suffixes. The topic will relate medical language used in medical field.

BIO111 Anatomy and Physiology 1

This is an introduction to anatomy, the science of body structure, and the physiology, the study of body function. The anatomy and physiology of the body are closely related and this topic is the basic introduction to all those relationships.

The introduction covers following topics:

Introduction to Human Body, The Skeletal System, Lymphatic System, The Muscular System, The Endocrine System, The Circulatory System, The Respiratory System, The Digestive System, Cell & its Structure & functions, The Urinary System and The Reproductive System.

BIO112 Anatomy and Physiology 2

This is an introduction to anatomy, the science of body structure, and the physiology, the study of body function. The anatomy and physiology of the body are closely related and this topic is the basic introduction to all those relationships.

The introduction covers following topics: The Spinal cord and Spinal Nerves, Development and Inheritance and Vascular Anatomy. *Required pre-requisite for the module: BIO 111.*

PTC 110 Patient Care

The topics covered under this module are:

Patient Care Techniques, Safety & Communication: bio-effects of ultrasound, monitoring of patient, common emergency handling, vital signs, assisting patient transfer and movement, and communication modes; Infection Control: terminology and basics of asepsis, cycle of infection, standard Precautions – hand washing, wearing gloves, gowns, masks, precautions for transmission of infection and disposal of contaminated material used; Legal and Ethical Principles: patient identification, clinical indication comparison, terminology of legal issues, patient's rights- includes informed consent, confidentiality (HIPAA), Patient's bill of rights and ethics of ultrasound technologist.

UHC 111 Understanding Health Care

In this module, the student will learn about ICD diagnostic codes, medical insurance, office administration, PACS & DICOM. Students will also gain knowledge about record keeping, personnel & fiscal management. The student also learns about latest & future trends in ultrasound imaging, understanding other modalities, statistics & transducer disinfection.

SPI 222 Ultrasound Physics & Doppler (core module)

The student will learn about the parameters of sound wave, pulsed ultrasound, interaction of sound with different media, range equation, axial resolution, types of transducers, characteristics of sound beams, display modes, two-dimensional imaging, real-time imaging, displays and image storage, dynamic range, and harmonics.

Required pre-requisite for the module: BIO 112.

SPI 223 Instrumentation and Doppler (core module)

Students will also cover various sections of instrumentation and by the end of the class will have a complete understanding of Doppler.

Required pre-requisite for the module: SPI 222.

DMS 233 Abdomen and Small Parts (core module)

This module covers the scanning techniques of abdominal organs like liver, biliary tree, pancreas, spleen, gall bladder, kidney, urinary bladder, appendix, along with the pathology of abdomen organs and small parts like thyroid glands, parathyroid glands, prostate, scrotum and breasts.

Required pre-requisite for the module: BIO 112 and SPI 223.

DMS 243 Vascular Scanning (core module)

This module covers the basic introduction to the vascular ultrasound. The module covers the basic concept about vasculature, the vascular anatomy and pathology related to vessels. *Required pre-requisite for the module: BIO 112 and SPI 223.*

DMS 253 OB/GYN (core module)

This module includes scanning techniques of Pelvic organs like ovaries, uterine tubes and cervix. They also study about normal and completed pregnancy, scanning techniques of fetus, pathology & congenital anomalies of the fetus.

Required pre-requisite for the module: BIO 112 and SPI 223.

DMS 264 Pre - Clinical (core module)

In this module the student will be required to practice the clinical protocols learned in all the core scanning modules. The student will practice and review the protocols under the supervision of the clinical instructor covering the scanning protocols of Abdomen and Small Parts, Ob/Gyn and Vascular modules.

Required pre-requisite for the module: DMS 233, DMS 253 and DMS 243.

DMS 265 DMS Externship (core module)

This course will provide the student with hands-on experience in a physician's office, hospital, or imaging centers under the supervision and control of the AIHT, overseen by a designated site supervisor. Externships allow students to develop skills and contacts within the profession while they explore various career opportunities.

Required pre-requisite for the module: DMS 264.

MEDICAL ASSISTANT

720 Contact Hours, 32.5 Semester Credit Hours

Approximate Duration in Weeks: 36(for Day classes) and 42(for Evening classes)

Program description

Medical Assistants perform administrative and certain clinical duties under the direction of a physician. They perform duties ranging from scheduling appointments, maintaining medical records, billing, and coding to taking vital signs and medical histories, preparing patients for examination, and drawing blood. The Medical Assistant program is divided into different modules like Medical Terminology, Anatomy & Physiology, Phlebotomy, ECG, and Medical Billing and Coding. The coursework also includes 200 hours of externship which will give students an opportunity to practice what they have learned in the class. The course program utilizes the instructor-led method of teaching. Each module in the program will have a particular set of books and materials to serve as the fundamental reference guide of the subject.

Program Objective

The Medical Assistant program is designed to prepare students to become skilled office subordinates work closely with doctors, registered nurses, and other office personnel delivering patient care and assuming appropriate responsibilities before, during, and after hospital stays, surgical procedures and doctor's care.

Professional Credentials

After completion of the program graduates can appear for national certification examination, Clinical Medical Assistant Certification (CCMA) through NHA (National Health Career Association).

Employment

Many medical assistants are employed in Doctor's offices, hospitals, ambulatory centers, and emergency departments. Some are employed directly by doctors as 'private assistants' while others work as 'surgical assistants'. They also work in clinics, surgery centers, and general and specialty medical offices. Their broad educational background plus specialized focus, allows medical assistants to function well in a number of diverse areas of their field. Employment possibilities in addition to MA, include, surgery schedulers, materials managers, organ/tissues procurement and preservation, cardiac catheterization laboratories, product development, EKG technicians, phlebotomists and sales. A number of medical assistants become instructors after 3 years of experience in the field.

Program Layout

Term	Module	Course Title	Sem Credit	Theory	Lab	Clinical
Term I						
	Mod 1	BIO 110 Medical Terminology	2.5	40		
	Mod 2	BIO 111 Anatomy and Physiology 1	6.0	90		
	Mod 3	PHL 113 Phlebotomy	4.0	50	30	
	Mod 4	EKG 113 Electrocardiography	4.0	45	25	
Term II						
	Mod 1	MBC 121 Introduction to Billing	4.0	60		
	Mod 2	CMA 223 Assisting with Medical Specialist	7.5	90	90	
Term III						
	Mod 1	CMA 235 CMA Externship	4.5			200
			32.5	375	145	200

Total Semester Credits - 32.5

Total Contact Hours - 720

Course Description

BIO110 Medical Terminology

This module will cover a comprehensive study of the more common medical roots, prefixes and suffixes. The topic will relate medical language used in medical field.

BIO111 Anatomy and Physiology 1

This is an introduction to anatomy, the science of body structure, and the physiology, the study of body function. The anatomy and physiology of the body are closely related and this topic is the basic introduction to all those relationships.

The introduction covers following topics:

Introduction to Human Body, The Skeletal System, Lymphatic System, The Muscular System, The Endocrine System, The Circulatory System, The Respiratory System, The Digestive System, Cell & its Structure & functions, The Urinary System and The Reproductive System.

PHL 113 Phlebotomy

In this module the students will learn basic venipunctures techniques on the practice arm along with dermal punctures and butterflies. They will learn the blood order of draws and different tubes to be used for different blood tests.

EKG 113 Electrocardiography

This module will cover comprehensive information on the normal anatomy and physiology of the heart, conduction pathway, 12-lead EKG, normal and abnormal heart rhythms. The students will perform the EKG on each other to learn how to perform the same.

MBC 121 Introduction to Billing

In this module, the student will be provided with a comprehensive knowledge needed to explain the health insurance plans, requirements & responsibilities of the provider, insurance company and medical biller in depth.

CMA 223 Assisting with Medical Specialist (core module)

The student will learn on how to assist medical specialist to prepare students to work with doctors and other health care professionals for an entry level position in the medical field with an emphasis administrative duties and clinical procedures.

Required pre-requisite for the module: BIO 111.

CMA 235 CMA Externship (core module)

This course will provide the student with hands-on experience in a physician's office and hospital under the supervision and control of the AIHT, overseen by a designated site supervisor. Externships allow students to develop skills and contacts within the profession while they explore various career opportunities.

Required pre-requisite for the module: CMA 223.

MEDICAL BILLING & CODING SPECIALIST

340 Contact Hours, 18.5 Semester Credit Hours

Approximate Duration in Weeks: 17(for Day classes), and 20 (for Evening classes)

Program Description

Medical Billing and Coding Specialist Medical Billers and coders usually work regular office hours may be in the billing office or in the billing department of the professional healthcare office. They must know the different methods of billing patients, understand various collection methods, ethical and legal implications have a good working knowledge of medical terminology, medical billing and claims form completion, and coding. They also must understand database management, spreadsheets, electronic mail, and possess state-of-the-art word processing and accounting skills, be proficient in bookkeeping, and be able to type at a good typing speed.

In this program, students learn Medical terminology, computer application, Medical insurance, billing, coding, HIPAA and medical law & ethics. The clinical externship hours gives you an idea of working in hospital, doctor's office, labs and insurance companies. Each module in the program has a particular set of books and materials to serve as the fundamental reference guide for the subject.

Program Objective

The purpose of medical billing and coding program is to provide students with a comprehensive knowledge needed to explain the health insurance plans, requirements & responsibilities of the provider, insurance company and medical biller in depth.

Professional Credentials

After completion of the program graduates can appear for national certification examination, Certified Billing & Coding Specialist (CBCS) through NHA (National Health Career Association).

Employment

Medical Billers and coders usually work 40 regular office hours from Monday through Friday on a desk in the billing office or billing department of the professional healthcare office. They must know the different methods of billing patients, understand various collection methods, ethical and legal implications have a good working knowledge of medical terminology, medical billing and claims form completion, and coding. They also must understand database management, spreadsheets, electronic mail, and possess state-of-the-art word processing and accounting skills, be proficient in bookkeeping, and be able to type at a good typing speed.

Program Layout

Term	Module	Course Title	Sem Credit	Theory	Lab	Clinical
Term I						
	Mod 1	BIO 110 Medical Terminology	2.5	40		
Term II						
	Mod 1	MBC 221 Medical Billing and Insurance	5.5	80		
	Mod 2	MBC 222 Medical Coding and Compliant Billing	8.0	120		
	Mod 3	MBC 223 Electronic Health Record (EHR)	1.0	20		
Term III						
	Mod 1	MBC 235 Billing and Coding Externship	1.5			80
			18.5	260		80

Total Semester Credits - 18.5

Total Contact Hours - 340

Course Description

BIO110 Medical Terminology

This module will cover a comprehensive study of the more common medical roots, prefixes and suffixes. The topic will relate medical language used in medical field.

MBC 221 Medical Billing and Insurance (core module)

In the Medical Billing & Insurance module, the students will be introduced and given an overview of Medical Insurance, billing cycle, coding procedure, claim follow up and payment processing, management, legal and ethical skills with an emphasis on the basic and essential information.

MBC 222 Medical Coding & Compliant Billing (core module)

In the Medical Coding & Complaint Billing module, the students will be introduced and given an overview of Medical coding procedure, understanding the various code sets, rules and guidelines for coding, assigning correct codes, understanding the importance of code linkage on health care claim, common billing errors, compliant billing, and calculating insurance payments.

Required Pre-requisites for the Module: MBC 221 and BIO 110.

MBC 223 Electronic Health Record (EHR) (core module)

In the Electronic Health Record module, the students will be introduced and given an overview of the EHR documentation through the SpringCharts software. Students will learn the features and functionality, linking EHR software skills to meaning use of EHR. This module emphasizes on different aspects of SpringCharts, from basic patient's chart to labs, tests, codes, and templates.

Required Pre-requisites for the Module: MBC 221 and MBC 222.

MBC 235 Billing and Coding Externship (core module)

This course will provide the student with hands-on experience in a medical office, hospital, or billing & coding management company under the supervision and control of the AIHT, overseen by a designated site supervisor. Externships allow students to develop skills and contacts within the profession while they explore various career opportunities.

Required pre-requisite for the module: MBC 221, MBC 222, MBC 223.

PATIENT CARE TECHNICIAN

300 Clock Hours

Approximate Duration in Weeks: 12.25 (for Day classes), 18 (for Evening classes)

Program Description

This course is designed to provide students with the knowledge and skills necessary to become a Patient Care Technician by first attaining to meet or exceed the standards for the state's nursing aide license.

Graduates are trained to work in the acute hospital/clinic setting, as well as Chronic, long-term care settings. The students will learn about the topics that will help them attain comprehensive knowledge and skills related to the patient care job duties.

After completion of the program, student will appear for the Connecticut Nurse Aide Exam.

The program utilizes the instructor-led method of teaching. The program has a particular set of books and materials to serve as the fundamental reference guide for the subject.

Program Objective

The objective of the PCT program is to prepare students for entry-level patient care technician jobs as well as equip them with the skills and knowledge required to assist in direct patient care.

Professional Credentials

After completion of the program, students will appear for the Connecticut Nurse Aide Exam.

Employment

PCT is employed at any long term health care facilities including convalescent centers and hospitals.

Program Layout

Term	Module	Course Title	Theory	Lab	Clinical
Term I					
	Mod 1	EKG 113 Electrocardiography	50	20	
	Mod 2	PHL 113 Phlebotomy	50	30	
	Mod 3	CNA 110 Nursing Assistant	80	40	
	Mod 4	CNA 255 CNA Externship			30
			180	90	30

Total Clock Hours- 300

Course Description

CNA 110 Nursing Assistant

In this module, the students will be provided with the knowledge and skills necessary to become certified as a Nurse Aide in the State of Connecticut, by meeting the standard curriculum suggested by the state of CT.

EKG 113 Electrocardiography

This module will cover comprehensive information on the normal anatomy and physiology of the heart, the conduction pathway, 12-lead EKG, normal and abnormal heart rhythms. The students will perform the EKG on each other to learn how to perform the same. This module will also cover the basics of treadmill (stress) tests and Holter monitoring.

PHL 113 Phlebotomy

In this module the students will learn basic venipunctures techniques on the practice arm along with dermal punctures and butterflies. They will learn the blood order of draws and different tubes to be used for different blood tests.

CNA 255 CNA Externship

This course will provide the student with hands-on experience to practice the skills learned in the CNA 110 module in a long term care center in the observation of clinical instructor. Externships allow students to develop skills and contacts within the profession while they explore various career opportunities.

Required pre-requisite for the module: CNA 110

VASCULAR TECHNOLOGIST

1760 Contact Hours, 70.0 Semester Credit Hours

Approximate Duration in Weeks: 60 (for Day classes) and 88(for Evening classes)

Program Description

Vascular technologist, work towards conducting sonographic exam to create images in order to help physicians assess and diagnose medical conditions. Sonographers schedule and coordinate tests, records test results, and prepares and maintains operational logs.

In this program, students learn to perform sonographic examinations utilizing ultrasonic equipment to locate, evaluate and record critical functional, pathological, and anatomical data. The program comprises of modules like Medical Terminology, Anatomy & Physiology, Ultrasound Physics, and Vascular Scanning module. The coursework also includes 800 hours of externship which will also give students an opportunity to practice what they learned in the class. Students can also learn plenty of job related situations and how to handle these situations while working under the supervision of a trained professional in the field. Each module in the program will have a particular set of books and materials to serve as the fundamental reference guide of the subject. A step-by-step procedure is employed to walk the students through each chapter or topic.

Program Objective

The objective of the Vascular Technologist Program is to prepare students to become skilled Vascular Technologists and also prepare them to take Registered Vascular Sonographer exam through Cardiovascular Credentialing International. This program will equip them with the essential knowledge of the vital principles and instrumentation of Vascular Ultrasound.

Professional Credentials

After completion of the program student may appear for certification examinations offered by:

- ✓ Cardiovascular Credentialing International (CCI) or
- ✓ American Registry for Diagnostic Medical Sonography (ARDMS) or

Students may appear for Registered Vascular Specialist (RVS) exam through [Cardiovascular Credentialing International](http://ccionline.org/content/examinations-offered) (CCI). For more information, please visit <http://ccionline.org/content/examinations-offered>.

Students may also appear for Registered Vascular Technologist (RVT) exam through American Registry for Diagnostic Medical Sonography (ARDMS). Students without a bachelor's degree and who wish to apply for the ARDMS specialty exam will need to first gain additional clinical experience to become eligible to take the ARDMS specialty exam. The additional clinical experience could be gained by working as an ultrasound/vascular sonographer for a minimum of 12 months or 1680 hours. ARDMS does not accept volunteer, instructorship, unpaid, barter or veterinarian experience. Clinical experience earned to document the education requirement cannot also be used to support the clinical requirement. To learn more about the pre-requisites, please visit: http://www.ardms.org/Prerequisite%20Charts/generalprerequisites_-2014-2.pdf.

Employment

Many vascular technologists are employed in hospitals, ambulatory centers, and radiology centers. The education focus of the student allows them to function well in their field. The Sonographers not only scan vessels but are also responsible for maintaining equipment and orders supplies when needed. They rely on limited experience and judgment to plan and accomplish goals. They should be able to perform a variety of tasks, and typically report to a chief technologist or manager.

Program Layout

Term	Module	Course Title	Sem Credit	Theory	Lab	Clinical
Term I						
	Mod 1	BIO110 Medical Terminology	2.5	40		
	Mod 2	BIO111 Anatomy and Physiology 1	6.0	90		
	Mod 3	BIO112 Anatomy and Physiology 2	3.0	50		
	Mod 4	PTC 110 Patient Care	1.0	20		
	Mod 5	UHC 111 Understanding Healthcare	2.5	40		
Term II						
	Mod 1	SPI 222 Ultrasound Physics & Doppler	10.5	160		
	Mod 2	SPI 223 Instrumentation and Doppler	10.0	120	60	
Term III						
	Mod 1	DMS 243 Vascular Scanning	16.0	150	190	
Term IV						
	Mod 1	RVT 264 Pre - Clinical	1.0		40	
	Mod 2	RVT 265 RVT Externship	17.5			800
			70.0	670	290	800

Total Semester Credits - 70.0

Total Contact Hours - 1760

Course Description

BIO110 Medical Terminology

This module will cover a comprehensive study of the more common medical roots, prefixes and suffixes. The topic will relate medical language used in medical field.

BIO111 Anatomy and Physiology 1

This is an introduction to anatomy, the science of body structure, and the physiology, the study of body function. The anatomy and physiology of the body are closely related and this topic is the basic introduction to all those relationships.

The introduction covers following topics:

Introduction to Human Body, The Skeletal System, Lymphatic System, The Muscular System, The Endocrine System, The Circulatory System, The Respiratory System, The Digestive System, Cell & its Structure & functions, The Urinary System and The Reproductive System.

BIO112 Anatomy and Physiology 2

This is an introduction to anatomy, the science of body structure, and the physiology, the study of body function. The anatomy and physiology of the body are closely related and this topic is the basic introduction to all those relationships.

The introduction covers following topics: The Spinal cord and Spinal Nerves, Development and Inheritance and Vascular Anatomy. *Required pre-requisite for the module: BIO 111.*

PTC 110 Patient Care

The topics covered under this module are:

Patient Care Techniques, Safety & Communication: bio-effects of ultrasound, monitoring of patient, common emergency handling, vital signs, assisting patient transfer and movement, and communication modes; Infection Control: terminology and basics of asepsis, cycle of infection, standard Precautions – hand washing, wearing gloves, gowns, masks, precautions for transmission of infection and disposal of contaminated material used; Legal and Ethical Principles: patient identification, clinical indication comparison, terminology of legal issues, patient's rights- includes informed consent, confidentiality (HIPAA), Patient's bill of rights and ethics of ultrasound technologist.

UHC 111 Understanding Health Care

In this module, the student will learn about ICD diagnostic codes, medical insurance, office administration, PACS & DICOM. Students will also gain knowledge about record keeping, personnel & fiscal management. The student also learns about latest & future trends in ultrasound imaging, understanding other modalities, statistics & transducer disinfection.

SPI 222 Ultrasound Physics & Doppler (core module)

The student will learn about the parameters of sound wave, pulsed ultrasound, interaction of sound with different media, range equation, axial resolution, types of transducers, characteristics of sound beams, display modes, two-dimensional imaging, real-time imaging, displays and image storage, dynamic range, and harmonics.

Required pre-requisite for the module: BIO 112.

SPI 223 Instrumentation and Doppler (core module)

Students will also cover various sections of instrumentation and by the end of the class will have a complete understanding of Doppler.

Required pre-requisite for the module: SPI 222.

DMS 243 Vascular Scanning (core module)

This module covers the basic introduction to the vascular ultrasound. The module covers the basic concept about vasculature, the vascular anatomy and pathology related to vessels. *Required pre-requisite for the module: BIO 112 and SPI 223.*

RVT 264 Pre - Clinical (core module)

In this module the student will be required to practice the clinical protocols learned in all the core scanning modules. The student will practice and review the protocols under the supervision of the clinical instructor covering the scanning protocols of Abdomen and Small Parts, Ob/Gyn and Vascular modules.

Required pre-requisite for the module: DMS 243.

RVT 265 RVT Externship (core module)

This course will provide the student with hands-on experience in a physician's office, hospital, or imaging centers under the supervision and control of the AIHT, overseen by a designated site supervisor. Externships allow students to develop skills and contacts within the profession while they explore various career opportunities.

Required pre-requisite for the module: RVT 264.

Tuition Information

According to AIHT payment plan the student must pay non-refundable \$125.00 for registration and reserve a seat in the class scheduled. Thereafter, students are responsible to pay according to their payment plan until tuition fee is paid in full. Payment done between 1st and 7th of every month will be considered as a regular payment; from 8th to 10th there will be \$10.00 & after 10th, \$25.00 collected towards late fee charges. Please look at the “AIHT payment plan” for details (Business Office).

Tuition Breakdown for Programs

COURSE	Hours	Reg. Fees	Books	*Other	Tuition	Total
CARDIOVASCULAR TECHNOLOGIST	92.5 Credit HRS	\$125.00	\$750.00	\$1000.00	\$18,995.00	\$20,870.00
CERTIFIED NURSE ASSISTANT	150 HRS	\$125.00	\$75.00	\$200.00	\$1,075.00	\$1,475.00
DIAGNOSTIC MEDICAL SONOGRAPHY	101 Credit HRS	\$125.00	\$750.00	\$1000.00	\$19,995.00	\$21,870.00
MEDICAL ASSISTANT	32.5 Credit HRS	\$125.00	\$500.00	\$450.00	\$11,425.00	\$12,500.00
MEDICAL BILLING & CODING SPECIALIST	18.5 Credit HRS	\$125.00	\$500.00	\$250.00	\$3,125.00	\$4,000.00
PATIENT CARE TECHNICIAN	300 HRS	\$125.00	\$250.00	\$500.00	\$3,125.00	\$4,000.00
VASCULAR TECHNOLOGIST	70 Credit HRS	\$125.00	\$350.00	\$750.00	\$16,275.00	\$17,500.00

Cash, Check, Money Order or Credit card accepted

**For lab supplies, uniform(s) and externship costs (if applicable)*