CAMBRIDGE
COLLEGE OF HEALTHCARE & TECHNOLOGY

2022-2023 CATALOG

Volume IV

WWW.CAMBRIDGEHEALTH.EDU

REVISED 06/2022

PRESIDENT'S WELCOME

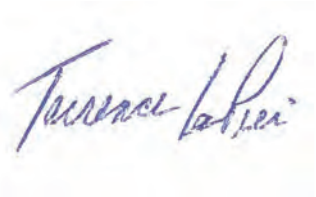
I personally welcome you to Cambridge!

We are excited about your interest in being part of Cambridge and your desire to know more about our health care and information technology training college. Cambridge's commitment to be the very best "student-centered" college is deeply engrained within our culture. We are extremely proud of our faculty, students and alumni. We would enjoy you visiting us soon, so you can experience a sense of our college's values and traditions and learn about our many student successes.

Healthcare, nursing, information technology and their related fields are at a crossroads. The field's shortage of professionals has forced schools to "think outside the box" and explore different venues and technologies for meeting the challenges of today's healthcare and IT workforce. At Cambridge, we are committed to taking advantage of this technological and digital revolution. We have structured our programs to meet the employment needs not only where we have in-residence campuses, but also with our online programs. Cambridge's integrated platform helps address the national healthcare personnel shortages, and related cyber security and IT job market demands.

I promise each student that Cambridge is committed to your personal growth by teaching, nurturing and mentoring each of you.

Let's continue to grow together!



Dr. Terrence LaPier
Chancellor & CEO

Dr. LaPier is a Roman Catholic and Knight of the Sovereign Order of Malta, a lay religious order of the Catholic Church, whose charism is to serve the poor and sick. To learn more about the Sovereign Order of Malta, please visit https://www.orderofmalta.int. Dr. LaPier received his Ph.D. from the London School of Economics and was a faculty member at the University of Pennsylvania's Wharton School for 17 years.

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GENERAL INFORMATION

NATIONAL OVERVIEW

Cambridge College of Healthcare & Technology provides live lecture and remote lecture classrooms, while utilizing wide-ranging learning resource center / library, multiple program laboratories, student lounges, and faculty, administration offices to assist students and Global Campus (hybrid and full distant online education platform) in developing and becoming quality professionals capable of meeting the demands of the related Health Care and Information Technology industries.

HISTORY OF THE INSTITUTION

Cambridge College of Healthcare & Technology has a long history of academic and student career successes.

Cambridge College of Healthcare & Technology was initially founded in 2001 as Cambridge Institute of Allied Health and Technology located in Altamonte Springs (Orlando), Florida; being established and licensed by the Commission for Independent Education (license # 2453). The institution was nationally accredited by the Accrediting Bureau of Health Education Schools (ABHES) in 2004, and changed to the existing ownership in October of 2009 from a local nursing related professional school to Cambridge Health Education I, LLC. In 2010, Cambridge Health Education I, LLC acquired the Delray Beach Main campus with its Atlanta, Georgia branch campus. Commencing in January 2016, for name consistency across all campuses, a name change took place to Cambridge College of Healthcare & Technology. In January, 2020, the Cambridge College Delray Beach Main opened an additional branch campus located in Miami Gardens, FL (license #6244).

In January of 2021, the initial Altamonte Springs (Orlando) Main location had a name change to come fully into name alignment with the other three Cambridge College of Healthcare & Technology campuses. Cambridge has transformed itself from initially providing diplomas / certificates for health-related programs only in Altamonte Springs (Orlando), Florida into a diversified healthcare and technology multi-campus and online platform that now offers certificates/diplomas, associates and bachelors degrees with the goal of offering higher level degrees to serve the various campus communities.

STATEMENT OF OWNERSHIP

Dr. Terrence LaPier and Mr. Stephen Garchik are the two voting Board of Directors. They each have 50 / 50% Voting rights. Dr. Terrence LaPier is a Managing Member and Chief Executive Officer ("CEO"), he is responsible for setting the strategy and managing the college's leadership team and operation. He approves the employee compensation, and sets and monitors the performance of the corporate strategy and objectives directed at maximizing the College's value. Mr. Stephen Garchik is a Managing Member and is the Chief Financial Officer ("CFO"), where he is responsible for all financial systems, audits, managing of the third party accounting and tax firm. He works closely with Dr. LaPier on all College decisions. The Cambridge Board of Director's has one Observer that does not have any voting rights.

BOARD OF DIRECTORS
Cambridge Health Education I, LLC

Dr. Terrence LaPier
Stephen Garchik

BOARD OF GOVERNORS
Cambridge College of Healthcare & Technology

Kristie Pellecchia, Chairman of the Board, Voting (Independent)
Dr. Robert Rothstein, Voting (Independent)
William Larkin, Voting (Independent)
Meredith LaPier, Voting
Stephen Garchik, Voting
Scott Sill, Voting
Dr. Terrence LaPier, Chancellor & CEO, Non-voting, Ex-Officio

Governance

The primary legal authority and responsibility for the advancement of Cambridge College's mission, its financial stability, and the development of its institutional policies rests with its Board of Governors ("BOG"). The BOG presently includes five voting members, as well as the Chancellor and CEO, Dr. LaPier, who serves as a non-voting, ex-officio member. Pursuant to the Cambridge College Bylaws, a majority of the voting members of the BOG must be independent, meaning they are free from any contractual, employment, personal, or familial financial interest in Cambridge College or Cambridge LLC. Presently, three of the five voting members of the BOG are independent.

MISSION STATEMENT

Cambridge College of Healthcare & Technology is a private, academic and student-centered institution of higher education that is dedicated to providing excellent pedagogical teaching and hands on training to traditional and nontraditional students. With Cambridge's significant history, the emphasis on an outstanding student culture continues with focusing on in demand programs, dynamic curriculum, general education skills and a strong commitment to being a leader in the field of career-focused education.

Cambridge offers professional and career-focused curricula designed to cultivate students' successful learning and the ability to apply knowledge, think critically, and communicate effectively. Through comprehensive academic programs, innovative and contemporary in content and mode of delivery, students are exposed to skills essential to become a professional in the healthcare and technology fields. Because academic programs are professional and career focused, Cambridge responds to local, regional, national and global employment needs and supports current workforce trends. Cambridge's mission guides its strategic planning and decision making at all levels of the institution.

GOALS AND OBJECTIVES

Cambridge College aims to enrich student education through comprehensive training, which is essential to meet the demands of medical offices, hospitals, medical centers and clinics. An integral part of achieving our goals is through:

- **The promotion of self- discipline and self-motivation**
- **Attracting and retaining effective and qualified instructors**
- **Offering sound diploma and degree programs**
- **The development of students individual & professional growth which includes interpersonal communication, critical thinking and problem solving competencies**

SCHOOL LOCATIONS

ALTAMONTE SPRINGS
MAIN CAMPUS

Cambridge College of Healthcare & Technology is conveniently located on State Road 436 just a half mile south of Interstate 4 in Altamonte Springs. Convenient access to public transportation is available. This third floor location has elevator access as well as stairways. All the equipment used at Cambridge College of Healthcare & Technology is compatible with industry standards and effectively meets the objectives of the programs. This is a non-smoking facility.

460 E. Altamonte Dr. 3rd Floor
Altamonte Springs, FL 32701
407-265-8383

DELRAY BEACH
MAIN CAMPUS

This campus is located on the grounds of Delray Medical Center. All the equipment used at Cambridge College of Healthcare & Technology is compatible with industry standards and effectively meets the objectives of the programs. This is a non-smoking facility.

5150 Linton Blvd, Suite 340
Delray Beach, FL 33484
561-381-4990

ATLANTA
ADDITIONAL LOCATION TO DELRAY BEACH

The campus is located on the campus of Emory St. Joseph's Hospital of Atlanta. The campus has easy and convenient access to the I-285 and GA 400 Highways. All the equipment used at Cambridge College of Healthcare & Technology is compatible with industry standards and effectively meets the objectives of the programs. This is a non-smoking facility.

5669 Peachtree Dunwoody Rd, Suite 100
Atlanta, GA 30342
404-255-4500

MIAMI GARDENS
ADDITIONAL LOCATION TO DELRAY BEACH

The Miami Gardens campus of Cambridge College of Healthcare & Technology is located centrally for easy access in Miami on Park Centre Boulevard. Easy accessible highways with connections to all cities and counties in South Florida. All the equipment used at Cambridge College of Healthcare & Technology is compatible with industry standards and effectively meets the objectives of the programs. This is a non-smoking facility.

1000 Park Centre Blvd, Suite 112
Miami Gardens, FL 33169
305-627-3001

PLEASE VISIT OUR WEBSITE AT WWW.CAMBRIDGEHEALTH.EDU FOR A LISTING OF ALL OUR SCHOOLS.

ACCREDITATION & LICENSURE

Licensing

Florida

Cambridge College of Healthcare & Technology in Altamonte Springs, Florida is licensed by the Commission for Independent Education, Florida Department of Education (license # 2453).

Cambridge College of Healthcare & Technology Delray Beach, FL and Miami Gardens, FL is licensed by the Commission for Independent Education, Florida Department of Education (license # 2453 and #6244).

Commission for Independent Education (CIE)
325 W. Gaines St, Suite 1414
Tallahassee, Florida 32399-0400
Phone: 850-245-3200
Fax: 850-245-3233
http://www.fldoe.org/cie

*The IV Infusion Therapy Course does not fall under the purview of the Commission.

Georgia

Cambridge College of Healthcare & Technology in Atlanta, Georgia is licensed by Georgia Nonpublic Postsecondary Education Commission (GNPEC).

2082 East Exchange Place, Suite 220
Tucker, Georgia 30084
Phone 770-414-3300
Fax 770-414-3309
https://gnpec.georgia.gov

Accreditation

Institutional

Cambridge College of Healthcare & Technology is institutionally accredited by the Accrediting Bureau of Health Education Schools (ABHES), 6116 Executive Boulevard, Suite 730
North Bethesda, MD 20852 - Tel: 301-291-7550
Email: info@abhes.org, a national accrediting agency recognized by the United States Department of Education under provisions of Chapter 33, Title 38, U.S. Code, and subsequent legislation.

*The IV Infusion Therapy Course and the Computed Tomography Review do not fall under the grant of accreditation for the Accrediting Bureau of Health Education Schools (ABHES).

Programmatic

The Diagnostic Medical Sonography programs are accredited by the Commission on Accreditation of Allied Health Education Programs (caahep.org) upon the recommendation of JRCDMS Committee on Accreditation.

CAAHEP
9355 – 113th ST N #7709
Seminole FL 33775
Phone# 727-210-2350
caahep.org

JRCDMS
6021 University Blvd
Suite 500
Ellicott City, MD 21043
Phone# 443-973-3251
jrcdms.org

Campus Approval Locations

Altamonte Springs, FL location
Delray Beach, FL location
Atlanta, GA location

ADDITIONAL OVERVIEW

PROGRAM AND POLICY CHANGES
Cambridge College reserves the right to make changes in organizational structure, policies and procedures, equipment and materials, and modify the curriculum as deemed necessary. When size and curriculum permit, classes may be combined. Students are expected to be familiar with the information presented in this catalog and applicable student handbooks. Cambridge College obtains the right to make changes to the admissions requirements, tuition, fees and degree requirements. Students will be notified of any changes.

HOUSING
Cambridge College does not have dormitory or housing facilities.

PARKING
Student parking varies by location.

STUDENT HEALTH AND SAFETY
Cambridge College will attempt to provide safe facilities and a workplace free of recognized hazards. Each program has specific guidelines that will be explained by the individual program dean/instructors. Please understand that while the College strives to provide a safe environment, the College cannot guarantee that you will not be exposed to COVID-19 while on campus.

The College does not require vaccinations but encourages all students to receive the dose/doses. If the student is fully vaccinated, then the student must submit a copy of the vaccination card to their Campus Dean. The College will require any student that is not fully vaccinated to have weekly (every seven days) COVID-19 testing and provide a negative result to the Campus Dean or Leadership Team point person.

Students are expected to use common sense at all times to prevent injury to themselves and others. The school maintains first aid kits for emergencies. All accidents and injuries must be reported to a Dean or Administrative Staff immediately.

CRIME AWARENESS AND CAMPUS SECURITY
Cambridge College provides the following information to all of its employees and students as part of the institution's commitment to safety and security pursuant to the requirements of the federal Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act. The Campus Security Report is available on our web page. It should be noted that this report is updated annually. Information on Crime Statistics is also available on the National Center for Education Statistic's College Navigator website. The National Center for Education Statistics (NCES) is the primary federal entity for collecting and analyzing data related to education in the U.S. and other nations. NCES is located within the U.S. Department of Education and the Institute of Education Sciences.

TIMELY WARNINGS
In the event that a situation arises, either on or off campus, in the judgment of the CEO, constitutes a serious and/or continuing threat, a campus wide "timely warning" will be issued. Notices will be posted in each common area. Students will be notified of locations for public notice during orientation.

CONFIDENTIAL REPORTING PROCEDURES
If you are a victim of a crime and unsure if you want to pursue action within the College system or the criminal justice system, you may still make a confidential report. The Campus Dean may be told of the details of the incident in confidence. The purpose of confidential reporting is to comply with your wish to keep the matter confidential, while taking steps to ensure you future safety and the safety of others. With such information, the College can keep accurate records of the number of incidents involving students, determine where there is a pattern of crime with regard to a particular location, method or assailant, and alert the campus community to potential danger. These incidents are counted and disclosed in the annual crimes statistics for the institution with no identifying information.

SMOKE FREE FACILITIES
Florida Statue 386.205 2(a) states that smoking is not permitted inside educational facilities where the public attends class. It is the policy of Cambridge College that it is smoke-free and that all designated smoking areas be located outdoors. Any member of the College community found to be in violation of this policy will be subject to suspension and/or permanent dismissal.

INSURANCE
The school does not provide personal, medical or liability insurance against fire, theft, or vandalism of students' personal property. Students are covered by professional liability insurance during the clinical courses of their program.

ACADEMICS

PROGRAM LOCATIONS

Altamonte Springs - Orlando, FL Campus
Diagnostic Medical Sonography
Radiologic Technology
Nursing Assistant
Medical Assistant
Phlebotomy
Radiation Therapy
Medical Laboratory Technician
Patient Care Technician
Occupational Therapy Assistant
Physical Therapy Assistant

Atlanta, GA Campus
Diagnostic Medical Sonography
Radiologic Technology
Radiation Therapy
Medical Laboratory Technician
Occupational Therapy Assistant
Physical Therapy Assistant
Medical Assistant
Phlebotomy
Patient Care Technician

Delray Beach, FL Campus
Diagnostic Medical Sonography
Radiologic Technology
Radiation Therapy
Nursing
Medical Assistant
Phlebotomy
Medical Laboratory Technician
Nursing Assistant

Miami Gardens, FL Campus
Diagnostic Medical Sonography
Radiologic Technology
Radiation Therapy
Nursing Assistant
Medical Assistant
Phlebotomy
Patient Care Technician

Online Division
Computer Networking (Associates & Diploma/Certificate)
Cyber and Network Security (Associates & Diploma/Certificate)
Data and Project Management (Associates & Diploma/Certificate)
Medical Billing and Coding
Health Information Technology
Health Information Management
Computer Networking Bachelors
Cyber and Network Security Bachelors
Project Management and Analytics Bachelors
Data Management Bachelors

ADDITIONAL INFORMATION

HOURS OF OPERATION
The hours for the business office of Cambridge College are Mon-Thursday 8:30 a.m. to 7 p.m., and Friday from 8 a.m. – 5 p.m.

CLASS SCHEDULES
Residential Classes Meet Monday - Friday 8:00 am – 10:00pm • Distance Education taught through Blackboard® • Externship Hours S M T W TH F S 6:00am – 11:59pm - Actual times for externships are set by the externship sites.

PERSONAL APPEARANCE
All students are expected to be neat, clean, and dressed in Cambridge uniform. The student's footwear should consist of clean white sneakers or medical clogs. While assigned to an externship site, the student must adhere to that facility's dress code in addition to the program's policy. If such rules are not followed, the school will take disciplinary action. Please refer to your program handbook for more details on the dress code.

CREDIT HOURS
Semester Credit Programs: The units of measure used are standard semester credit hours. One semester credit hour equals a minimum of 15 clock hours of lecture, or 30 clock hours of laboratory or 45 clock hours of clinical/externship.
Additional time will be calculated for outside work.

Diploma Programs: A clock hour is defined as 60 consecutive minutes, of which a minimum of 50 minutes is dedicated to instruction.

GRADE LEVEL PROMOTION
Grade Level Credits Required
Freshman 0-30
Sophomore 31-60
Junior 61 or more
Senior 90 or more

CLASS SIZES
Radiology Lab 10:1
DMS Lab 10:1
Clinical Rotation 10:1 (ASN)
Distant Education 25:1
Lecture 30:1
Lab 20:1

GRADUATION REQUIREMENTS
In order to graduate from a program, students must meet the following requirements:

- CGPA of 2.0 or higher
- 90% didactic attendance (clock hour programs)
- 100% Clinical completed in all programs if applicable
- Fulfillment of all financial obligations

COURSE NUMBERING SYSTEM

The courses are numbered in sequence to ensure that all required classes are taught to provide students with necessary information for successful program completion. All one series numbers are for first year and all two series numbers are for second year students.

The following prefixes represents the various course codes.

DMS	Diagnostic Medical Sonography
RTE	Radiologic Technology
RAD	Radiation Therapy
PH	Phlebotomy
MA	Medical Assistant
NUR	Nursing
PN	Practical Nursing
NA	Nursing Assistant
MBC	Medical Billing and Coding
HIT	Health Information Technology
MLT	Medical Laboratory Technician
CN	Computer Networking
CNS	Cyber and Network Security
CDS	Cyber and Data Security
DPM	Data and Project Management
PC	Patient Care Technician
HIM	Health Information Management
OTA	Occupational Therapy Assistant
PTA	Physical Therapy Assistant

TRANSCRIPTS

Student transcripts are permanently maintained at the institution and are available from the Registrar. One copy of the official academic transcript is provided to each student upon program completion and satisfaction of all financial obligations to the school. Students may request, in writing, additional copies of transcripts from the Registrar for a fee of $5.00 each.

ADMISSIONS PROCESS

Admissions Requirements

Applicants must complete and submit an application for admissions that includes:

- Admission Interview
- Personal Statement
- Vaccination Waiver Form
- Distance Education Questionnaire

Proof of High School Graduation

The requirements of High School Graduation (POG) consist of one of the following:

- Diploma from high school
- GED
- Official college transcript confirming associate, bachelors or master's degree
- Evaluated and translated Foreign High School
  Any student submitting proof of high school from a foreign country for consideration of admission is required to provide a translation and evaluation by an approved organization recognized within the Department of Education
- Transcripts (If Applicable)
- Homeschooling documentation (Florida Schools Only)

Application fee of $50.00. Once paid paperwork for Drug Screen & Background Check Acknowledgment to be completed for the following programs:

- Nursing
- Practical Nursing
- Diagnostic Medical Sonography
- Radiation Therapy
- Radiologic Technology
- Nursing Assistant
- Medical Laboratory Technician
- Pharmacy Technician

A clear background and negative drug screening test is required for the above programs

Program Director Overview – Degree Programs

Nursing Disclosure forms required for NCLEX pass rate and nursing status with the Board of Nursing (Florida Schools ONLY).

Any applicant who is under the age of 18 and applying for admissions to Cambridge College of Healthcare & Technology must acquire a parent or guardian's signature on any contractual papers (i.e., Enrollment Agreement), and must verify that they will be 18 years or older at the time they begin their clinical rotations.

Entrance Testing for Nursing Programs ONLY

Nursing/Nursing Assistant Disclosure forms required for NCLEX/PROMETRICS pass rate and nursing status with the Board of Nursing (Florida Schools ONLY).

Delray Beach Location
Applicants to the Associate of Science in Nursing Program at the Delray Beach location must complete a TEAS assessment exam in order to be considered for the Program. Students must obtain a minimum, cumulative passing score of 52% using all four sections. The test is free of charge to applicants. Students may take the TEAS test only twice any 6-month period. All attempts count toward the number of attempts, including those transferred from other institutions. For transferred tests results, the test must have been completed within 12 months of the student's signed enrollment agreement date.

TRANSFER OF CREDIT

Transfer of credit is always the decision of the individual college or university and is controlled by the receiving college. Accreditation does not guarantee transfer of credits.

Applicants requesting credit earned for previous training at another post-secondary institution must submit sealed official transcripts to the Registrar within 30 days of starting a program. In order to be considered, the institution where the credit was previously earned must be accredited by an agency recognized by the United States Department of Education and/or the Commission for Higher Education Accreditation (CHEA).

CLEP is not accepted for Transfer Credit.

Advanced Standing/Proficiencies

The College does not award credit for Advanced Standing, nor does the College permit students to proficiency out of courses.

Transfer of credit from prior education must meet the following requirements:

College course must be completed within 20 years of admission to Cambridge College with a minimum grade of a C or higher.

The following courses require a grade of a B or higher for transferability only for the Delray Beach Nursing program.

- Anatomy & Physiology I
- Anatomy & Physiology I Lab
- Anatomy & Physiology II
- Anatomy & Physiology II Lab
- College Algebra

Any student wishing to submit transcripts from a foreign country for consideration of admission is required to provide a translation and evaluation by an approved organization recognized within the Department of Education.

Transferability of Credit to Other Institutions

Transferability of credit is at the discretion of the accepting institution, and it is the student's responsibility to confirm whether or not credits will be accepted by another Institution of the student's choice. Cambridge does not guarantee that any credits earned at Cambridge will be transferable or accepted by any other institution. Each institution as its own policies governing the acceptance of credit from other institutions.

Students should inquire as to policies on credit transfer at any institution to which they seek admission.

Background Check/ Drug Screening/Proof of Vaccination

Cambridge College of Healthcare & Technology is committed to a drug free and safe learning environment for all students. The allied health professions are committed to providing excellence in patient care and services in a safe, productive and quality conscious environment. As such, clinical and community agencies require students to meet standards, similar to employees, for criminal offenses, use of illegal substances, and COVID-19 vaccinations. Therefore, all students will be required, at their own expense, to be screened for background checks, and substance abuse screens prior to clinical assignments.

For Clinical Assignment, students will be required to show proof of vaccination otherwise the college cannot confirm that the student's clinical assignment will be completed. The program reserves the right to retest a student if there is reasonable suspicion of consumption of alcohol or drugs. Any student dismissed from Cambridge College because of violation of the alcohol/drug or illegal substances will not be considered for readmission to the school until the student has undergone drug counseling and/or treatment and recommendations from the appropriate agencies have been submitted to the school. It is the sole discretion of the school as to whether or not the student will be readmitted.

Felony Disclosure

Please be advised that if you have been convicted of a felony or DUI you may not be eligible for certain clinical experiences, externships or certifications associated with our educational programs. Those with non-felonious criminal backgrounds may also find it difficult to secure employment within a health care setting.

GRIEVANCE PROCEDURES

Grievance Defined

A grievance is a claim, a complaint or an expression of concern made by a student regarding any aspect of his or her educational experience including misapplication of campus policies, rules, regulations, and procedures, or unfair treatment, such as coercion, reprisal, or intimidation by an instructor or other campus employee.

Appeals for Students

A student has the right to appeal all matters with respect to:

- Admissions decisions
- Tuition and fees matters

General Policy

The Appeals Committee shall be responsible for evaluating and making a final decision for an appeal. The committee will decide whether the appeal will be approved or denied. The committee will consist of a combination of faculty & staff members.

Before the student files an appeal, due process must include:

Step 1: Any student with a grievance may request an individual conference with the instructor or administrative staff to address the matter.
Step 2: If unable to resolve the grievance, the student can request a conference with the Program Director or Department Manager.
Step 3: If still unable to resolve the grievance, the student is requested to schedule a conference with the Campus Dean.
Step 4: If still unable to resolve the grievance, the student shall file an appeal with the appropriate documentation to the office of the Registrar.

A final decision and response will be emailed to the student within a reasonable timeframe, not to exceed 7 days after the appeal is reviewed. The decision made by the Appeals Committee shall be final. If, in the judgment of the student, there is no satisfactory resolution, the student may contact the Compliance Department via email at jorloff@cambridgehealth.edu. If, in the judgement of the student, there is still no satisfactory resolution, the student may
contact:

Commission for Independent Education Florida (Florida Schools Only)
Department of Education
325 West Gaines St., Ste. 1414
Tallahassee, Florida 32399-0400
888-224-6684

Georgia Nonpublic Postsecondary Education Commission (Georgia School Only)
2082 East Exchange Place - Suite 220
Tucker, Georgia 30084
Phone 770-414-3300
Fax 770-414-3309
https://gnpec.georgia.gov

Accrediting Bureau of Health Education Schools (ABHES)
7777 Leesburg Pike - Suite 314 N.
Falls Church, VA 22043
Phone (703) 917-9503

CAAHEP
9355 – 113th ST N
#7709
Seminole FL 33775

JRCDMS
6021 University Blvd
Suite 500
Ellicott City, MD 21043

**Diagnostic Medical Sonography programs except for the Miami Gardens Location)*

PROGRAMS
TABLE OF CONTENTS

Certificate/Diploma Programs

- **Nursing Assistant**
- **Phlebotomy**
- **Medical Assistant**
- **Practical Nursing**
- **Patient Care Technician**

Academic Programs

- **Diagnostic Medical Sonography**
- **Radiologic Technology**
- **Radiation Therapy**
- **Nursing**
- **Medical Laboratory Technician**
- **Physical Therapy Assistant**
- **Occupational Therapy Assistant**

Distance Education Programs

- **Medical Billing and Coding**
- **Health Information Technology**
- **Computer Networking – Certificate, Associate, and Bachelor of Science**
- **Cyber and Network Security – Certificate, Associate, and Bachelor of Science**
- **Data and Project Management – Certificate, Associate,**
- **Data Management and Analytics - Bachelor of Science**
- **Project Management – Bachelor of Science**
- **Health Information Management – Bachelor of Science**

CERTIFICATE/DIPLOMA PROGRAM LISTINGS

NURSING ASSISTANT

Offered at our Delray Beach, Altamonte Springs, and Miami Gardens locations
Diploma Program
Method of Delivery: Residential
5 weeks /120 clock hours

Program Objective

The program objective is to provide a student with career training for employment as a basic Nursing Assistant in a long-term care facility, hospital or other related healthcare setting. Specific Course objectives: Demonstrate knowledge of patient care, nutritional needs, safety and comfort measures, and competency in providing personal patient care, applying infection control principles, and assisting with rehabilitative activities. A 40- hour externship in a long- term care facility is required for program completion. Students are required to present a negative TB report from a doctor prior to attending clinical externship. Students that have completed the Nursing Assistant programs are eligible to make application to take the Florida Certified Nursing Assistant (CNA) Examination. A level-2- FBI background screening will be conducted on all candidates. A criminal record may keep a student from obtaining a license or certification in some medical programs. Therefore, a criminal record may affect the student's ability to gain employment in the field of training. Nursing Assistant graduates may work for up to 120 days without certification. Graduates must make application and pass the certification examination before the expiration of the 120 days to become employed.

At the completion of the program, graduates who have attended class and their clinical rotations, studied, and practiced their skills should have the ability to make successful application for state licensure and, upon passing the required state examination, to seek entry-level employment as nursing assistants.

Program Description

The program description is to provide students with career training for employment as a basic Nursing Assistant in a long-term care facility, hospital or other related healthcare setting.

Program Outline

Mon. – Thur. 8:30 am - 1:30 pm	Externship - Fri. 7:00 am-3:00pm (day)
Miami Campus Schedule is: Mon. – Thur. 9:00 am – 2 pm	Externship – Fri. 8:30 am – 5 pm

Schedules may vary depending on location.

Required Courses Clock Hours

Course Code	Course Title	Clock hours
NA101	Nursing Assistant	80
NA102	Nursing Assistant Externship	40
Total Hours		**120**

Course Descriptions

NA101 Nursing Assistant 80 clock hours

This course instructs students in the role of nursing assistant, personal care skills and basic nursing skills as related to long term care.

Prerequisite: None

NA102 Nursing Assistant Externship 40 clock hours

In this course students will practice skills learned in NA101 in a clinical acute care setting. Students will engage in the role of the nursing assistant, personal care skills, and basic nursing skills as related to extended care facilities and hospital care.

Prerequisite: NA101

PHLEBOTOMY TECHNICIAN

Offered at All Locations
Diploma program 11 weeks/220 clock hours
Method of Delivery: Residential

Program Objective

The program objective is to provide students with career training for employment as basic Phlebotomists in a physician's office, hospital, outpatient center, laboratory, or other healthcare facility. Students will practice Phlebotomy procedures on a training arm.

Program Description

At the completion of the Phlebotomy Technician program, a student is prepared to enter the work force as an entry level Medical Assistant. The national Phlebotomy Technician certification examination through NCCT may be taken (not required by the state) when the applicable number of venipunctures and capillary sticks have been obtained and documented by an employer.

Program Outline

Course Code	Course Title	Clock hours
HC 101	Health Care & Body Systems	100
PH101	Phlebotomy	120

Course Descriptions

HC101 Heath Core and Body Systems 100 clock hours
This course describes health care delivery system and health occupations communication interpersonal skills, computer literacy, infection control and recognition and response to emergency situations. This course also includes safety and security, ethical and legal issues, employability skills, basic math and science, and wellness and disease concept, HIV/AIDS, Domestic Violence and OSHA are also included.
Prerequisites: None

PH101 Phlebotomy 120 clock hours
This course includes an introduction to phlebotomy, equipment, safety, and specimen collection techniques. The student receives instruction in anatomy, infection control, special procedures and documenting competency skills.
Prerequisites: None

MEDICAL ASSISTANT

Offered at All Locations
Diploma Program
Method of Delivery: Blended
36 weeks/ 900 clock hours

Program Description

More and more medical offices desire to hire medical assistants who possess diverse skill sets. A Medical Assistant can seek entry level employment in physician's offices, outpatient medical facilities, hospital, clinics, and other related health care setting. Specific course objectives relate to administrative procedures that include use of computerized practice management software, medical billing, and insurance codes, office supplies, collections, correspondence, knowledge and appointment scheduling. Course objectives relative to clinical procedures include: anatomy & physiology, medication administration, injections, EKG, assisting with minor surgical procedures, phlebotomy and lab procedures in a physician's office, outpatient medical facility, hospital and other related healthcare settings. Student must complete a 220-hour externship in an ambulatory care medical facility. At the completion of the Medical Assistant program, a student is prepared to enter the work force as an entry level Medical Assistant.

Program graduates are eligible to take the following credentialing examinations: Registered Medical Assistant (RMA) through the American Medical Technologists (AMT), CCMA from the National Health Career Associate or Certified Medial Assistant exam (CMA through the American Association of Medical Assistants. The National Certification for Phlebotomy Technician examination may be taken (not required by the state) when the applicable number of venipunctures and capillary sticks have been obtained and documented by an employer.

Program Outline

Course Code	Course Description	Clock Hours
HC101	Heath Care and Body Systems	100
MA101	Medical Office Process	60
MA102	Financial & Insurance Office	60
MA103	Anatomy/Physiology/Related Diseases	80
MA104	Electrocardiography	80
MA105	Pharmacology/ Medication	80
PH101	Phlebotomy	120
MA106	Clinical Procedures	100
MA107	Medical Assisting Externship	220
Total Hours		**900**

Course Descriptions

HC101 Heath Care and Body Systems 100 clock hours

This course includes health care delivery system, health occupations, communication, interpersonal skills, computer literacy, infection control, and recognition and response to emergency situations. This course also includes safety and security, ethical and legal issues, employability skills, basic math and science, and wellness and disease concepts. In addition, students receive instruction and certification in HIV/AIDS, Domestic Violence, and OSHA.

Prerequisites: None

MA101 Medical Office Process 60 clock hours

This course introduces the student to the characteristics, responsibilities, and job opportunities of the Medical Assistant. It also introduces the student to the office environment and initial front office procedures. Ethical and legal issues are discussed. Principles of oral and written communications are introduced. The student is introduced to computerized practice management, electronic health records, and appointment scheduling system software as they learn about scheduling, referrals, and office communications.

Prerequisites: None

MA102 Financial & Insurance Office Process 60 clock hours

This course is designed to introduce the student to the patient's medical record. Included is knowledge of insurance, preparing claims, billing, coding, basic bookkeeping, and accounting. Transcription and documentation are introduced. Computer software is introduced and used in the computer lab.

Prerequisites: None

MA103 Anatomy & Physiology 80 clock hours

This course includes fundamental Anatomy and Physiology of the human body. The student is introduced to selected body systems as well as common diseases related to each. Included are nervous, special senses, integumentary, skeletal and muscular, and respiratory systems.

Prerequisites: None

MA104 Electrocardiography 80 clock hours

This course includes basic principles of the cardiovascular system, the normal electrocardiograms, lead systems, identifying rhythms, performing the ECG, and quality assurance and continual quality improvement.

Prerequisites : None

MA105 Pharmacology/ Medication Administration 80 clock hour

This course covers pharmacology, dosage calculations using the metric system and IV dosage calculations for the administration of prescription and non-prescription medications, injections and immunizations. Patient teaching and communication are emphasized.

Prerequisites: None

PH101 Phlebotomy 120 clock hours

This course includes an introduction to phlebotomy, equipment, safety, and specimen collection techniques. The student receives instruction in anatomy, infection control, special procedures and documenting competency skills.

Prerequisites: None

MA106 Clinical Procedures 100 clock hours

This course instructs the students in the following clinical duties and responsibilities clinical duty preparation, medical database, exam preparation and related clinical procedures, laboratory & specimen collection, diagnostic tests and procedures, minor surgical procedures, acute illness, accidents, and emergencies.

Prerequisites: None

MA107 Medical Assisting Externship 220 clock hours

The medical assisting externship will be completed in a physician's office, Outpatient medical facility, or other healthcare setting.

Prerequisites: All prior courses

PATIENT CARE TECHNICIAN

Offered at Our Altamonte Springs, Miami Gardens, and Atlanta Locations
Diploma Program
720 clock Hours 36 weeks
Method of Instruction – Residential

Program Objective

The program is a 720-clock program to prepare students for employment as entry level crossed-trained Patient Care Technicians.

Program Description

This program offers a broad foundation of knowledge and skills expanding the traditional role of the nursing assistant for acute and long-term care settings. A Patient Care Technician is strongly encouraged to become a Certified Nursing Assistant to practice as a PCT. Graduates are eligible to take the Certified Patient Care Technician exam through NHA (not a state requirement).

Phlebotomy procedures are practiced on training arms and human venipunctures and capillary sticks are performed in the classroom. The Certified Phlebotomy Technician examination may be taken through NHA (not a state requirement) when the applicable number of human venipunctures and capillary sticks have been obtained and documented by an instructor or employer. All courses must be satisfactorily completed in order to graduate from the Patient Care Technician Program. Students that have completed the Nursing Assistant portion of the PCT program are eligible to make application to take the Florida Certified Nursing Assistant (CNA) Examination through Prometric.

A criminal record may keep a student from obtaining a license or certification in some medical programs. Therefore, a criminal record may affect the student's ability to gain employment in the field of training.

Program Outline	Required Courses Clock Hours
HC102 Health Care and Body Systems	100
NA101 Articulated Nursing Assistant	80
NA102 Nursing Assistant Externship (prerequisite-NA101)	40
PC101 Home Health Aide	75
PC102 Patient Care Assistant	65

PH101 Phlebotomy	120
PC103 Electrocardiograph Aide	80
PC104 Allied Health Assistant	80
PC105 Patient Care Technician	80
Total Hours	**720**

Course Descriptions

HC101 Heath Care and Body Systems **100 clock hours**

This course describes health care delivery system and health occupations communication interpersonal skills, computer literacy, infection control and recognition and response to emergency situations. This course also includes safety and security, ethical and legal issues, employability skills, basic math and science, and wellness and disease concept. CPR, HIV/AIDS, Domestic Violence and OSHA are also included.

Prerequisites: None

NA101 Articulated Nursing Assistant **80 clock hours**

This course instructs students in the role of the nursing assistant, personal care skills, and basic nursing skills as related to extended care facilities and hospital care.

Prerequisites: None

NA102 Nursing Assistant Externship **40 Clock Hours**

In this course students will practice skills learned in NA101 in a clinical acute care setting. Students will engage in the role of the nursing assistant, personal care skills, and basic nursing skills as related to extended care facilities and hospital care.

Prerequisites: NA101

PC101 Home Health Aide **75 clock hours**

This course includes homemaking services, shopping and meal preparation, stages of human growth and development, safety and infection control, body systems and common disorders relative to home health care. In addition, this course teaches home health care for maternal and infant needs as well as care for the client with special needs.

Prerequisites: None

PC102 Patient Care Assistant **65 clock hours**

This course instructs students in nursing assistant skills for pediatric patients, maternal and infant care and adult surgical patients related to the hospital setting.

Prerequisites: None

PH101 Phlebotomy **120 clock hours**

This course includes an introduction to phlebotomy, equipment, safety, and specimen collection techniques. The student receives instruction in anatomy, infection control, special procedures and documenting competency skills.

Prerequisites: None

PC103 Electrocardiograph Aide **80 clock hours**

This course includes basic principles of the cardiovascular system, the normal electrocardiograms, lead systems, identifying rhythms, performing the ECG, and quality assurance and continual quality improvement.

Prerequisites: None

PC104 Allied Health Assistant **80 clock hours**

This course introduces the student to care of the patient with problems of the respiratory, muscular and skeletal systems. Included are restorative therapies and equipment used to enable the patient to regain optimal function.

Prerequisites: None

PC105 Patient Care Technician **80 clock hours**

This course instructs the student in organizational and effective team skills, documentation, and record management. In addition, students will learn advanced special care skills, such as colostomy care, wound care, endotracheal tube and tracheotomy care.

Prerequisites: None

DEGREE PROGRAM LISTINGS

DIAGNOSTIC MEDICAL SONOGRAPHY

Offered at All Locations
98 Semester Credits
2378 Clock Hours
90 Weeks
Credential awarded – Associate of Science
Method of Delivery: Blended

Program Objectives

The mission of the Diagnostic Medical Sonography program is to provide a comprehensive education that will prepare students to become sonographers. The program is structured to provide intellectual stimulation and learning in the didactic and clinical settings using psychomotor, affective and cognitive domains. It is necessary to prepare students to assume the responsibilities of a sonographer, provide quality patient care and to contribute to their profession by a commitment to professional organizations and lifelong learning. These beliefs are the foundation of the sonography profession and are realized through commitment to the education of sonographers in the community. At the completion of the Diagnostic Medical Sonography program, a student is prepared to enter the sonography work force as an entry level sonographer in any or all modalities including Abdomen, OBGYN, and Cardiovascular Sonography. Upon graduation, clinical employment opportunities can range from hospital settings, out-patient clinics, private practice and specialty centers, mobile and agency services all throughout the domestic United States and International markets.

Program Description

The Associate of Science Degree in Diagnostic Medical Sonography is an educationally broad based postsecondary full-time program. This 90-week program is designed to provide the essentials of entry level sonographic medical imaging. The curriculum leads the student through primary sonographic education in the specialties of Abdomen, including full abdominal and small smarts, Obstetrics & Gynecology, including female pelvis and 1st, 2nd and 3rd trimester Obstetrics imaging, and Cardiovascular including the application and techniques in cardiac imaging and cardiac Doppler studies, cardiac anatomy and function. The course also provides an introduction to the principles of Vascular Sonography, introducing the two common vascular examinations most widely used by sonographers; Lower Extremity Venous Doppler and Carotid Doppler examinations. In addition to Medical Terminology, Pharmacology, and an introduction to Health Science, Sonographic Anatomy and Sonographic Physics are covered. The core curriculum devotes significant “hands-on” laboratory and clinical education skills components. The program requires general education courses in General Physics, Anatomy & Physiology, Algebra, Psychology, English and Speech. Students receive consistent sequential didactic and scheduled laboratory

instruction throughout the program. Students complete one thousand two hundred ninety (1290) didactic hours of classroom and laboratory education and one thousand eighty-eight (1088) hours of clinical training within an approved clinical facility. Assessments takes place at regular intervals throughout the program evaluating the student's progress towards specific levels of competency. Students must complete each course with a 2.0 or higher to remain in the program.

Program Goals

Diagnostic Medical Sonography Program Goals

Goals:

- "To Prepare competent entry-level abdominal sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains" and or
- "To Prepare competent entry-level adult cardiac sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains"
- To Prepare competent entry-level ob/gyn sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains"

Program Prerequisites: DMSA1003 and DMSA2009 will now require the following courses be successfully completed before entering into them:

BSC1085, BSC1085L, BSC1086, BSC1086L, MAC1105, SPC1016, ENC1101, PHY2053, DMSA2008, and MEA1239

DMS Graduation Requirements

In order to graduate from the DMS program, students must meet the following requirements:

- CGPA of 2.0 or higher
- 90% didactic attendance (clock hour programs)
- 100% Clinical hours completed
- 100% Clinical Competencies completed
- 100% Lab Competencies completed
- Successfully pass the SPI (Sonography Principals & Instrumentation) registry exam via the ARDMS (American Registry for Diagnostic Medical Sonography)
- Fulfillment of all Career Services obligations
- Fulfillment of all financial obligations

Program Listing

Course Number	Course Title	Semester Credits	Clock Hours
BCS 1085	Anatomy & Physiology I	3	45
BCS 1085L	Anatomy & Physiology I Lab	1	30
BCS 1086	Anatomy & Physiology II	3	45
BCS1086L	Anatomy & Physiology II Lab	1	30
DMSA 1002	Principles of Sonographic Physics and Instrumentation	5	90
DMSA 1003	Sonographic Anatomy	3	60
DMSA 2001	Principles of Abdominal Sonography I	4	75
DMSA 2002	Principles of Abdominal Sonography II	4	75
DMSA 2003	Principles of OBGYN Sonography I	4	75
DMSA 2004	Principles of OBGYN Sonography II	4	75
DMSA 2005	Introduction to Vascular Sonography	4	75
DMSA 2006	Echocardiographic Pathology I	4	75
DMSA 2007	Echocardiographic Pathology II	4	75
DMSA 2008	Pharmacology	3	45
DMSA 2009	Introduction to Echocardiographic Anatomy	4	75
DMSA 2010	Clinical Externship I	6	272
DMSA 2011	Clinical Externship II	6	272
DMSA 2012	Clinical Externship III	6	272
DMSA 2013	Clinical Externship IV	6	272
DMSA 2014	Seminar	3	45
ENC 1101	English Composition	3	45
HUM1101	Humanities I	3	45
MAC 1105	College Algebra	3	45
MEA 1239	Medical Terminology	2	30
PSY 1012	Introduction to Psychology	3	45
PHY 2053	General Physics	3	45
SPC 1016	Fundamentals of Speech	3	45
Grand Total		**98**	**2378**

Course Descriptions

BCS1085 Anatomy & Physiology I 3 Credits 45 Clock Hours

In this course you will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus

on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system. Students will explore the structure and function of tissues and organism a laboratory setting.
Prerequisites: None

BSC1085L - Anatomy & Physiology I Lab 1 Credit 30 clock hours
In this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system.
Prerequisites: None

BCS 1086 Anatomy & Physiology II 4 Credit 45 clock hours
This course is a continuation of BSC 1085 lecture. Students will continue to will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Students will explore the structure and function of tissues and organs in a laboratory setting. This will include visiting the office of the Medical Examiner, Video web cast of dissections and autopsies.
Prerequisites: BCS 1085

BSC 1086L - Anatomy & Physiology II Lab 1 Credit 30 clock hours
Students will explore the structure and function of tissues and organs in a laboratory setting. This will include visiting the office of the Medical Examiner, Video web cast of dissections and autopsies.
Prerequisites: BSC 1085, BSC 1085L & MEA 1239

ENC 1101 English Composition 3 Credits 45 Clock Hours
Students will learn grammar, punctuation and usage skills that are useful in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course. Students will review readings for writing to aid in essay preparation and completion.
Prerequisites: None

HUM1101 – Humanities I 3 Credits 45 Clock Hours
This course offers an interdisciplinary approach to the humanities. Students study major works in art, music, literature, and philosophy with historical framework.
Prerequisites: None

MAC 1105 College Algebra 3 Credits 45 Clock Hours
Students in this course will explore college algebra through a detailed examination of practical applications. Students will calculate algebraic problems with linear equations, exponents, polynomials, factors, and rational expressions. Student will solve problems using graphs, slopes, inequalities, linear equations, roots, radicals and quadratic equations.
Prerequisites: None

MEA 1239 Medical Terminology 2 Credits 30 Clock Hours
This course provides instruction in how to decipher useful medical terminology into everyday language. Students analyze and learn prefixes and suffixes, spelling use and correct pronunciation. Medical abbreviations and symbols are included.
Prerequisites: None

PSY 1012 Introduction to Psychology 3 Credits 45 Clock Hours
In this course, students learn basic principles of human behavior. Challenges, responsibilities, problems and satisfactions of being a health care provider are discussed. Theories of human behavior and personality development are included.
Prerequisites: None

PHY 2053 General Physics 3 Credits 45 Clock Hours
This course is designed to cover a broad range of physics topics. As these topics are applied to various problem situations, the student will develop critical thinking skills and through the use of group activities which the student will enhance cooperative attitudes. In addition to the knowledge base development in physics the use of computer technologies are integrated throughout the entire course. Topics include technical math calculations, units of measurements, mechanics, heat, fluid, and gas laws, atomic structures and nuclear physics, electromagnetic, light and sound.
Prerequisites: MAC1105

SPC 1016 Fundamentals of Speech 3 Credits 45 Clock Hours
Students will learn the foundations of communications including public presentations and interviewing skills.
Prerequisites: None

DMSA 1002 Principles of Sonographic Physics and Instrumentation
5 Credits 90 Clock Hours
Presents in-depth training in the properties of ultrasound and Doppler physics, instrumentation, equipment operations, display systems, recording devices, image artifacts, biological effects of ultrasound and quality assurance methods. Student will apply sonographic physics and instrumentation principles in an ultrasound laboratory setting.
Prerequisites: MAC1105, PHY2053, DMSA1003, DMSA2009, BSC1085, BSC1085L, BSC1086, BSC1086L

DMSA 1003 Sonographic Anatomy 3 Credits 60 Clock Hours
Introduces ultrasound scanning principles and protocols. Topics include scanning criteria and standardization of image documentation for physician interpretation, normal anatomy, physiology and sonographic appearance of the abdomen, OB/GYN, vascular, and cardiac structures. Students will apply sonographic anatomy principles in an ultrasound laboratory setting.
Prerequisites: BSC 1085 and 1085L, BSC 1086 and 1086L, MAC1105, SPC1016, ENC1101, PHY2053, MEA1239, DMSA2008

DMSA 2001 Principles of Abdominal Sonography I 4 Credits 75 Clock Hours
Presents cross-sectional anatomy of the abdomen, normal and abnormal sonographic findings of the intra-abdominal organs, peritoneal spaces and retroperitoneal structures. The relationship of abnormal findings to patient history, physical examination and laboratory findings are stressed. Students will learn and perform abdomen exam protocols in an ultrasound laboratory.
Prerequisites: BSC 1085/1085L, BSC 1086/1086L, MAC 1105, DMSA1003, DMSA2009

DMSA 2002 Principles of Abdominal Sonography II 4 Credits 75 Clock Hours
This course is a continuation of Principles of Abdominal Sonography I containing a comprehensive approach to in-depth studies of the organs contained within the human abdominal cavity in both normal and abnormal states. This course further explores small parts including: breast, testicular, prostate, and thyroid in addition to an introduction to musculoskeletal, neonatal brain, spine, hips and interventional sonography. Students will continue to learn and perform abdomen exam protocols in an ultrasound laboratory including phantom scanning of various small parts.
Prerequisites: BSC 1085/1085L, BSC 1086/1086L, MAC 1105, DMS A 1003, DMS A 2009, DMSA1002, DMSA2001

DMS A 2003 Principles of OBGYN Sonography I 4 Credits 75 Clock Hours
Presents cross sectional anatomy of the female pelvis, normal and abnormal sonographic features of the non-gravid pelvis, as well as normal and abnormal anatomy of the first trimester. Embryology, early fetal development and the relationship of abnormal findings of the patient history, physical examination and laboratory findings are emphasized. Students will learn and perform transabdominal pelvic exam protocols in an ultrasound laboratory.
Prerequisites: BSC 1085/1085L, BSC 1086/1086L, MAC 1105, DMS A 1003, DMS A 2001, DMS A 1002

DMS A 2004 Principles of OBGYN Sonography II 4 Credits 75 Clock Hours
Presents normal and abnormal anatomy and sonographic features of the second and third trimester pregnancies. The relationship of patient history, physical examination, and laboratory findings with abnormal fetal and maternal findings is emphasized. Students will continue to learn and perform transabdominal pelvic exam protocols in an ultrasound

laboratory including phantom scanning for second and third trimester pregnancies.
Prerequisites: BSC 1085/1085L, BSC 1086/1086L, MAC 1105, DMS A 1003, DMS A 2001, DMS A 1002, DMS A 2002, DMSA2003

DMS A 2005 Introduction to Vascular Sonography 4 Credits 75 Clock Hours
This section of the course provides hands on experience in the application of the two most common vascular examinations: the lower extremity venous doppler exam and the carotid doppler exam. The student will also participate in the application and technique studied in the didactic section of the course. The laboratory sessions also emphasize and encourage the student to recognize the normal anatomy and normal ultrasonic findings while learning and performing exam protocols for lower extremity venous Doppler and carotid Doppler ultrasound exams. After completion of the basic principles, the course focuses on pathology and dysfunction and the disease process.
Prerequisites:, DMSA 1002, DMSA 2007, DMSA2004, DMSA1003, DMSA2009, DMSA2004, BSC1085, BSC1085L, BSC1086, BSC1086L

DMS A 2006 Echocardiographic Pathology 4 Credits 75 Clock Hours
After the basic principles, the course will be focusing on pathology and dysfunction and the disease process. Cardiac pathology covered includes: left ventricular dysfunction, coronary artery diseases, valvular heart disease, Doppler-(Color, PW, and CW), diseases of the aorta & pulmonary hypertension. Coordination of the patient's history, physical findings and Sonographic images are evaluated for presentation. Discussions will be both detailed and concise for understanding and comprehension. Students will learn and perform echo ultrasound exam protocols in an ultrasound laboratory.
Prerequisites: BSC 1085/1085L, BSC 1086/1086L, MAC 1105, DMS A 1002, DMSA 1003, DMS A 2009

DMS A 2007 Echocardiographic Pathology 4 Credits 75 Clock Hours
This course provides a foundation for cardiomyopathies and IHD, evaluation of pericardia and intra cardiac tumors, anomalies of the aorta and great vessels, congenital heart diseases, pericardial pathologies, tumors and diseased valves. Each section of disease will be discussed in detail regarding causes, signs symptoms, echocardiographic findings and complications. This course also discusses wall motion abnormalities in relation to pathologic situation. Discussion is both detailed and concise for understanding and comprehension. Students will continue to learn and perform echo ultrasound exam protocols in an ultrasound laboratory.
Prerequisites: BSC 1085/1085L, BSC 1086/1086L, MAC 1105, DMS A 1002, DMS A 1003, DMS A 2009, DMS A 2006

DMS A 2008 Pharmacology 3 Credits 45 Clock Hours
This course involves understanding of clinical pharmacology including theory, effects of drugs used in Echocardiography and pharmacology of provocative stress agents and their uses and adverse effects. This course also discusses potential side effects of cardiac medications on the Echo findings and involves understanding the indications, utility of

advances in echocardiography such as Stress echocardiography Transesophageal echocardiography, Intraoperative echocardiography, & Contrast echocardiography.
Prerequisites: BSC 1085/1085L, BSC 1086/1086L, MAC 1105

DMS A 2009 Introduction to Echocardiographic Anatomy 4 Credits 75 Clock Hours
This course provides a foundation in the principle of echocardiography, the most effective non-invasive method for use in cardiac diagnosis. This course involves understanding of the normal cardiac anatomy, coronary anatomy, and the relationship of chambers and the great vessels. An understanding of EKG, Electrophysiology, conduction system and mechanical events of the cardiac cycle in relation to electrical events will be stressed. This course provides the application and techniques in 2D cardiac imaging, M-mode, cardiac studies, cardiac anatomy and function. Students will learn and perform EKG exam protocols in an ultrasound laboratory.
Prerequisites: BSC 1085/1085L, BSC 1086/1086L, MAC1105, SPC1016, ENC1101, PHY2053, MEA1239, DMSA2008

DMS A 2010 Clinical Externship I 6 Credits 272 Clock Hours
This course introduces students to the clinical setting and provides an opportunity for students to observe and participate in Sonographic procedures, at the clinical sites discretion. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required competencies related to but not exclusive to Abdomen in the clinical setting.
Prerequisites: BSC 1085/1085L, BSC 1086/1086L, MAC 1105, DMS A 2009, DMS A 1003

DMS A 2011 Clinical Externship II 6 Credits 272 Clock Hours
This course, a continuation of the clinical setting in Clinical Externship I, allows students to continue in the clinical setting and provides additional opportunity to observe and have in depth participate in Sonographic procedures, at the clinical sites discretion. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required competencies related to but not exclusive to OBGYN in the clinical setting. Students will continue building oral skills to communicate clearly, concisely, and intelligently to medical professionals and patients and will begin using written skills to communicate clearly, concisely, and intelligently. Student will begin to possess the ability to demonstrate critical thinking and problem solving skills. The course also supports student's ability to better understand and apply allied health occupational information as well as encourage occupational attitudes and work ethic desired of allied health employers and members of the specific profession.
Prerequisites: BSC 1085/1085L, BSC 1086/1086L, MAC 1105, DMS A 2009, DMS A 1003, DMS A 2010

DMS A 2012 Clinical Externship III 6 Credits 272 Clock Hours
This course introduces students to the clinical setting and provides an opportunity for students to observe and participate in Sonographic procedures, at the clinical sites discretion. All activities of students are under the supervision of a designated site clinical

instructor or designee. Emphasis is placed on the demonstration of proficiency in required competencies related to but not exclusive to vascular examinations such as lower extremity venous and carotid doppler examinations in addition to an introduction to cardiac echo examinations in the clinical setting. The student will continue to build upon proper oral skills and will have the ability to communicate clearly, concisely, and intelligently with medical professionals and patients. Also, the student will have the opportunity to build upon written skills to communicate clearly, concisely, and intelligently along with the ability to demonstrate critical thinking and problem solving. This course continues to support the student's ability to demonstrate occupational attitudes and work ethic desired of allied health employers and members of the specific profession.
Prerequisites: BSC 1085/1085L, BSC 1086/1086L, MAC 1105, DMS A 2009, DMS A 1003, DMS A 2010, DMSA2011

DMS A 2013 Clinical Externship IV 6 Semester Credits 272 Clock Hours
This course, a continuation of the clinical setting in Clinical Externship III, allows students to continue in the clinical setting and provides additional opportunity to observe and future participate in Sonographic procedures, at the clinical sites discretion. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required competencies related to but not exclusive to echocardiography examinations in the clinical setting. The course continues to encourage the students to communicate clearly, concisely, and intelligently with medical professionals and patients as well as continuing to build upon critical thinking and problem-solving skills in an independent manner. This course will present to the student the correct way to function as a productive team member. The course will facilitate the ability to understand and apply allied health occupational information and build upon the student's ability to demonstrate occupational attitudes and work ethics.
Prerequisites: BSC 1085/1085L, BSC 1086/1086L, MAC 1105, DMS A 2009, DMS A 1003, DMS A 2010, DMSA2011, DMSA2012

DMS A 2014 Seminar 3 Credits 45 Clock Hours
In this course the student is prepared for the real world of work via assistance with resume writing, interviewing techniques and job placement. In addition, the student will elect which registry concentration they are interested in (Abdomen vs OBGYN vs Echo) and review registry exam questions and materials along with a mock specialty registry exam in preparation for passing the ARDMS or CCS specialty concentration registry board.
Prerequisites: DMSA 2005, DMS2004, DMSA2007, DMSA2010

RADIATION THERAPY PROGRAM

Offered at All Locations
2175 Hours
89 Credits
90 weeks
Credential Awarded: Associate of Science Degree
Type of Instructional Delivery: Blended

Program Description

The Radiation Therapy Program is 90 weeks in length. It is designed to provide a well-planned didactic and clinical education experience to enable students to become competent, entry-level radiation therapists upon graduation.

Program Objective

The objective of the Radiation Therapy program curriculum is it has been developed in accordance with the guidelines established by the American Society of Radiologic Technologists (ASRT). The clinical competency requirements have been developed in accordance with ARRT (American Registry of Radiologic Technologists) guidelines.

Withdrawals

Students will not be eligible for re-entry after two withdrawals. Student with two failures in any didactic radiation therapy course will be dismissed from the Radiation Therapy program.

Program Outline

Course Code	Course Description	Credits	Clock Hours
BSC 1085	Anatomy & Physiology I	3	45
HUM1101	Humanities I	3	45
BSC 1085L	Anatomy & Physiology I Lab	1	30
BSC 1086	Anatomy & Physiology II	3	45
BSC 1086L	Anatomy & Physiology II Lab	1	30
ENC 1101	English Composition	3	45
PSY 1012	Introduction to Psychology	3	45
SPC 1016	Fundamentals of Speech	3	45
MAC 1105	College Algebra	3	45
MEA 1239	Medical Terminology	2	30
RAD 1006A	Clinical Externship I A	5	240
RAD 1007A	Clinical Externship II A	5	240

RAD 2007A	Clinical Externship III A	8	360
RAD 2008A	Clinical Externship IV A	8	360
RAD 1001A	Introduction to Clinical Radiation Therapy & Operations	4	60
RAD 1015A	Orientation to Radiation Therapy & Patient Care	3	45
RAD 1003A	Radiation Therapy Physics I	4	60
RAD 1004A	Radiation Therapy Physics II & Quality Management	4	60
RAD 1025A	Radiation Biology & Protection	4	60
RAD 1009A	Principles & Practice of Radiation Therapy I	4	60
RAD 1010A	Principles & Practice of Radiation Therapy II	3	45
RAD 2010A	Treatment Planning	4	60
RAD 2003A	Radiation Therapy Review Seminar	4	60
RAD 1018A	Sectional Anatomy & Imaging Principles	4	60
Total Credits		89	2175

Course Descriptions

ENC 1101 - English Composition 3 credits 45 clock hours

Students will be taught the proper use of grammar, punctuation and usage skills that are used in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course. Students will review readings for writing, to aid in essay preparation and completion.
Prerequisites: None

MAC 1105 - College Algebra 3 Credits 45 clock hours

Students in this course will explore college algebra through a detailed examination of practical applications. Students will calculate algebraic problems with linear equations, exponential functions, polynomials, factors and rational expressions. Students will solve problems using graphs, slopes, inequalities, linear equations, roots, radicals and quadratic equations.
Prerequisites: None

MEA 1239 - Medical Terminology 2 credits 30 clock hours

This course will provide students with instruction in how to decipher useful medical terminology into everyday language. Students analyze and learn prefixes and suffixes, spelling use and correct pronunciation. Medical abbreviations and symbols are included.
Prerequisites: None

PSY 1012 - Introduction to Psychology 3 credits 45 clock hours

This course offers students the basic principles of human behavior. Students will discuss challenges, responsibilities, problems and satisfaction of being a health care provider and

relate this to the theories of human behavior and personality development.
Prerequisites: None

SPC 1016 - Fundamentals of Speech 3 credits 45 clock hours
Students will learn the foundations of communication including public presentations and interviewing skills. Emphasis will be placed on motivational speaking.
Prerequisites: None

BSC 1085 - Anatomy & Physiology I 3 credits 45 clock hours
This course will offer students the opportunity to learn about the structure and function of the human body. The concepts of cells, tissues, organs and systems are presented to form the framework for a comprehensive study of anatomic structures and basic functions of each body system. In addition, the concepts of biochemistry will be discussed. Also provided will be the concepts of structural anatomy as students analyze the complex functions of each system.
Prerequisites: None

BSC 1085L - Anatomy & Physiology I Lab 1 credit 30 clock hours
Students in this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system.
Prerequisites: None

BSC 1086 - Anatomy & Physiology II 3 credits 45 clock hours
This course is a continuation of BSC 1085 lecture. Students will continue to will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved.
Prerequisites: BSC 1085

BSC 1086L- Anatomy & Physiology II Lab 1 credit 30 clock hours
Students will explore the structure and function of tissues and organs in a laboratory setting. This will include visiting the office of the Medical Examiner, Video web cast of dissections and autopsies.
Prerequisites: BSC1085

HUM1101 – Humanities I **3 Credits 45 Clock Hours**
This course offers an interdisciplinary approach to the humanities. Students study major works in art, music, literature, and philosophy with historical framework.
Prerequisites: None

RAD 1001A - Introduction to Clinical Radiation Therapy & Operations
4 credits 60 clock hours
This course will introduce the students to the clinical setting. Personnel and responsibilities will be discussed with regard to each person involved with patients and their care. Equipment utilized and safe operation of equipment will be discussed. The proper and ethical behaviors of students and personnel in the clinical setting will be demonstrated via role play and discussion groups. The psychological aspects of patient reactions and fears will be discussed with regard to the waiting room, treatment room and personnel they will meet. This course will prepare students for clinical externships beginning the second semester of the program. This course also focuses on various Radiation Therapy operational issues. Continued quality improvement issues are discussed and evaluated and assessment techniques will be emphasized. Human resource regulations impacting the radiation therapist will be examined. Accreditation agencies and the radiation therapist's role in the accreditation process will be discussed. Billing and reimbursement issues pertinent to the radiation therapy department will be presented. Basic Cardiac Life Support for the Health Care Provider will also be provided involving training in risk factors of heart disease, recognition of a heart attack and choking victim. Activating the emergency medical services system and managing the unconscious victim with rescue breathing using airway adjuncts/ventilation devices along with the automated external defibrillator educational course. Adult, child and infant cardio pulmonary resuscitation and obstructed airway instruction for the one-rescuer and two-rescuer team will be covered.
Prerequisites: None

RAD 1015A – Orientation to Radiation Therapy & Patient Care
3 credits 45 clock hours
The student will be provided with concepts in assessment and evaluation of the patient for delivery of radiation therapy. Psychological and physical needs and factors affecting treatment outcome will be presented and examined. Routine and emergency care procedures will be presented. An overview of the foundations in radiation therapy and the therapist's role in the health care delivery system will be reviewed. The principles, practices, and policies of Cambridge College of Healthcare & Technology, health care organizations, principles of radiation and health safety and professional responsibilities of the radiation therapist will be covered in this course. Problem-solving will be utilized along with critical thinking skills in discussion of the source of law, causes of action and litigation processes related to the professional practice of radiation therapy and the ethical standards and standard of law will be compared and examined.
Prerequisites: BSC 1085, BSC 1085L, MEA 1239, ENC 1101, BSC 1086, BSC 1086L

RAD 1003A - Radiation Therapy Physics I **4 credits 60 clock hours**

This course provides students with an understanding of the concepts of general physics. It then develops into an understanding of radiations used in the clinical setting. Fundamental physical units, measurements, principles, atomic structure and types of radiation are emphasized. Also presented are the fundamentals of x-ray generating equipment, x-ray production and its interactions with matter.

Prerequisites: RAD 1015A, RAD 1001A. RAD1018

RAD 1004A - Radiation Therapy Physics II & Quality Management
4 credits 60 clock hours

This course is a continuation of RAD 1003A and is designed to review and expand concepts and theories in the radiation physics I course. Detailed analysis of the structure of matter, properties of radiation, nuclear transformations, x-ray production and interactions of ionizing radiations are emphasized. The student is also presented with treatment units used in external beam radiation therapy, measurement and quality of ionizing radiation produced, absorbed dose measurement, dose distribution and scatter analysis. This course is also designed to focus on the evolution of quality management programs and continuing quality improvement in radiation oncology. Students will examine the need for quality assurance checks, quality assurance of the clinical aspects and chart checks, film checks, the various types of evaluations and tests performed on simulators, megavoltage therapy equipment and therapy planning units, the role of radiation therapists in quality management programs. Legal and regulatory implications for maintaining appropriate quality management guidelines as well as the role of computers and information systems are discussed as they serve within the radiation oncology department. As part of this course, students will be required to document competency in performing daily treatment machine checks as part of their clinical competency requirements.

Prerequisites: MAC 1105, RAD 1025A RAD 1003A, RAD 1018A

RAD 1025A - Radiation Biology & Protection **4 credits 60 clock hours**

This course will present the basic principles of radiation protection and safety for the radiation therapist. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations are included. The specific responsibilities of the radiation therapist are discussed, examined, performed and evaluated. The student will also be presented with basic concepts and principles of radiation biology; the interactions of radiation with cells, tissues and the body as whole and resultant biophysical events will be presented. Discussion of the theories and principles of tolerance dose, time-dose relationships, fractionation schemes and the relationship to the clinical practice of radiation therapy will be discussed, examined and evaluated

Prerequisites: BSC 1085, BSC 1085L, BSC 1086, BSC 1086L, MEA 1239, RAD 1015A, RAD 1018A, ENC1101

RAD 1018A - Sectional Anatomy & Principles of Imaging **4 credits 60 clock hours**

The student is introduced to a knowledge base in factors that govern and influence the production and recording of radiographic images for patient simulation, treatment planning, and treatment verification in radiation oncology. Radiation oncology imaging equipment and related devices will be emphasized. This course will also provide the student the opportunity to study normal anatomical structures via a variety of imaging formats. Basic anatomical relationships will be compared using topographical and cross-sectional images.
Prerequisites: BSC 1085, BSC 1085L, MEA 1239, BSC 1086, BSC 1086L.

RAD 1009A - Principles and Practice of Radiation Therapy I 4 credits 60 clock hours
In this course the student is provided with an overview of cancer and the specialty of radiation therapy. The medical, biological and pathological aspect as well as the physical and technical aspects will be discussed. The role and responsibility of the radiation therapist, the treatment prescription, the documentation of treatment parameters and delivery will also be discussed.
Prerequisites: MEA 1239, RAD 1003A RAD 1025A, RAD 1018A.

RAD 1010A - Principles and Practice of Radiation Therapy II 3 credits 45 clock hours
This course is a continuation of RAD 1009A. The course is designed to examine and evaluate the management of neoplastic disease while promoting critical thinking skills and the basis of ethical clinical decision-making. The epidemiology, etiology, detection, diagnosis, patient condition, treatment and prognosis of neoplastic disease will be presented for each organ and system. This will be discussed and evaluated in relationship to histology, anatomical site and patterns of spread. The radiation therapist's role in the management of neoplastic disease will also be examined and linked to the skills required to analyze complex issues and make informed decisions while appreciating the character of the profession.
Prerequisites: MEA 1239, RAD 1004A, RAD 1009A.

RAD 2010A - Treatment Planning 4 credits 60 clock hours
The content of this course is designed to establish factors that influence and govern clinical treatment planning of patient treatment. Encompassed are isodose distributions, patient contouring, and radiobiologic considerations. Students will be required to make dosimetric calculations utilizing compensating filters, blocking considerations with various field angles and other treatment accessories.
Prerequisites: MAC 1105, RAD 1018A, RAD 1003A, RAD 1004A, RAD 1006A, RAD 1007A.

RAD 2003A - Radiation Therapy Review Seminar **4 credits 60 clock hours**
Course is designed to synthesize previous coursework and integrate didactic and clinical concepts. Various Instructors will present interactive lectures, reviews and comprehensive exams based on all course topics and materials covered throughout the two-year program. Instructors will emphasize the application process, completion of the programmatic requirements and practice computerized simulations of the registry exam based on the outline in the Radiation Therapy Certification Handbook
Prerequisites: ENC 1101, PSY 1012, SPC 1016, MAC 1105, MEA 1239, BSC 1085, BSC 1085L, BSC 1086, BSC 1086L, RAD 1006A, RAD 1007A, RAD 2007A, RAD 1001A, RAD 1015A, RAD 1003A, RAD 1004A, RAD 1025A, RAD 1009A, RAD 1010A, RAD 2010A, RAD 1018A.

RAD 1006A - Clinical Externship I A **5 credits 240 clock hours**
The student will rotate through nursing, simulation and treatment. The student will participate in routine procedures under the direct supervision of a registered radiation therapist. The student will develop competence in basic patient care skills as well as basic simulation and treatment setups.
Prerequisites: BSC 1085, BSC 1085L, MEA 1239, RAD 1000A, RAD 1001A.

RAD 1007A - Clinical Externship II A **5 credits 240 clock hours**
The student will rotate through nursing, simulation and treatment. The student will participate in routine procedures under the direct supervision of a registered radiation therapist. The student will develop competence in basic patient care skills as well as basic simulation and treatment setups.
Prerequisites: RAD 1000A, RAD 1001A, RAD 1002A, RAD 1003A, RAD 1006A.

RAD 2007A - Clinical Externship III A **8 credits 360 clock hours**
The student will be introduced to the general operations of a radiation oncology department including equipment used for simulation and treatment, patient flow, and roles and responsibilities of the healthcare team that comprises the staff.
Prerequisites: RAD 1000A, RAD 1001A, RAD 1002A, RAD 1003A, RAD 1005A, RAD 1006A, RAD 1007A.

RAD 2008A - Clinical Externship IV A **8 credits 360 clock hours**
The student will introduced to the general operations of a radiation oncology department including equipment used for simulation and treatment, patient flow, and roles and responsibilities of the healthcare team that comprises the staff. The student will develop competence in basic patient care skills, as well as, dosimetry, simulation and treatment setups.
Prerequisites: RAD 1000A, RAD 1001A, RAD 1002A, RAD 1003A, RAD 1004A, RAD1005A, RAD 1006A, RAD 1007A, RAD 1008A, RAD 1009A, RAD 2007A.

RADIOLOGIC TECHNOLOGY

Offered at All Locations
2640 Clock Hours
99 Credits
90 Weeks
Credential Awarded Associate of Science Degree
Type of Instructional Delivery: Blended

Program Description

The program is 90 weeks in length. The program is designed to provide a well-planned didactic and clinical education experience to enable students to become competent, entry-level professionals upon graduation.

Program Objectives

At the completion of the Radiologic Technology program, a student is prepared to enter the work force as an entry level Radiologic Technologist.

The curriculum has been developed in accordance with the guidelines established by the American Society of Radiologic Technologists (ASRT). The clinical competency requirements have been developed in accordance with ARRT (American Registry of Radiologic Technologists) guidelines.

Note: BCLS Training will be provided to students prior to the first clinical rotation.

Radiologic Technology Program Goals

- **Goal 1:** Demonstrate clinical competence in the care of patients. Students will apply knowledge of anatomy, physiology, positioning and radiographic techniques to accurately demonstrate anatomical structures on image receptors. Students will deliver appropriate patient care while maintaining a safe environment according to OSHA and ALARA principles.
- **Goal 2:** Demonstrate problem solving and critical thinking skills Students will evaluate radiographic images for appropriate positioning and image quality. Students will manipulate technical factors for non-routine exams.
- **Goal 3:** Model professional and ethical behavior as a member of the healthcare team. Students will maintain ethical and professional values. Students will attend a society meeting.

- **Goal 4:** Demonstrate written and oral communication skills within the healthcare setting. Students will demonstrate effective written communication skills. Students will demonstrate effective oral communication skills.

Program Courses

Course Number	Course Name	Credits	Clock Hours
CTS 1050	Introduction to Computers	3	45
ENC1101	English Composition	3	45
HUM1101	Humanities	3	45
MAC1105	College Algebra	3	45
MEA1239	Medical Terminology	2	30
PSY1012	Introduction to Psychology	3	45
SPC1016	Fundamentals of Speech	3	45
BSC1085	Anatomy & Physiology I	3	45
BSC1085L	Anatomy & Physiology I Lab	1	30
BSC1086	Anatomy & Physiology II	3	45
BSC1086L	Anatomy & Physiology II Lab	1	30
RTE1025	Principles of Image Production I	2	30
RTE1026	Principles of Image Production II	2	30
RTE1030	Radiographic Physics	4	60
RTE1202	Radiographic Procedures I	3	45
RTE1202L	Radiographic Procedures I Lab	1	30
RTE1203	Radiographic Procedures II	3	45
RTE1203L	Radiographic Procedures II Lab	1	30
RTE1204	Radiographic Procedures III	2	30
RTE1204L	Radiographic Procedures III Lab	1	30
RTE1205	Radiographic Procedures IV	2	30
RTE1205L	Radiographic Procedures IV Lab	1	30
RTE1206	Radiographic Procedures V	2	30
RTE1206L	Radiographic Procedures V Lab	1	30
RTE2015	Radiographic Biology and Protection	3	45
RTE2025	Cross Sectional Anatomy/Advanced Modalities	3	45
RTE1270	Clinical I	5	240
RTE1280	Clinical II	5	240
RTE2005	Clinical III	8	360
RTE2010	Clinical IV	8	360
RTE2020	Clinical V	8	360
RTE2500	Senior Registry Review	3	45
RTE1201	Introduction to Radiologic Sciences	3	45
Total		**99**	**2640**

Course Descriptions

CTS 1050 - Introduction to Computers 3 Credits 45 clock hours
Students will learn the basic operation of Microsoft Word, Excel, and PowerPoint. Student will learn proper techniques for business letter writing and resume writing.
Prerequisites: None

ENC 1101 - English Composition 3 Credits 45 clock hours
Students will learn grammar, punctuation and usage skills that are useful in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course.
Prerequisites: None

HUM1101 – Humanities I 3 Credits 45 Clock Hours
This course offers an interdisciplinary approach to the humanities. Students study major works in art, music, literature, and philosophy with historical framework.
Prerequisites: None

MAC 1105 - College Algebra 3 Credits 45 clock hours
Students in this course will explore college algebra through a detailed examination of practical applications. Students will calculate algebraic problems with linear equations, exponents, polynomials, factors, and rational expressions. Student will solve problems using graphs, slopes, inequalities, linear equations, roots, radicals and quadratic equations.
Prerequisites: None

MEA 1239 - Medical Terminology 2 Credits 30 clock hours
This course will provide students with instruction in how to decipher useful medical terminology into everyday language. Students analyze and learn prefixes and suffixes, spelling use and correct pronunciation. Medical abbreviations and symbols are included.
Prerequisites: None

PSY 1012 - Introduction to Psychology 3 Credits 45 clock hours
In this course, students learn basic principles of human behavior. Challenges, responsibilities, problems and satisfactions of being a health care provider are discussed. Theories of human behavior and personality development are included.
Prerequisites: None

SPC 1016 - Fundamentals of Speech 3 Credits 45 clock hours
Students will learn the foundations of communications including public presentations and interviewing skills.
Prerequisites: None

BSC 1085 - Anatomy & Physiology I 3 Credits 45 clock hours
Students in this course will explore the human body as a whole, its levels or organization,

the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system.
Prerequisites: None

BSC 1085L - Anatomy & Physiology I Lab 1 Credit 30 clock hours
In this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system.
Prerequisites: None

BSC 1086 - Anatomy & Physiology II 3 Credits 45 clock hours
This course is a continuation of BSC 1085 lecture. Students will continue to will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved.
Prerequisites: BSC1085, BSC1085L

BSC 1086L - Anatomy & Physiology II Lab 1 Credit 30 clock hours
Students will explore the structure and function of tissues and organs in a laboratory setting. This will include visiting the office of the Medical Examiner, Video web cast of dissections and autopsies.
Prerequisites: BSC 1085, BSC 1085L & MEA 1239

RTE 1201 Introduction to Radiologic Sciences 3 Credits 45 clock hours
Content provides a foundation in ethics and law related to the practice of medical imaging. An introduction to terminology, concepts and principles will be presented. Students will examine a variety of ethical and legal issues found in clinical practice. Content provides an overview of the foundations of radiography and the practitioner's role in the health care delivery system. Principles, practices and policies of health care organizations are examined and discussed in addition to the professional responsibilities of the radiographer. Content provides the concepts of optimal patient care, including consideration for the physical and psychological needs of the patient and family. Routine and emergency patient care procedures are described, as well as infection control procedures using standard precautions. The role of the radiographer in patient education

is identified
Prerequisites: BSC1086, BSC1086L, MAC1105

RTE 1025 - Principles of Image Production I 2 Credits 30 clock hours
This course is about the knowledge of the factors that govern and influence the production of radiographic images. Content establishes a knowledge base in radiographic and mobile equipment requirements and design. Content imparts an understanding of the components, principles and operation of digital imaging systems.
Prerequisites: RTE 1030

RTE 1026 - Principles of Image Production II 2 Credits 30 Clock Hours
This course continues with the knowledge of the factors that govern and influence the production of radiographic images. Image-intensified and digital fluoroscopy will be discussed. Image quality and the technical factors that affect it will be covered in this course. Content provides a basis for analyzing radiographic images. Included are the importance of optimal imaging standards, discussion of a problem-solving technique for image evaluation and the factors that can affect image quality. Factors that impact image acquisition, display, archiving and retrieval are discussed. Principles of digital system quality assurance and maintenance are presented Grids and grid applications will be presented as well as the calculations of technique problems.
Prerequisites: RTE 1025

RTE 1030 - Radiographic Physics 4 Credits 60 clock hours
Students in this course will receive a working knowledge of radiologic physics as it relates to the field of radiography. This will include the make-up of the Bohr atom, electromagnetic radiation, electricity and magnetism and electromagnetism. They will become familiar with equipment used in medical imaging for general x-rays and their production, as well as for special procedures. The student will understand how the x-ray beam is produced as well as the radiographic image. They will also be introduced to the equipment utilized for film processing and the equipment needed to improve the quality of the x-ray image. Students will learn about the components involved in quality improvement, assessment and assurance regarding all aspects of the radiology department. Equipment quality control is included, as well as tests to evaluate specific components of radiographic imaging systems.
Prerequisites: MAC 1105

RTE 1202 - Radiographic Procedures I 3 Credits 45 clock hours
This course will cover the discovery of x-rays and the use of radiation in medicine. The course provides an introduction to radiological science and familiarizes students with the different terms that are used within the profession. Students will learn the anatomic structures and topographic landmarks of the abdomen, chest, and parts of skeletal assigned for the semester. Students will learn the synopsis of radiation protection and exposure. Students will learn and practice how to communicate effectively with patients regardless of existing barriers. Pathology and disease as they relate to various radiographic procedures are discussed. Students will also learn how different pathology affects the

radiographic image and technique.
Prerequisites: BSC1086, BSC1086L

RTE 1202L - Radiographic Procedures I Lab 1 Credit 30 clock hours
This course is designed to provide instruction in the proper positioning methods in the laboratory setting to prepare the student to perform these methods competently in the clinical setting. This course will include positioning terminology of abdomen and chest radiography as well as positioning terminology of the upper extremity and lower extremity (foot and ankle). Students will master practical experience in positioning patients, exercising independent judgment, creativity, and problem solving in the clinical laboratory. Students will learn the synopsis of radiation protection and exposure. Students work in teams, role-playing and simulating patient and technologist. Student will learn and practice how to communicate effectively with patients and family members regardless of existing barriers. Pathology and disease as they relate to various radiographic procedures are discussed. Students will also learn how different pathology affects the radiographic image and technique
Prerequisites: BSC1086, BSC1086L

RTE 1203 - Radiographic Procedures II 3 Credits 45 clock hours
This course is designed to expand students 'knowledge and understanding of the ARRT Code Ethics. Students will learn the different types of consent and its appropriate use. The course will cover the anatomic structures and topographic landmarks of various parts of the skeletal system assigned for the semester. Students will learn the synopsis of radiation protection and exposure. Students will learn and practice how to communicate effectively with patients regardless of existing barriers. Pathology and disease as they relate to various radiographic procedures are discussed. Students will also learn how different pathology affects the radiographic image and technique.
Prerequisites: RTE 1202, RTE 1202L

RTE 1203L - Radiographic Procedures II Lab 1 Credit 30 clock hours
This course is designed to allow students to conduct simulations on radiographic positions covered in the didactic course. The goal is to make students more competent and confident within the clinical setting. Students will simulate radiographic positions for areas of the skeletal system covered in the didactic course for the semester. Students use an energized x-ray laboratory to master practical experience in positioning patients, exercising independent judgment, critical thinking, and patient care. Students will learn the synopsis of radiation protection and exposure. Students work in teams, role-playing and simulating patient and technologist. Student will learn and practice how to communicate effectively with patients and family members regardless of existing barriers. Pathology and disease as they relate to various radiographic procedures are discussed. Students will also learn how different pathology influences radiographic image and technique.
Prerequisites: RTE 1202, RTE 1202L

RTE 1204 - Radiographic Procedures III 2 Credits 30 clock hours
The course will cover the anatomic structures and topographic landmarks of various parts of the skeletal system assigned for the semester. Students will learn the synopsis of radiation protection and exposure. Students will learn and practice how to communicate effectively with patients and family members regardless of existing barriers. Pathology and disease as they relate to various radiographic procedures are discussed. Students will also learn how different pathology affects the radiographic image and technique.
Prerequisites: RTE 1203, RTE 1203L

RTE 1204L - Radiographic Procedures III Lab 1 Credit 30 clock hours
This course is designed to allow students to conduct simulations on radiographic positions covered in the didactic course. The goal is to make students more competent and confident within the clinical setting. Students will simulate radiographic positions for areas of the skeletal system covered in the didactic course for the semester. Students use an energized x-ray laboratory to master practical experience in positioning patients, exercising independent judgment, critical thinking, and patient care. Students will learn the synopsis of radiation protection and exposure. Students work in teams, role-playing and simulating patient and technologist. Student will learn and practice how to communicate effectively with patients and family members regardless of existing barriers. Pathology and disease as they relate to various radiographic procedures are discussed. Students will also learn how different pathology influences radiographic image and technique.
Prerequisites: RTE 1203, RTE 1203L

RTE 1205 - Radiographic Procedures IV 2 Credits 30 clock hours
This course will include positioning terminology and radiographic positioning and procedures for fluoroscopy studies. The course will cover several patient care topics that are important to the profession. Pathology and disease as they relate to various radiographic procedures are discussed. Students will also learn how different pathology affects the radiographic image and technique. Pharmacologic terminology, drug classifications, pharmacokinetics, and drugs used in imaging are also studied. It also offers comprehensive coverage of diagnostic contrast agents, along with drug administration procedures, emergency responses to drug reactions, and legal and ethical aspects of medication administration. The theory and practice of basic venipuncture techniques and the administration of diagnostic contrast agents are also practiced and mastered.
Prerequisites: RTE1204, RTE 1204L

RTE 1205L - Radiographic Procedures IV Lab 1 Credit 30 clock hours
This course is designed to provide instructions on proper positioning methods within the laboratory setting so students are prepared to perform these methods competently in the clinical setting. The course will include fluoroscopy studies. Image critique covering the elements of diagnostic radiographs is emphasized. Students will master practical experience in positioning patients, critical thinking, and problem solving in the clinical laboratory. Students will learn the synopsis of radiation protection and exposure. Students work in teams, role- playing patient and technologist. Pathology and disease as they relate

to various radiographic procedures are discussed and viewed on radiographs or images viewed on power points. Students will also learn how different pathology affects the radiographic image and technique.
Prerequisites: RTE1204, RTE 1204L

RTE 1206 - Radiographic Procedures V 2 Credits 30 clock hours
The course will include positioning terminology, radiographic positioning, and procedures of the skull and facial structures. Students will learn the synopsis of radiation protection and exposure. Students will learn and practice how to communicate effectively with patients regardless of existing barriers. The course also reviews avenues for professional within the profession and continuing education requirements. Pathology and disease as they relate to various radiographic procedures are discussed. Students will also learn how different pathology affects the radiographic image and technique.
Prerequisites: RTE 1205, RTE 1205L

RTE 1206L - Radiographic Procedures V Lab 1 Credit 30 clock hours
This course is designed to allow students to perform simulations on radiographic positions covered in the didactic course. By the end of the course students will be more competent and confident within the clinical setting. Students use an energized x-ray laboratory to master practical experience in positioning patients, exercising independent judgment, critical thinking, and patient care. Students will learn the synopsis of radiation protection and exposure. Students work in teams, role-playing and simulating patient and technologist. Student will learn and practice how to communicate effectively with patients and family members regardless of existing barriers. Pathology and disease as they relate to various radiographic procedures are discussed. Students will also learn how different pathology influences radiographic image and technique.
Prerequisites: RTE 1205, RTE 1205L

RTE 2015 - Radiographic Biology and Protection 3 Credits 45 clock hours
The course is designed to educate students on the principles of radiation protection. Students will be lectured on the responsibilities of the radiographer to patients, other personnel, and the public. Radiation health and safety requirements of federal and state regulatory agencies are incorporated. The course is also designed to provide students with an overview of the principles of the interaction of radiation to the body systems. Fundamental principles of molecular and cellular responses to radiation will be learned, including acute and chronic effects of radiation.
Prerequisites: RTE1026

RTE 2025 - Cross Sectional Anatomy/Advanced Modalities 3 Credits 45 clock hours
Students will learn sectional anatomy to develop a realistic understanding of 3-dimensional sense of anatomy of the head, neck, thorax, abdomen, and pelvis. Students will acquire basic principles, image appearance and education/certificate for Ultrasound, MRI, Nuclear Medicine/PET, Angiography and Radiation Therapy. Students will also acquire

a basic understanding of Computed Tomography.
Prerequisites: RTE 1026

RTE 1270 – Clinical I 5 Credits 240 clock hours
Introduces students to the clinical setting and provides an opportunity for students to observe and participate in radiographic procedures, with emphasis on specific structures. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required and elective competencies in the area of abdomen, chest and upper extremity.
Prerequisites: BSC 1086/1086L, RTE 1202 & RTE 1202L

RTE 1280 - Clinical II 5 Credits 240 clock hours
Introduces students to the clinical setting and provides an opportunity for students to observe and participate in radiographic procedures, with emphasis on specific structures. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required and elective competencies in the content covered in the prior semester.
Prerequisites: RTE 1270, RTE 1203 & RTE 1203L

RTE 2005 - Clinical III 8 Credits 360 clock hours
Introduces students to the clinical setting and provides an opportunity for students to observe and participate in radiographic procedures, with emphasis on specific structures. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required and elective competencies in the area covered in the prior semester.
Prerequisites: RTE 1204, RTE 1204L, RTE 1280

RTE 2010 - Clinical IV 8 Credits 360 clock hours
Introduces students to the clinical setting and provides an opportunity for students to observe and participate in radiographic procedures, with emphasis on specific structures. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required in the content covered in the prior semester.
Prerequisites: RTE 1205, RTE 1205L, RTE 2005

RTE 2020 - Clinical V 8 Credits 360 clock hours
Introduces students to the clinical setting and provides an opportunity for students to observe and participate in radiographic procedures, with emphasis on specific structures. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required and elective competencies in the prior semester.
Prerequisites: RTE 1206, RTE 1206L, RTE 2010

RTE 2500 - Senior Registry Review 3 Credits 45 clock hours

This Course provides a review of basic knowledge from previous courses and helps the student prepare for national certification examination for radiographers. Topics include: principles of radiographic exposure, radiographic procedures, anatomy, physiology, pathology, terminology, radiographic equipment, radiation protection, and patient care techniques.

Prerequisites: RTE 1206, RTE 1206L, RTE2015 & RTE 1026

NURSING PROGRAM

Offered only at Our Delray Beach Location
1725 Clock Hours
77 Semester Credits
90 Instructional Weeks
Credential Awarded: Associate of Science Degree
Type of Instructional Delivery: Blended

Program Description & Objectives

The Associate in Science Nursing program at Cambridge College of Healthcare & Technology is designed to provide training and education in order to prepare graduates to plan, deliver, and manage patient care as registered nurses in a variety of settings. The program offers students the opportunity to learn to effectively function as an integral part of the interdisciplinary team in a complex healthcare delivery system. At the completion of the program, graduates who have attended class and their clinical rotations, studied, and practiced their skills should have the ability to make successful application for state licensure and, upon passing the required state examination, to seek entry-level employment as registered nurses.

Transfer of Credit (Nursing Only)

The following courses require a grade of a B or higher and completed for less than 10 years for transferability.

Anatomy & Physiology I, Anatomy & Physiology I Lab, Anatomy & Physiology II, and Anatomy & Physiology II Lab

Withdrawals

Students will not be eligible for re-entry after two withdrawals. Student with two failures in any didactic nursing course will be dismissed from the nursing program.

The requirements of the Program for graduation are as follows:

Completion of all program courses with a satisfactory grade of 75% or above in theory and a passing grade in all clinical courses Completion with an earned grade point average of 2.0 or above Tuition accounts satisfied Completion of a practice NCLEX-RN exam with a minimum passing score of 75%. If below 75%, evidence of remediation in identified areas is necessary.

Curriculum

Code	Course Name	Credit Hours	Clock Hours
NUR111	Nursing Concepts	1	15
NUR112	Nursing Fundamentals	3	45
NUR112C	Nursing Fundamentals Clinical	2	90
NUR112L	Nursing Fundamentals Lab	1	30
NUR123	Medical/Surgical Nursing 1	3	45
NUR123C	Medical/Surgical Nursing 1 Clinical	2	90
NUR123L	Medical/Surgical Nursing 1 Lab	1	30
NUR145	Pharmacology in Nursing Practice I	2	30
NUR146	Pharmacology in Nursing Practice II	1	15
NUR163	Maternal-Child Nursing	3	45
NUR163C	Maternal-Child Nursing Clinical	2	90
NUR212	Integrated Medical/ Surgical Nursing I	3	45
NUR212C	Integrated Medical/Surgical Nursing I Clinical	2	90
NUR212L	Integrated Medical/ Surgical Nursing I Lab	1	30
NUR213	Integrated Medical/ Surgical Nursing II	3	45
NUR213C	Integrated Medical/ Surgical Nursing II Clinical	2	90
NUR220	Mental Health Nursing	2	30
NUR220C	Mental Health Nursing Clinical	2	90
NUR243C	Nursing Preceptorship	3	135
NUR250	Advanced Maternal/Infant Nursing	2	30
NUR250C	Advanced Maternal/Infant Nursing Clinical	1	45
BSC1085	Anatomy & Physiology I	3	45
BSC1085L	Anatomy & Physiology I Lab	1	30
BSC1086	Anatomy & Physiology II	3	45
BSC1086L	Anatomy & Physiology II Lab	1	30
CTS1050	Introduction to Computers	3	45
HUM1101	Humanities I	3	45
MEA1239	Medical Terminology	2	30
NUT180	Nutrition	3	45
ENC1101	English Composition	3	45
MAC1105	College Algebra	3	45
MIC150	Microbiology	3	45
MIC150L	Microbiology Lab	1	30
PSY1012	Psychology	3	45
SPC1016	Speech	3	45
Total		**77**	**1725**

Course Descriptions

BSC 1085 - Anatomy & Physiology I **3 Credits 45 Clock Hours**
In this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and special senses.
Prerequisites: None

BSC 1085L - Anatomy & Physiology I Lab **1 Credit 30 Clock Hours**
Students will explore the structure and function of tissues and organs in a laboratory setting.
Co-requisite: BSC 1085

BSC 1086 - Anatomy & Physiology II **3 Credits 45 Clock Hours**
This course is a continuation of BSC 1085 lecture. Students will continue to will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the endocrine system, cardiovascular system, including blood circulation, heart anatomy and electrical conduction and disease, lymphatic system, respiratory system, gas exchange, digestion, excretory, urinary, male and female reproduction systems.
Prerequisites: BSC1085, BSC1085L

BSC 1086L - Anatomy & Physiology II Lab **1 Credit 30 Clock Hours**
Students will explore the structure and function of tissues and organs in a laboratory setting. This will include visiting the office of the Medical Examiner, Video web cast of dissections and autopsies.
Prerequisites: BSC1085, BSC 1085L; Co-requisite BSC1086

CTS 1050 - Introduction to Computers **3 Credits 45 Clock Hours**
Students will learn the basic operation of Microsoft Word, Excel, and PowerPoint. Student will learn proper techniques for business letter writing and resume writing.
Prerequisites: None

ENC 1101 - English Composition **3 Credits 45 Clock Hours**
Students will learn grammar, punctuation and usage skills that are useful in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course.
Prerequisites: None

HUM1101 – Humanities I **3 Credits 45 Clock Hours**
This course offers an interdisciplinary approach to the humanities. Students study major works in art, music, literature, and philosophy with historical framework.
Prerequisites: None

MAC 1105 - College Algebra **3 Credits 45 Clock Hours**
Students in this course will explore college algebra through a detailed examination of practical applications. Students will calculate algebraic problems with linear equations, exponents, polynomials, factors, and rational expressions. Student will solve problems using graphs, slopes, inequalities, linear equations, roots, radicals and quadratic equations.
Prerequisites: None

MEA 1239 - Medical Terminology **2 Credits 30 Clock Hours**
This course will provide students with instruction in how to decipher useful medical terminology into everyday language. Students analyze and learn prefixes and suffixes, spelling use and correct pronunciation. Medical abbreviations and symbols are included.
Prerequisites: None

PSY 1012 – Psychology **3 Credits 45 Clock Hours**
In this course, students learn basic principles of human behavior. Challenges, responsibilities, problems and satisfactions of being a health care provider are discussed. Theories of human behavior and personality development are included.
Prerequisites: None

SPC 1016 – Speech **3 Credits 45 Clock Hours**
Students will learn the foundations of communications including public presentations and interviewing skills.
Prerequisites: None

MIC150 – Microbiology **3 Credits 45 Clock Hours**
This is an introduction course emphasizing the classification, physiology, and pathology of microorganisms.
Prerequisites: None

MIC150L – Microbiology Lab **1 Credit 30 Clock Hours**
Students will explore the classification, physiology, and pathology of various microorganisms.
Prerequisites: None; Co-requisites: MIC150

NUR111 – Nursing Concepts **1 Credit 15 Clock Hours**
Nursing Concepts introduces nursing as a caring, holistic and critically thinking profession. Studying the historical nursing perspectives, Nightingale through modern holistic, and concepts critical to professional nursing are traced. Theories of the profession will be explored and an emphasis placed on the theory of Dorothea Orem as a method for

organizing thinking and nursing practice. Concepts that shape a profession like healthcare delivery systems, ethical considerations, professional behaviors and values are also considered. And, concepts necessary to provide nursing care like: the nursing process, therapeutic communications, teaching/learning processes, advocacy, interdisciplinary teamwork and the health/illness continuum are examined. Throughout the course, students have the opportunity to identify their own learning styles and begin to create strategies for positive learning and personal wellness.
Co-requisite: NUR112, NUR 112L, NUR 145

NUR112 – Nursing Fundamentals 3 Credits 45 Clock Hours
The emphasis in Nursing Fundamentals is on the normal foundations necessary for a nurse to apply critical thinking processes during both health and illness. The theory of Dorothea Orem and the conceptual framework of the program are integrated with foundational nursing concepts as a means of exploring normal human functioning. Areas discussed include: assessment, diagnostic and pharmacological resources, accountability through documentation, and, foundational concepts for normal human functioning and wellness.
Prerequisites: BSC 1085, BSC 1086 Co-requisite: NUR111, NUR112L, NUR145

NUR112C – Nursing Fundamentals Clinical 2 Credits 90 Clock Hours
Nursing Fundamentals Clinical provides selected patient experiences in a variety of settings and assists the student to incorporate both theory and college lab skills. The clinical focus is on the practice of assessment, diagnostic and pharmacological resources, accountability through documentation, and foundational concepts for normal human functioning and wellness within this practice, the student identifies self-care deficits and therapeutic demands for patients with commonly occurring health limitations.
Prerequisites: BSC 1085, BSC 1086, NUR111 Co-requisites: NUR112

NUR112L – Nursing Fundamentals Lab 1 Credit 30 Clock Hours
Nursing Fundamentals Lab presents an introduction to basic technical nursing skills sets that are either utilized or delegated by the nurse to implement the nursing process. While practicing basic patient care skills students find a supportive and supervised environment where increasing confidence and competence is encouraged.
Prerequisites: BSC 1085, BSC 1086 Co-requisites: NUR112, NUR111, NUR145

NUR123 – Medical/Surgical Nursing I 3 Credits 45 Clock Hours
This course builds on the foundations of nursing by considering stressors that affect an individual's level of wellness by inflicting intermediary self-care physical and/or mental limitations. Stressors explored will include, but are not limited to, commonly occurring health limitations that alter one's state of wellness and thus require therapeutic nursing demands for self-care and a change in one's wellness status. Critical thinking models for human functioning and independent nursing interventions will be further explored and expanded to include detailed nursing processes, care management, interdisciplinary healthcare team approaches and holistic considerations for selected stressors.

Prerequisites: MIC150, MIC150L, NUR112, NUR112C, NUR112L, NUR145, NUR146, NUT180 Co-requisite: NUR123L, NUR 123C

NUR123C – Medical/Surgical Nursing I Clinical 2 Credits 90 Clock Hours
Medical/Surgical Nursing 1 Clinical provides selected patient experiences in a variety of settings and assists the student to incorporate both theory and college lab skills. The clinical focus is on the practice of beginning medical/surgical technical nursing skill sets that are utilized or delegated by the nurse. Within this practice, the student identifies self-care deficits and therapeutic demands for patients with commonly occurring health limitations.
Prerequisites: MIC150, MIC150L, NUR112, NUR112C, NUR112L, NUR145, NUR146, NUT180, NUR111 Co-requisite: NUR123CL, NUR 123

NUR123L – Medical/Surgical Nursing I Lab 1 Credit 30 Clock Hours
Medical Surgical Nursing 1 Skills Laboratory provides the knowledge and practice for beginning medical/surgical nursing skills sets that are used by the nurse to implement the nursing process and manage care. Students find a supportive and supervised environment where increasing confidence and competence is encouraged while practicing medical/surgical patient care skills.
Prerequisites: MIC150, MIC150L, NUR 112, NUR112C, NUR112L, NUR145, NUR146, NUT180, NUR111 Co-requisite: NUR123CL, NUR123

NUR145 – Pharmacology in Nursing Practice I 2 Credits 30 Clock Hours
Pharmacology in Nursing Practice I assists the beginning professional nursing student to understand pharmacotherapeutic concepts that are necessary for safe adult medical/surgical nursing practice. The major drug classifications are introduced in the context of human functioning and self-care deficits. For each classification the student considers: data collection, dosage/administration, evaluating and maximizing therapeutic effects, minimizing adverse reactions/interactions, managing toxicity and patient education. *Prerequisites: BSC 1085/1085L, BSC 1086/1086L, MAC1105 Co-requisite: NUR111, NUR112*

NUR146 – Pharmacology in Nursing Practice II 1 Credit 15 Clock Hours
Pharmacology in Nursing Practice assists the professional nursing student to understand Pharmacotherapeutic concepts that are necessary for safe administration of medications for pediatric, reproductive health and advanced medical/surgical nursing practice. The major drug classifications, in the context of human functioning and self-care deficits, are reinforced. For each classification the student considers: data collection, dosage/administration, evaluating and maximizing therapeutic effects, minimizing adverse reactions/interactions, managing toxicity, patient education, managing IV therapy, chemotherapy, and blood administration.
Prerequisites: NUR145 Co-requisite: NUR112, NUR112CL

NUR163 – Maternal-Child Nursing 3 Credits 45 Clock Hours
Maternal Child Health Nursing introduces the student to the components of nursing for

women and children that address self-care limitations imposed by pregnancy, childbirth, new life (including congenital defects), age related growth, developmental, and health promotion limitations. Through the use of human functioning concepts and nursing processes for thinking, the keys to holistic nursing care are delineated by the concepts of assessment, communications, clinical decision-making, managing, collaborating, and teaching/learning and wellness. The nurse's role in assessment for abuse and neglect and risk factors are discussed.
Prerequisites: NUR111, NUR145, NUR 146, NUR123, NUR212, NUR213
Co-requisite: NUR163CL

NUR163C - Maternal-Child Nursing Clinical 2 Credits 90 Clock Hours
Maternal Child Health Clinical provides selected experiences in obstetric and pediatric

settings that assist the student to integrate content from the classroom with the nursing care of child-bearing women, children and their families. The focus, in these settings, is on the holistic nursing care and accompanying technical skill sets that are used by the nurse to implement the nursing process for normal self-care limitations due to childbearing or development. Keys to care include assessments, communications, teaching/learning, interdisciplinary and community partnering, and managing care. Clinical experiences will occur in out-patient clinics, physician's offices, health department clinics, birthing centers and/or hospitals.
Prerequisites: NUR112, NUR111, NUR 146, NUR123, NUR123C, NUR212, NUR213
Co-requisite: NUR163

NUR212 – Integrated Medical/ Surgical Nursing I 3 Credits 45 Clock Hours
Integrated Medical/Surgical Nursing 1 focuses on self-care limitations that are common to both adults and children. Stressors are explored through nursing diagnosis categories and include commonly occurring health limitations that alter one's view of wellness and require therapeutic nursing demands for self-care. Critical thinking models for human functioning and independent nursing interventions will continue to be explored for adults and children. Examples of limitations include, but are not limited to, anemia, cancer, cardiac issues, nephrotic conditions, asthma, fractures, seizures, and, rashes. End of life issues are discussed.
Prerequisites: NUR111, NUR145, NUR146, NUR112, NUR112L, NUR112CL, NUR123, NUR123L, NUR123CL Co-requisite: NUR212L, NUR212CL

NUR212C – Integrated Medical/ Surgical Nursing I Clinical 2 Credits 90 Clock Hours
Integrated Medical/Surgical Nursing 1 Clinical provides selected pediatric and adult patient experiences in a variety of settings. It assists students to incorporate both theory and college lab skills. The clinical focus is on the practice of technical nursing skill sets that are utilized or delegated by the nurse. Within this practice, the student identifies self-care deficits and therapeutic demands for patients and/or families with commonly occurring health limitations and designs nursing care. Examples of limitations include, but are not limited to conditions of: anemia, cancer, cardiac and nephrotic dysfunction, asthma,

fractures, seizures, and, skin rashes.
Prerequisites: NUR123, NUR123CL, NUR123L, NUR111, NUR145, NUR146, NUR112, NUR112CL Co-requisite: NUR212, NUR212L

NUR212L – Integrated Medical/ Surgical Nursing I Lab 1 Credit 30 Clock Hours
Integrated Medical Surgical Nursing 1 Skills Laboratory provides the knowledge and practice for medical/surgical nursing skills sets that are used by the nurse to implement the nursing process and manage care for adults and children. Students find a supportive and supervised environment where increasing confidence and competence is encouraged while practicing medical/surgical patient care skills.
Prerequisites: NUR123, NUR123C, NUR123L, NUR111, NUR145, NUR146, NUR112, NUR112CL Co-requisite: NUR212, NUR212CL

NUR213 - Integrated Medical/ Surgical Nursing II 3 Credits 45 Clock Hours
Integrated Medical /Surgical Nursing II focuses on self-care limitations that are common to both adults and children. Stressors are explored through nursing diagnosis categories and include complex, multi-system failure health limitations that alter one's view of wellness and require therapeutic nursing demands for self-care. Critical thinking models for human functioning and independent nursing interventions will continue to be explored for adults and children. Examples of limitations include, but are not limited to, hepatitis, HIV/AIDS, organ transplants, shock, sepsis, spinal cord injury, thyroid issues, Alzheimer's, loss of senses.
Prerequisites: NUR212, NUR212C, NUR212L, NUR111, NUR145, NUR146, NUR123, NUR123L, NUR123CL Co-requisite: NUR213CL

NUR213C - Integrated M/S Nursing II Clinical 2 Credits 90 Clock Hours
Integrated M/S Nursing Clinical 2 provides selected pediatric and adult patient experiences in a variety of settings. It assists students to incorporate both theory and college lab skills. The clinical focus is on the practice of technical nursing skill sets that are utilized or delegated by the nurse when caring for patients with complex, multi-system failure health limitations. Stressors are explored through the nursing diagnosis categories and include centering of mental, cultural and spiritual aspects of one's view of wellness and altered self-care status. Critical thinking models for human functioning and independent nursing interventions will continue to be explored for adults and children. Examples of limitations include, but are not limited to, hepatitis, HIV/AIDS, organ transplants, shock, sepsis, spinal cord injury, thyroid issues, Alzheimer's, and loss of senses.
Prerequisites: NUR212, NUR212C, NUR212L, NUR111, NUR145, NUR146, NUR112, NUR112L, NUR112CL, NUR123, NUR123L, NUR123CL Co-requisite: NUR213

NUR220 – Mental Health Nursing 2 Credits 30 Clock Hours
Mental Health Nursing introduces the student to the stressors that impose transitional self-care mental and/or social limitations. Psychosocial nursing tools and intervention modalities are expanded. The DSM-IV-TR classification system is introduced for moderate, severe, psychotic, and, emergency issues. Through the use of human functioning concepts

and nursing processes for thinking, the keys to holistic nursing care are delineated, implemented and evaluated. Selected stressors include, but are not limited to commonly occurring mental health limitations that lead to therapeutic self-care demand(s) that require partnering. Individuals and families are assisted in defining and accepting an altered mental perception in order to maintain wellness. Nurse's role in assessment for abuse and neglect of the mentally ill are explored. Community resources for assistance are explored.
Prerequisites: NUR213, NUR123, NUR212, NUR111, NUR145, NUR146
Co-requisite: NUR220CL

NUR220C – Mental Health Nursing Clinical 2 Credits 90 Clock Hours
Mental Health Nursing Clinical affords the student an opportunity to explore, for individuals and groups, the stressors that impose transitional self-care mental and/or social limitations. Psychosocial nursing skill sets and the development of a plan of care (case management) with the interdisciplinary healthcare team are practiced. After assessment, students use the DMS-IV-TR, NIC and NOC classifications and NANDA nursing diagnosis to assist patients re-gain or find a new level of wellness. Therefore, clinical facilities include in-patient and out-patient opportunities.
Prerequisites: NUR111, NUR145, NUR146, NUR123, NUR212, NUR213
Co-requisite: NUR220

NUR243C – Nursing Preceptorship 3 Credits 135 Clock Hours
The Nursing Preceptorship builds on the knowledge and skills obtained in the nursing curriculum and integrate the theory of organizational development and culture, management styles and beginning leadership skills into the clinical practice of nursing. The course provides the foundations for independent clinical practice by assisting the student to prepare for employment as a registered nurse. Students work with an assigned clinical preceptor. Preceptors directly mentor the student throughout the course. At completion, the student is expected to be confident and competent in handling all aspects of the average patient load for that agency.
Prerequisites: NUR111, NUR145, NUR146, NUR112, NUR112L, NUR112CL, NUR123, NUR123CL, NUR212, NUR212L, NUR212CL, NUR163, NUR220, NUR250
Co-requisite: NUR243CL

NUR250 – Advanced Maternal/Infant Nursing 2 Credits 30 Clock Hours
Advanced Maternal Infant Nursing introduces the student to the components of nursing for "high risk" women and infants. It addresses complex self-care limitations-imposed b pregnancy, childbirth and new life for the individual and family. Through the use of human growth, development, and functioning concepts and nursing processes for thinking, the keys to holistic nursing care are delineated by the concepts of assessment, communications, clinical decision-making, managing, collaborating, and teaching/learning and wellness. Individuals and families are assisted in accepting an altered perception in order to maintain wellness.

Prerequisites: NUR111, NUR145, NUR146, NUR112, NUR112L, NUR112CL, NUR123, NUR123L, NUR123CL, NUR212, NUR212L, NUR212CL, NUR163 Co-requisite: NUR250CL

NUR250C - Advanced Maternal/Infant Nursing Clinical 1 Credit 45 Clock Hours

Advanced Maternal/Infant Nursing Clinical provides selected experiences in obstetric and newborn settings that assist the student to integrate content from the classroom with the nursing care of high risk child-bearing women, infants and their families. The focus, in these settings, is on the holistic nursing care and accompanying technical skill sets that are used by the nurse to implement the nursing process for high risk self-care limitations due to alternations during childbearing or the neonatal period. Keys to care include assessments, communications, teaching/learning clinical decision-making, managing, collaborating, and interdisciplinary and community partnering, and wellness. Clinical experiences will occur in out-patient clinics, physician's offices, health department clinics, and hospitals.

Prerequisites: NUR111, NUR145, NUR146, NUR112, NUR112L, NUR112CL, NUR123, NUR123L, NUR123CL, NUR212, NUR212L, NUR212CL, NUR163 Co-requisite: NUR250

NUT180 – Nutrition 3 Credits 45 Clock Hours

This is an introduction to the fundamentals of nutrition and how they relate to the promotion and maintenance of optimal health. This course includes a presentation of the practical applications of the current principles of nutrition and diet therapy in the prevention and treatment of nutrition-related pathologies, as well as a discussion of socioeconomic, religious, and cultural influences on nutrition.

Prerequisites: None

MEDICAL LABORATORY TECHNICIAN

Currently offered at Delray Beach, Altamonte Springs, and Atlanta
66 Semester Credits
1525 Clock Hours
75 Weeks
Credential awarded – Associate of Science
Method of Delivery: Blended

Program Objectives

- To develop a student's ability to perform proficiently on laboratory testing procedures
- To develop a student's ability to think critically and communicate effectively
- To prepare students for entry-level employment in clinical and reference laboratories or physicians 'offices as a medical laboratory technician.

Program Goals

- Students will acquire the knowledge and skill development to competently perform standardized laboratory test procedures
- Students will acquire critical thinking and problem solving skills to effectively practice in the profession
- Students will possess employable entry0level skills required for medical laboratory technicians.

Curriculum

Course Code	Course Name	Credits	Hours
BCS 1085	Anatomy & Physiology I	3	45
BCS 1085L	Anatomy & Physiology I Lab	1	30
BCS 1086	Anatomy & Physiology II	3	45
BCS1086L	Anatomy & Physiology II Lab	1	30
ENC1101	English Composition	3	45
MAC1105	College Algebra	3	45
PSY1012	Introduction to Psychology	3	45
SPC1016	Fundamentals of Speech	3	45
HUM1101	Humanities I	3	45
MEA1239	Medical Terminology	2	30
PH101	Phlebotomy/Specimen Collection	5	120

MLT1000	Laboratory Orientation/Quality Assurance	4	75
MLT1005	General Chemistry	3	45
MLT1010	Urinalysis	3	75
MLT1015	Hematology I	4	90
MLT2005	Hematology II	2	45
MLT1020	Immunohematology	3	75
MLT1025	Microbiology	3	75
MLT1030	Immunology/Serology	2	45
MLT1035	Clinical Chemistry	2	45
CS1000	Career Services/Credential Review	2	30
MLT2500	Clinical Practicum	8	400
Total		**66**	**1525**

Course Descriptions

ENC 1101 - English Composition **3 Credits 45 clock hours**
Students will learn grammar, punctuation and usage skills that are useful in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course.
Prerequisites: None

HUM1101 – Humanities I **3 Credits 45 Clock Hours**
This course offers an interdisciplinary approach to the humanities. Students study major works in art, music, literature, and philosophy with historical framework.
Prerequisites: None

MAC 1105 - College Algebra **3 Credits 45 clock hours**
Students in this course will explore college algebra through a detailed examination of practical applications. Students will calculate algebraic problems with linear equations, exponents, polynomials, factors, and rational expressions. Student will solve problems using graphs, slopes, inequalities, linear equations, roots, radicals and quadratic equations.
Prerequisites: None

MEA 1239 - Medical Terminology **2 Credits 30 clock hours**
This course will provide students with instruction in how to decipher useful medical terminology into everyday language. Students analyze and learn prefixes and suffixes, spelling use and correct pronunciation. Medical abbreviations and symbols are included.
Prerequisites: None

PSY 1012 - Introduction to Psychology **3 Credits 45 clock hours**
In this course, students learn basic principles of human behavior. Challenges, responsibilities, problems and satisfactions of being a health care provider are discussed. Theories of human behavior and personality development are included.
Prerequisites: None

SPC 1016 - Fundamentals of Speech **3 Credits 45 clock hours**
Students will learn the foundations of communications including public presentations and interviewing skills.
Prerequisites: None

BSC 1085 - Anatomy & Physiology I **3 Credits 45 clock hours**
Students in this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system.
Prerequisites: None

BSC 1085L - Anatomy & Physiology I Lab **1 Credit 30 clock hours**
In an online delivery, students in this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system.
Prerequisites: None

BSC 1086 - Anatomy & Physiology II **3 Credits 45 clock hours**
This course is a continuation of BSC 1085 lecture. Students will continue to will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved.
Prerequisites: BSC 1085

BSC 1086L - Anatomy & Physiology II Lab **1 Credit 30 clock hours**
Students will explore the structure and function of tissues and organs in a laboratory setting. This will include visiting the office of the Medical Examiner, Video web cast of dissections and autopsies.
Prerequisites: BSC 1085, BSC 1085L & MEA 1239

PHL1000 – Phlebotomy/Specimen Collection **5 Credits 120 hours**
This course includes an introduction to phlebotomy, equipment, safety, and specimen collection techniques. The student receives instruction in anatomy, infection control,

special procedures and documenting competency skills.
Prerequisites: BSC1085, 1085L, 1086, 1086L, MLT1000

MLT1000 – Laboratory Orientation/Quality Assurance 4 credits 75 hours
This course introduces the students to the laboratory setting and the process of operating and maintaining equipment. The student will learn the various methods of assurance/quality control to consist of instrument calibration, reference ranges, proficiency testing, and other quality control procedures.
Prerequisite: None

MLT1005 – General Chemistry 3 credits 45 hours
Students will understand inorganic and organic chemical reactions and clinical methodologies performed using a chemistry analyzer.
Prerequisite: MLT1000

MLT1010 – Urinalysis 3 credits 75 hours
This course introduces students to a didactic study and performance of physical, chemical, and microscopic analysis of urine.
Prerequisite: MLT1000

MLT1015 – Hematology I 4 credits 90 hours
This course presents the didactic study of the origin and morphology of blood cells and the ability to interpret the clinical significance of test results. Topics include performance of phlebotomies, blood cell counts and coagulation procedures (both manually and automated).
Prerequisite: MLT1000

MLT2005 – Hematology II 2 credits 45 hours
This course is a continuation of MLT1015. Topics include a didactic study of diseases related to erythrocytes, leukocytes, thrombocytes and coagulation factors as well as the clinical significance of test results by providing additional opportunities for the performance of phlebotomies, blood cell counts and coagulation procedures.
Prerequisite: MLT1015

MLT1020 Immunohematology 3 credits 75 hours
This course introduces the student to the study of blood group antigens and antibodies, the theory of genetics, the performance of basic blood bank procedures involving blood group and Rh typing, antibody screens and identification, and compatibility testing. The student will learn the didactic study of blood bank procedures involved in donor screening requirements, transfusion therapy, safety and quality controls, hemolytic disease of the newborn, blood component preparation, and the adverse effects of transfusions.
Prerequisite: MLT1000

MLT1025 Microbiology 3 credits 75 hours
This course is an introduction emphasizing the classification, physiology, and pathology of

microorganisms. Students will explore the classification, physiology, and pathology of various microorganisms.
Prerequisite: MLT1000

MLT1030 – Immunology/Serology **2 credits 45 hours**
This course examines theoretical concepts of the human immune system in health and disease and instructs students in serological procedures.
Prerequisite: MLT1000

MLT1035 – Clinical Chemistry **2 credits 45 hours**
This course presents theoretical concepts, principles and the performance of procedures used for the measurement of carbohydrates, proteins, non-protein nitrogen-containing compounds, bilirubin and hemoglobin with emphasis on their relationships to various disease states, enzymes, lipids, electrolytes, trace elements, endocrinology, toxicology and therapeutic drug with emphasis on their relationships to various disease states
Prerequisite: MLT1000, MLT1005

CS1000 – Career Services/Credential Review **2 credits 30 hours**
This course is designed to synthesize previous coursework concepts. The instructor will present interactive lectures, reviews and comprehensive exams based on all course topics and materials covered throughout the program. The instructor will emphasize the application process, completion of the requirements and practice computerized simulations of the exam. A career service session will take place to demonstrate proper resume writing, job interview techniques, continuing education and the importance to passing the certification exam.
Prerequisite: All course work

MLT2500 – Clinical Practicum **8 credits 400 hours**
The student will be introduced into a clinical laboratory setting that is CLIA approved which will provide an opportunity for students to observe and participate in various laboratory procedures with emphasis on specific structure. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required and elective competencies.
Prerequisite: All coursework

OCCUPATIONAL THERAPY ASSISTANT ASSOCIATE OF SCIENCE

Currently Only Offered at Our Altamonte Springs and Atlanta Location
79 Semester Credits 1780 clock Hours
90 Weeks
Method of Instruction – Blended

Course Outline

Course Number	Course Title	Semester Credits	Clock Hours
BCS 1085	Anatomy & Physiology I	3	45
BCS 1085L	Anatomy & Physiology I Lab	1	30
BCS 1086	Anatomy & Physiology II	3	45
BCS1086L	Anatomy & Physiology II Lab	1	30
ENC 1101	English Composition	3	45
HUM1101	Humanities I	3	45
MAC 1105	College Algebra	3	45
MEA 1239	Medical Terminology	2	30
PSY 1012	Introduction to Psychology	3	45
SPC 1016	Fundamentals of Speech	3	45
OTA 102	Introduction to Occupational Therapy	3	45
OTA 130	Occupational Analysis	2	30
OTA 108	Growth & Development	3	45
OTA 115	Principles of OT in Mental Health	3	60
OTA 125	Kinesiology	3	45
OTA 110	Fundamentals of Occupational Therapy	2	30
OTA 206	Human Occupations I	4	75
OTA 215	Principles of OT in Physical Health	4	60
OTA 220	Clinical I	2	90
OTA 209	Human Occupations II	3	60
OTA 230	Administrative Procedures	2	30
OTA 245	Pediatric Practice for the OTA	4	75
OTA 250	Specific Populations for the OTA	3	60
OTA 226	Seminar Strategies	2	30
OTA 221	Clinical II	7	320
OTA 222	Clinical III	7	320
Total Program		**79**	**1780**

Course Descriptions

ENC 1101 - English Composition **3 Credits 45 clock hours**
Students will learn grammar, punctuation and usage skills that are useful in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course.
Prerequisites: None

HUM1101 – Humanities I **3 Credits 45 Clock Hours**
This course offers an interdisciplinary approach to the humanities. Students study major works in art, music, literature, and philosophy with historical framework.
Prerequisites: None

MAC 1105 - College Algebra **3 Credits 45 clock hours**
Students in this course will explore college algebra through a detailed examination of practical applications. Students will calculate algebraic problems with linear equations, exponents, polynomials, factors, and rational expressions. Student will solve problems using graphs, slopes, inequalities, linear equations, roots, radicals and quadratic equations.
Prerequisites: None

MEA 1239 - Medical Terminology **2 Credits 30 clock hours**
This course will provide students with instruction in how to decipher useful medical terminology into everyday language. Students analyze and learn prefixes and suffixes, spelling use and correct pronunciation. Medical abbreviations and symbols are included.
Prerequisites: None

PSY 1012 - Introduction to Psychology **3 Credits 45 clock hours**
In this course, students learn basic principles of human behavior. Challenges, responsibilities, problems and satisfactions of being a health care provider are discussed. Theories of human behavior and personality development are included.
Prerequisites: None

SPC 1016 - Fundamentals of Speech **3 Credits 45 clock hours**
Students will learn the foundations of communications including public presentations and interviewing skills.
Prerequisites: None

BSC 1085 - Anatomy & Physiology I **3 Credits 45 clock hours**
Students in this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine

system.
Prerequisites: None

BSC 1085L - Anatomy & Physiology I Lab **1 Credit 30 clock hours**
In an online delivery, students in this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system.
Prerequisites: None

BSC 1086 - Anatomy & Physiology II **3 Credits 45 clock hours**
This course is a continuation of BSC 1085 lecture. Students will continue to will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved.
Prerequisites: BSC 1085

BSC 1086L - Anatomy & Physiology II Lab **1 Credit 30 clock hours**
Students will explore the structure and function of tissues and organs in a laboratory setting. This will include visiting the office of the Medical Examiner, Video web cast of dissections and autopsies.
Prerequisites: BSC 1085, BSC 1085L & MEA 1239

OTA 102 Introduction to Occupational Therapy **3 credits 45 clock hours**
This course provides the student with an introduction to occupational therapy, including the various types of practice settings, client populations roles, and the process. The foundation of occupational therapy as well as its history, ethics, standards, and values will be discussed. A variety of resources will be introduced including the standards of practice framework and the process.
Prerequisite: None

OTA 130 Occupational Analysis **2 credits 30 clock hours**
This course introduces the student to the concepts of task, activity and performance analysis. Students will learn the basics of grading and adapting tools, materials, and the environment in which they will apply the subsequent courses in order to develop the occupational performance of various populations. Students will learn to consider the domains of the Occupational Therapy Practice Framework.
Prerequisite: A&P I&II, PSY1011 Psychology

OTA108 Growth and Development **3 credits 45 clock hours**
Growth and Development discussion as it occurs across the life span in physical, psychological, and cognitive domains. Emphasis will be placed on the relationship of development, health, and wellness to occupational performance in all stages of life. Multicultural discussion to include impact on environmental, sociological, socioeconomic, and other diversity factors on human development.
Prerequisite: A&P I&II, PSY1011 Psychology

OTA115 Principles of OT in Mental Health **3 credits 60 clock hours**
In this course the student will focus on the biological/psychological/social models of mental health practice, common diagnoses, and traditional and emerging practice settings. Students will be introduced to approaches and modalities commonly used in mental health settings and their integration with occupational therapy practice. The course will cover the use of groups, selected assessments and other occupational performance-based interventions. A focus will be on performance skills, which include emotion regulation and cognition.
Prerequisite: A&P I&II, PSY1011 Psychology

OTA125 Kinesiology **3 credits 45 clock hours**
This course engages students with principles of movement as it supports occupation. Student will review key concepts of A&P and apply these to biomechanical functions. Students will gain an appreciation for the structures of the body and basic physics concepts that allow functional mobility and activity. Students will apply kinesiology concepts to manual muscle testing, range of motion assessment and analysis of movement.
Prerequisite: A&P I&II, PSY1011 Psychology

OTA110 Fundamentals of Occupational Therapy **2 credits 30 clock hours**
This course provides an integration of the theoretical foundations of the profession with practice. Concepts that guide clinical reasoning in practice will be interwoven with the domain and process of occupational therapy. Students will begin to relate frames of reference to client population and practice settings, and to use clinical reasoning effectively within the guidelines of roles, ethics, and scope of practice.
Prerequisite: A&P I&II, PSY1011 Psychology

OTA206 Human Occupations I **4 credits 75 clock hours**
Students will learn treatment interventions commonly used in occupational therapy practice with an emphasis on occupation as an intervention technique as well as an outcome of treatment. Activities preparatory to participation in occupation are also included. Techniques addressed are training in ADLs, IADLs, transfer and mobility, use of adaptive equipment, neuromuscular function, and sensory perception as needed to address occupational needs.
Prerequisite: A&P I&II, PSY1011 Psychology

OTA215 Principles of OT in Physical Health **4 credits 60 clock hours**

This course examines the biological/psychological/social models of physical health and wellness, focusing on the common diagnoses and pathologies most often encountered in occupational therapy practice. Also introduced are examples of assessments used for various diagnoses and pathologies, especially those of the musculoskeletal and cardiopulmonary systems. Students will be introduced to tools and interventions commonly used in physical health and emerging practice settings and their integration with OT practice. Students will explore occupational therapy treatment and other occupational performance-based interventions within the scope, roles frames of reference, and practice guidelines related to physical health and wellness. A focus will be on the performance skills that include motor and praxis and sensory-perceptual.

Prerequisite: A&P I&II, PSY1011 Psychology

OTA220 Clinical I **2 credits 90 clock hours**

This course provides the students the opportunity to recognize the use of models of practice and skills in a practice setting under the supervision of qualified and credential practitioner.

Prerequisite: A&P I&II, PSY1011 Psychology

OTA209 Human Occupations II **3 credits 60 clock hours**

This course is the continuation of Human Occupations I with a focus on aspects of the domain of occupational therapy. Students will analyze the client's occupational therapy needs, synthesize occupation based interventions, and begin to critique their application of occupational therapy concepts. Students will exam the basic principles of physical agent modalities (PAMs) and will participate in hand's-on scenarios simulating those situations likely to be encountered during the clinical rotation and in the practice.

Prerequisite: A&P I&II, PSY1011 Psychology

OTA230 Administrative Procedures **2 credits 30 clock hours**

This course introduces students to administrative procedures in the day to day practice and prepares the student for program management. Students will participate in program development and activities and analysis of the professional literature and promotion of the profession. The student will examine the management function versus the leadership skills within the practice.

Prerequisite: A&P I&II, PSY1011 Psychology

OTA245 Pediatric Practice for the OTA **4 credits 75 clock hours**

The students in this course will examine limitations and obstacles to occupational engagement for people from birth through age 21. Students will examine the role of the occupational therapy assistant in pediatric settings and the functions of OT in the field of pediatrics. Students will explore common disabilities and diagnoses and their implications for treatment in areas of occupation in traditional, community-based, and emerging practice settings. Students will learn treatment interventions commonly used by the OTA in a pediatric practice. Students will synthesize occupation-based mental and physical

health concepts related to occupational performance interventions with the pediatric population.
Prerequisite: A&P I&II, PSY1011 Psychology

OTA250 Specific Population for the OTA **3 credits 60 clock hours**
Students in this course will synthesize occupation based mental and physical health concepts as applied to commonly used occupational performance interventions with neurological, bariatric, geriatric, and emerging populations. In addition to exploring treatment in traditional practice settings, students will generalize their knowledge, skills, and abilities to community-based settings and emerging practice settings. An emphasis will be placed on interacting with and teaching caregivers and family members
Prerequisite: A&P I&II, PSY1011 Psychology

OTA226 Seminar Strategies **2 credits 30 clock hours**
This course prepares students for fieldwork and practice by examining professional development strengths and needs and formulating a plan for advocating for oneself and the profession. To accomplish this the student will explore supervisory needs, set goals for fieldwork success, and examine effective job search strategies. In addition, students will review and prepare for the National Board for Certification in Occupational Therapy to a Certified Occupational Therapy Assistant (COTA) exam.
Prerequisite: All Core classes

OTA221 Clinical II **7 credits 320 clock hours**
This course provides the student with the opportunity to apply learned models of practice and occupational therapy skills in a practice setting under the supervision of a qualified and credentialed occupational therapy practitioner.
Prerequisite: All Prior Courses

OTA222 Clinical III **7 credits 320 clock hours**
This course is a continuation of Clinical II giving the student the opportunity to apply learned models of practice and occupational therapy skills in a practice setting under the supervision of a qualified and credentialed occupational therapy practitioner.
Prerequisite: All Prior Courses

To enter the profession, one must obtain an Associate's Degree from a program accredited by the Accreditation Council for Occupational Therapy Education (ACOTE). If not included in the program of study, one must complete a clinical practicum of at least sixteen weeks. With a degree and practicum completed, candidates must pass the COTA exam and then apply for and receive state licensure.

PHYSICAL THERAPY ASSISTANT ASSOCIATE OF SCIENCE

Currently Offered at Our Altamonte Springs and Atlanta Location
77 Semester Credits 1730 Clock Hours
Method of Instruction – Blended
90 Weeks

Course Outline

Course Number	Course Title	Semester Credits	Clock Hours
BCS 1085	Anatomy & Physiology I	3	45
BCS 1085L	Anatomy & Physiology I Lab	1	30
BCS 1086	Anatomy & Physiology II	3	45
BCS1086L	Anatomy & Physiology II Lab	1	30
ENC 1101	English Composition	3	45
HUM1101	Humanities I	3	45
MAC 1105	College Algebra	3	45
MEA 1239	Medical Terminology	2	30
PSY 1012	Introduction to Psychology	3	45
SPC 1016	Fundamentals of Speech	3	45
PTA110	Introduction to Physical Therapy	3	45
PTA103	PTA Techniques	3	60
PTA104	Fundamentals of Disease	3	45
PTA105	Growth & Development	4	60
PTA120	Introduction to Kinesiology	1	15
PTA200	Kinesiology	3	60
PTA201	RehabilitationI	3	60
PTA205	Therapeutic Exercise I	4	75
PTA210	Clinical I	2	90
PTA207	Therapeutic Exercise II	3	60
PTA202	Rehabilitation II	3	60
PTA211	Clinical II	6	280
PTA204	Administrative Procedures	2	30
PTA208	Special Topics	4	75
PTA209	PTA Seminar	2	30
PTA212	Clinical III	6	280
Total Program		**77**	**1730**

Course Descriptions

ENC 1101 - English Composition **3 Credits 45 clock hours**
Students will learn grammar, punctuation and usage skills that are useful in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course.
Prerequisites: None

HUM1101 – Humanities I **3 Credits 45 Clock Hours**
This course offers an interdisciplinary approach to the humanities. Students study major works in art, music, literature, and philosophy with historical framework.
Prerequisites: None

MAC 1105 - College Algebra **3 Credits 45 clock hours**
Students in this course will explore college algebra through a detailed examination of practical applications. Students will calculate algebraic problems with linear equations, exponents, polynomials, factors, and rational expressions. Student will solve problems using graphs, slopes, inequalities, linear equations, roots, radicals and quadratic equations.
Prerequisites: None

MEA 1239 - Medical Terminology **2 Credits 30 clock hours**
This course will provide students with instruction in how to decipher useful medical terminology into everyday language. Students analyze and learn prefixes and suffixes, spelling use and correct pronunciation. Medical abbreviations and symbols are included.
Prerequisites: None

PSY 1012 - Introduction to Psychology **3 Credits 45 clock hours**
In this course, students learn basic principles of human behavior. Challenges, responsibilities, problems and satisfactions of being a health care provider are discussed. Theories of human behavior and personality development are included.
Prerequisites: None

SPC 1016 - Fundamentals of Speech **3 Credits 45 clock hours**
Students will learn the foundations of communications including public presentations and interviewing skills.
Prerequisites: None

BSC 1085 - Anatomy & Physiology I **3 Credits 45 clock hours**
Students in this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine

system.
Prerequisites: None

BSC 1085L - Anatomy & Physiology I Lab **1 Credit 30 clock hours**
In an online delivery, students in this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system.
Prerequisites: None

BSC 1086 - Anatomy & Physiology II **3 Credits 45 clock hours**
This course is a continuation of BSC 1085 lecture. Students will continue to will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved.
Prerequisites: BSC 1085

BSC 1086L - Anatomy & Physiology II Lab **1 Credit 30 clock hours**
Students will explore the structure and function of tissues and organs in a laboratory setting. This will include visiting the office of the Medical Examiner, Video web cast of dissections and autopsies.
Prerequisites: BSC 1085, BSC 1085L & MEA 1239

PTA 110 Introduction to Physical Therapy **3 Credits 45 Clock Hours**
This course provides the student with an introduction to physical therapy profession from its early development to its present-day complexities. Course material emphasizes the role of the physical therapist assistant, general state-practice acts, scope of practice, types of practice settings, patient interactions, professional organizations, and the importance of lifelong professional growth and development. Lab topics address a range of basic patient care skills including infection control and patient positioning and draping.
Prerequisite: None

PTA103 PTA Techniques **3 Credits 60 Clock Hours**
This course introduces the student to the basic principles of, physiological responses to, and safe and effective application of thermal agents, electromagnetic radiation, ultrasound, soft tissue mobilization, hydrotherapy, electrical stimulation, traction, and compression.
Prerequisite : A&P I&II

PTA104 Fundamentals of Disease **3 Credits 45 Clock Hours**
This class introduces basic information about common medical conditions. Diseases of the

cardiovascular, respiratory, nervous, endocrine, integumentary, immune, lymphatic, sensory, musculoskeletal, urogenital, and gastrointestinal systems are covered. Emphasis is placed on those conditions that could potentially affect the mobility of the person or the outcome of physical therapy treatment. Consideration is given to the diagnosis, treatment, and prognosis for various diseases. Through the study of specific diseases, the student will become familiar with doing research, reading professional literature, and using critical thinking in relation to how disease affects physical therapy treatments.
Prerequisite: A&P I&II, PSY1011

PTA105 Growth and Development 4 Credits 60 clock Hours
This course explores several theories that examine the relationship of structure and function with the development of movement skills through the life span. Students will also study changes that occur to major body systems during various phases of growth and development and ow these changes affect health and wellness
Prerequisite: A&P I&II

PTA120 Introduction to Kinesiology 1 Credits 15 Clock Hours
This course introduces students to the principles of kinesiology with a emphases on biomechanical function and movement patterns, including osteokinematics, arthrokinematics, normal gait cycle, and optimal posture
Prerequisite: A&P I&II

PTA200 Kinesiology 3 Credits 60 Clock Hours
This course expands on the knowledge development in the introduction to kinesiology course with principles on biomechanical function. Students apply concepts of resistance, forces, and positioning to specific muscles and movement patterns by study anatomical models of joints and muscles and other visual aids to enhance understanding of anatomy and movement. Lab activities focus on skills development and provide a range of competency based practice opportunities along with analysis of gait and normal and abnormal biomechanical movement patterns
Prerequisite: A&P I&II

PTA 201 Rehabilitation I 3 Credits 60 Clock Hours
Basic rehabilitation procedures and technique are discussed in this course. Students participate in hands-on activities to develop and practice skills in bed mobility and transfer techniques, general safety and infection control procedures, basic wheelchair management, gait training with ambulation aides, and measurement of vital signs.
Prerequisite: A&P I&II

PTA205 Therapeutic Exercise I 4 Credits 75 Clock Hours
This course explores the theoretical foundations for therapeutic exercise. Content address clinical indications for exercise as well as the basic principles of and physiological responses to therapeutic exercise protocols. Topics emphasize include special exercise

considerations for the lower extremities and lumbopelvic regions.
Prerequisite: A&P I&II

PTA210 Clinical I **2 Credits 90 Clock Hours**
This course provides the students the opportunity to apply learned theories and skills in a clinical setting under direct supervision of a licensed physical therapist or licensed/certified physical therapist assistant.
Prerequisite: A&P I&II

PTO207 Therapeutic Exercise II **3 Credits 60 Clock Hours**
This course continues the presentation of theoretical foundations for therapeutic exercise, including basic principles of and physiological response to exercise. Topics discussed include clinical indications for therapeutic exercise involving the shoulder girdle, upper extremity, and cervical/thoracic regions as well as the cardiopulmonary systems
Prerequisite: A&P I&II

PTA202 Rehabilitation II **3 Credits 60 Clock Hours**
This course explores the field of physical medicine and rehabilitation with a focus on the adult neurological patient. Content progresses from an overview of neurological assessment and treatment to the more common clinical syndromes relate to motor and postural control. Students participate in hands-on activities to develop and practice relevant skills for this patient population.
Prerequisite: A&P I&II

PTA207 Clinical II **6 Credits 280 Clock Hours**
This course is a continuation of clinical I and provides students with the opportunity to apply learned theories and skills in a clinical setting under direct supervision of a licensed physical therapist or licensed/certified physical therapist assistant.
Prerequisite: A&P I&II

PTA204 Administrative Procedures **2 Credits 30 Clock Hours**
This course examines the components included in the administration of the physical therapy practice. Topics include physical therapy practice, medical records, ethics, law, delegation and supervision, health insurance, and preparation for the workplace.
Prerequisite: A&P I&II

PTA208 Special Topics **4 Credits 75 Clock Hours**
This course presents the theoretical foundations for treatment of some of the more specialized patient population/diagnoses seen in the physical therapy clinic. Topics include indication for physical therapy interventions as well as the basic principles of and physiological responses to therapeutic exercise protocols, with an emphasis on particular exercises and functional training considerations for these populations.
Prerequisite: A&P I&II

PTA209 Seminar **2 Credits 30 Clock Hours**

This course provides a comprehensive review of technical coursework and prepares the student for transition into the workforce as an entry level physical therapist assistant. Through development of personal comprehensive study plans and participating in mock exams and other activities, students prepare to take the National Physical Therapist Examination. Students examine employment opportunities and review policies and procedures for applying for state licensure in their current location and target employment markets.

Prerequisite: All Prior Courses

PTA212 Clinical III **6 Credits 280 Clock Hours**

This course is a continuation of Clinical II giving the student the opportunity to apply learned theories and skills in a clinical setting under director supervision of a qualified and credentialed physical therapist practitioner.

Prerequisite: All Prior Courses

The Federation of State Boards of Physical Therapy (FSBPT) administers the National Physical Therapy Examination (NPTE).

DISTANCE EDUCATION PROGRAMS

Cambridge College of Healthcare & Technology strives to provide students with the ability to adapt their skills and knowledge to meet the demands of a dynamic, team based environment. The Online Distance Education Division focuses heavily on concept formation and skill development through collaborative learning. Our online courses offer flexibility to students.

The Blended Programs (Diagnostic Medical Sonography, Radiation Therapy, Medical Laboratory Technician, Occupation Therapy Assistant, Physical Therapy Assistant, Nursing, and Radiologic Technology) at Cambridge College of Healthcare & Technology are ONLY offered in the state of Florida and Georgia and students must disclose if they leave the state during their enrollment which could affect their status in the program.

The following courses may be offered on campus, on-line or a combination of both:

Anatomy & Physiology I

Anatomy & Physiology II

College Algebra

English Composition

Medical Terminology

Psychology

Humanities I

Fundamentals of Speech

Introduction to Computers

General Physics

Nutrition

Pharmacology (DMS program)

Seminar (DMS)

Radiographic Physics (Radiologic Technology program)

Introduction to Radiologic Technology Science (Radiologic Technology program)

Radiographic Procedures I (Radiologic Technology program)

Cambridge approved to participate in NC-SARA

Cambridge College of Healthcare & Technology has been approved by (Florida) to participate in the National Council for State Authorization Reciprocity Agreements. NC-SARA is a voluntary, regional approach to state oversight of postsecondary distance education.

Attendance Policy for Online Programs

Students attending only online classes: If a student does not submit any coursework for 14 consecutive calendar days, the student will be automatically terminated without the opportunity to appeal.

Computer System Requirements

The following comprehensive system requirements are the recommended minimum computer specifications for taking courses online at Cambridge College, where you will be using a number of integrated educational software delivery services, including Blackboard Learn™, Blackboard Collaborate Ultra™ among others.

Minimum Hardware Requirements

• Macintosh OS X (10.12 or higher) or Windows PC (7 or higher)

• 4GB RAM (8GB RAM or more is highly recommended)

• 20GB of available hard-drive space

• Screen resolution set to 1280x1024

• Broadband/high-speed uninterrupted Internet access; minimum speed of 1.5 Mbps download, 750 Kbps upload

• Webcam, microphone and speakers (a wearable headset is highly recommended)

Please note: Google Chromebook computers are not supported on some applications.

Browser Compatibility It is extremely important that you use a supported browser when using Blackboard Learn™ so that all course content and the course tools display properly. The very latest editions of Mozilla Firefox, and Google Chrome should work fine on most devices. We do not recommend using Apple Safari or Microsoft Edge, and Microsoft Internet Explorer is no longer a supported browser. We recommend installing both Chrome and Firefox browsers for use with our technologies, especially if one results in an error message. Please try using a different browser to see if you experience the same results before contacting the CCHT Blackboard Administrator.

Additional Browser Configuration Considerations

• Pop-up window blockers should be disabled, as they can conflict with online exams and assignments.

• The following domains should be added to your lists of trusted websites in your browsers:

• https://cambridgehealth.blackboard.com/ultra/institution-page

System Requirements for Additional Online Tools

Your instructors may elect to use a number of additional software services within your courses for online delivery. Please refer to the system requirements below for each of the services your instructors require you to access within your courses:

• Blackboard Collaborate™ Ultra

• Tutor.com

• Vital Source

*Microsoft Word is required to submit all assignments. In addition, some classes require the use of Excel, PowerPoint, and Access. Students are responsible for ensuring that they have the software required and should not enroll in courses for which they do not have the necessary software.

Internet/Email

An internet service provider (ISP)

An e-mail address, once enrolled you will be given a Cambridge email.

Students will need an Internet Service Provider (ISP). An ISP supplies access to the Internet for a fee. In many areas, cable television and digital Internet services offer high-speed Internet access. Cambridge does not provide access to the Internet as part of its agreement.

Course Delivery Structure

Cambridge College of Healthcare & Technology is pleased to offer a user friendly learning platform. Our courses offer diverse learning methodologies that enable students of all backgrounds to enjoy their experience online. Students are able to interact with instructors and peers in diverse learning experiences that facilitate the acquisition and application of knowledge. Our courses are offered in an asynchronous format but there are synchronous discussions for which students must be prepared to participate.

Security

Students are assigned a secure username and password for Blackboard.

Student Support Resources

Each Cambridge College of Healthcare & Technology course contains access to the following supportive resources:

Syllabus

Each course syllabus includes the course description, course outcomes, course materials list, general course policies, the grading scale, instructor contact information and other pertinent course level information.

Discussion Boards

Discussions are tied to specific course Learning Events for each course. Integrated Content Some Distance Education courses include integrated electronic content from a text companion web site, CD-ROM or other delivery device. This content is fully integrated into the related course of instruction or Learning Event with instructions for its use and purpose.

Online Course Survey

Students are given an opportunity to provide feedback on the courses taken online. These surveys are designed to assess the online content, learning management system, ease of access, student services and faculty. Students are encouraged to complete online surveys at the completion of a course.

Web Resources

Every course includes links to additional web resources that serve as supplemental resources for the subject matter. These links are provided by the instructor and are not tied to a specific Presentation or Learning Event, but are identified as extra resources for the student's own use.

LIBRARY/VIRTUAL LIBRARY

The campus has a fully functioning library that is open each day. The mission of the library is to provide academic support to students and to create a stimulating environment that will encourage academic achievement. Students have access to a collection of books and electronic resources available for use in the building or remotely. The link to the Virtual Library is found in our online learning management system. Students have access to research the library when logged into the online learning management system. The Virtual Library contains full-text articles from thousands of major newspapers, trade journals, academic periodicals, magazines and international publications. Discipline related

databases furnish valuable industry information useful for course-related projects and job search opportunities as related to each program major. The library is an online learning resource center that is a web-enabled information center offering Microsoft Word, Excel and Power Point 2007, 2010, committed to facilitating lifelong learning and achievement of Cambridge College of Healthcare & Technology student and faculty community. The residential library services are available to all students during the time of campus operations or when students are on campus. There is a dedicated qualified librarian available to work with students on research, projects, homework, or testing prep.

DISCLOSURE

Students are required to provide their physical location at the time of enrollment by providing the information on the Admissions Application. Students are required to immediately notify the institution of a change to their physical location by notifying the Registrar in writing. Currently under the NCSARA Reciprocity agreement, California is the only state that does not participate. If a student relocates to the state of California this will adversely impact the student's ability to complete their program.

DISTANCE EDUCATION PROGRAMS

MEDICAL BILLING AND CODING PROGRAM

920 Clock Hours
37.5 weeks
Credential Awarded: Certificate
Type of Instructional Delivery: 100% Distant Education

Program Objective

In a Full Distant Education setting, the Medical Billing and Coding program aims to provide an interactive, robust educational program that prepares graduates for entry level positions in the medical billing and coding facilities.

Program Description

This course is designed to prepare students to perform all of the tasks required of a Medical Biller and Coder. This is accomplished in a residential setting through theory courses designed to prepare students with the knowledge and skill needed to perform billing and coding processes. The program provides theoretical and laboratory-based training in foundational skills, including medical terminology, anatomy and physiology, pathology, another health science, as well as computer sciences. The program builds upon this knowledge base with more advanced and specific processes and procedures in medical coding and billing, computerized practice management, electronic health records and systems management. Students will learn laws and codes of regulation pertaining to healthcare records, privacy, archival requirements and privacy laws.

Program Outline

Course Number	Course Title	Clock Hours
HSC1000	Health Science Core Fundamentals I	45
BSC1085	Anatomy & Physiology I	45
BSC1085L	Anatomy & Physiology I Lab	30
BSC1086	Anatomy & Physiology II	45
BSC108L	Anatomy & Physiology II Lab	30
MEA1239	Medical Terminology	30
MBC120	Electronic Medical Office Procedures	60
MBC110	Computer in Healthcare	60
MBC130	Computerized Practice Management	45
MBC150	CPT 4	75
MBC160	HCPCS	75
MBC230	Certification Review and Exam (Capstone)	90
MBC220	Advanced CPT and ICD10	75
MCB140	Fundamentals of ICD Coding	75

MBC170	Insurance and Reimbursement Procedures	60
MBC190	Electronic Medical Records I	60
MBC210	Professional Development and Career Preparation	20
Total		**920**

Course Descriptions

MEA 1239 - Medical Terminology **2 credits 30 clock hours**
This course will provide students with instruction in how to decipher useful medical terminology into everyday language. Students analyze and learn prefixes and suffixes, spelling use and correct pronunciation. Medical abbreviations and symbols are included.
Prerequisites: None

BSC 1085 - Anatomy & Physiology I **3 credits 45 clock hours**
This course will offer students the opportunity to learn about the structure and function of the human body. The concepts of cells, tissues, organs and systems are presented to form the framework for a comprehensive study of anatomic structures and basic functions of each body system. In addition, the concepts of biochemistry will be discussed. Also provided will be the concepts of structural anatomy as students analyze the complex functions of each system.
Prerequisites: None

BSC 1085L - Anatomy & Physiology I Lab **1 credit 30 clock hours**
Students in this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system.
Prerequisites: None

BSC 1086 - Anatomy & Physiology II **3 credits 45 clock hours**
This course is a continuation of BSC 1085 lecture. Students will continue to will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved.
Prerequisites: BSC 1085

BSC 1086L- Anatomy & Physiology II Lab **1 credit 30 clock hours**
Students will explore the structure and function of tissues and organs in a laboratory setting. This will include visiting the office of the Medical Examiner, Video web cast of

dissections and autopsies.
Prerequisites: None

HSC1000 - Introduction to Health Science 3 credits 45 clock hours
Students will examine the following topics: The healthcare professions and teams, interactions between and reactions of patients in altered physical &/or mental states including gerontology and diverse cultures, professionalism and professional organizations, vital signs, OSHA standards, asepsis and isolation techniques including universal precautions, ethics and legal concerns of the healthcare provider, lifting/moving/body mechanics, patient and environmental emergency assessment and response, and Basic Cardiac Life Support (BCLS). The student will possess the aptitude to comprehend and use information in both written and oral formats.
Prerequisites: None

MBC110 Computers in Healthcare 60 Clock Hours
This course is designed to prepare students to become proficient at using Microsoft Office software. Students will become familiar with using the features and capabilities of Microsoft Office Word, Excel & PowerPoint. Application based topics include email use, word processing, spreadsheets, presentation tools. Special attention is given to information technology and communication for the health profession. Prerequisites: None

MBC130 Computerized Practice Management 45 Clock Hours
This course is dedicated to building upon the foundations learned in prior course work related to terminology, anatomy, physiology, medical office procedures, health sciences and computer sciences. In this course, students develop knowledge and base skills and understanding of the revenue models for healthcare facilities, their respective cycles, computerized practice management and cash flow management procedures. Emphasis on this course is placed upon the development, use and storage of electronic medical records (EMR). Prerequisites: None

MBC150 CPT 4 75 Clock Hours
This course provides students with the knowledge base, and skill to perform CPT-4 coding procedures. In an online environment this course will emphasize the rules and guidelines of the CPT – 4 manuals. The course is designed to help the beginner coder learn and understand the concept of coding using the CPT-4 coding manual. Prerequisites: None

MBC160 HCPCS 75 Clock Hours
This course provides an introduction for beginning coders to develop an understanding of ICD-9-CM characteristics, terminology, and conventions. The focus is to orient the student to the coding requirements of the prospective payment system in order to correctly code disorders to obtain reimbursement from insurance companies. Special emphasis is placed on level II (HCPCS). Prerequisites: None

MBC140 Fundamentals of ICD Coding 75 Clock Hours
This course covers clinical vocabularies and classification systems, as well as the principles

and guidelines for using ICD-10-CM to code diagnoses. Students will gain an understanding of validating and determining diagnostic codes accordance to official guidelines. The student will evaluate and understand how ICD is used in an inpatient setting. Assignments will include practical examples of patient records to provide practice in coding and sequencing of diagnoses. The applications of coding principles are also explored using encoder software tools. Prerequisites: BSC1085, BSC1085L, BSC1086, BSC1086L, MEA1239

MBC170 Insurance and Reimbursement Procedures 45 Clock Hours
This course provides an overview of the insurance, reimbursement and payment methodologies that apply to various healthcare settings. Various payment systems for healthcare services are explored. Topics related to insurance, third party, prospective payment, revenue cycle processes and managed care capitation are also explored along with issues of policy, regulatory requirements, case mix, DRG's, severity of illnesses and data exchange among providers. The course also focuses on the components of revenue cycle management and clinical documentation improvement. In addition, roles, responsibilities, and processes to manage financial and physical resources are presented. The application of these functions will be explored in the inpatient, ambulatory, and physician office environments. Prerequisites: MBC 140

MBC120 Electronic Medical Office Procedures 60 Clock Hours
This course is a foundational and critical structure in the development of medical coders and health information technicians. Emphasis in this course is placed upon the medical office tasks and the relationship of these tasks to the revenue collection performed through the process of patient-care, medical coding and billing. Prerequisites: None

MBC190 Electronic Medical Records I 60 Clock Hours
This course covers the skills, the practice of usage and management of health information and the electronic health record (EHR). This course will introduce the students to the use of health information and the electronic health record for any setting within the health care industry from acute, ambulatory, long term, home health, specialty, population health, and personal health that encompass the continuum of care. This course will provide students with a practical understanding of what an electronic health record specialist is and how important they are in the job market today. Prerequisites: None

MBC210 Professional Development & Career Preparation 20 Clock Hours
This course provides students with the information and skills they need to develop and maintain a sense of professionalism. In doing so, students learn how professionalism can help you become the person you want to be to get the job you want, how it can help you excel at the job you have, and how it can help you advance in your career. The course analyzes the connection between ethics and professionalism and discusses other important factors related to professionalism, including workplace goal setting, time management, interpersonal skills, and conflict management. Students will also build their workplace communication skills by examining best practices for writing emails and creating presentations. The course also includes discussions on participating in and leading

workplace meetings, forming and participating in workplace teams, the importance of developing a customer focus, and the role of HR. Finally, the course will discuss the importance of managing career growth and change. Throughout, students will apply critical-thinking skills to solve problems and evaluate situations. Prerequisites: None

MBC220 Advanced CPT and ICD10 **75 Clock Hours**
This course offers an advanced application of CPT and ICD-10-CM coding utilizing both coding systems and their guidelines appropriately.
Prerequisites: MBC140, MBC150

MBC230 Certification Review and Exam (Capstone) **90 clock Hours**
This course offers a guided national coding certification exam preparation with certification testing.
Prerequisites: MBC220

HEALTH INFORMATION TECHNOLOGY PROGRAM

68 Semester Credits
1185 Clock Hours
75 weeks
Credential Awarded: Associate of Science
Type of Instructional Delivery: 100% Distant Education

Program Objective

The objective of the Health Information Technology program is to prepare students with an understanding of analytical, technical and management skills associated with health information. Through different approaches and domains, students will acquire entry-level competencies to support the role of health information and technologies. This instruction occurs in a distance learning environment with 90 hours of a virtual lab practicum. Out-of-class work is required.

Program Description

Health information professionals manage medical records, coding and reimbursement and possess the skills to think critically and problem solve. These professionals also play a role in preparing, reviewing and maintaining health records and are considered experts in assuring the privacy and security of health data. Electronic health records, database management, and information privacy and security are a focus of the Health Information Technologist. Health Information Technicians play a critical role in ensuring the quality of medical records by utilizing systems that manage and store patient data. The Health Information Technician will utilize the different computer information systems used in health care settings and reimbursement procedures. In addition, the student will develop practical skills needed to manage and supervise medical records and healthcare reimbursement processes. In order to be successful in this profession the student will need Critical thinking and problem-solving abilities. There is a combination of general education and core curriculum which will provide the student with the opportunity to show proficiency in these skills. Upon successful completion of this program, the graduate will be awarded a Health Information Technology Associate of Science degree. Total Program: 1185 clock hours/ 68 credit hours.

Program Outline

Course Number	Course Title Clock	Credits	Hours
HUM1101	Humanities I	3	45
BSC1085	Anatomy & Physiology I	3	45

BSC1085L	Anatomy & Physiology I Lab	1	30
BSC1086	Anatomy & Physiology II	3	45
BSC1086L	Anatomy & Physiology II Lab	1	30
MEA1239	Medical Terminology	3	30
ENC1101	English Composition	3	45
MAC1105	College Algebra	3	45
PSY1012	Introduction to Psychology	3	45
SPC1016	Fundamentals of Speech	3	45
MBC110	Computers in Healthcare	3	60
MBC140	Fundamentals of ICD Coding	4	75
MBC170	Insurance and Reimbursement Procedures	4	60
HIT110	Health Information Systems	3	45
HIT115	Health Data Content and Structure	3	45
HIT120	Pharmacology Essentials	2	30
HIT125	Healthcare Delivery Systems	2	30
HIT130	Health Information Technology	2	30
HIT140	Principles of CPT/HCPCS	4	90
HIT150	Legal Aspects of Healthcare	2	30
HIT160	Clinical Quality Assessment	2	30
HIT170	Comparative Health Records and Data Security	2	30
HIT180	Healthcare Statistics	3	45
HIT200	Intermediate Coding	4	90
HIT210	Virtual Lab Practicum	3	90
Grand Total		**68**	**1185**

Course Descriptions

MEA 1239 - Medical Terminology **2 credits 30 clock hours**

This course will provide students with instruction in how to decipher useful medical terminology into everyday language. Students analyze and learn prefixes and suffixes, spelling use and correct pronunciation. Medical abbreviations and symbols are included.
Prerequisites: None

BSC 1085 - Anatomy & Physiology I **3 credits 45 clock hours**

This course will offer students the opportunity to learn about the structure and function of the human body. The concepts of cells, tissues, organs and systems are presented to form the framework for a comprehensive study of anatomic structures and basic functions of each body system. In addition, the concepts of biochemistry will be discussed. Also provided will be the concepts of structural anatomy as students analyze the complex functions of each system.
Prerequisites: None

BSC 1085L - Anatomy & Physiology I Lab **1 credit 30 clock hours**
Students in this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system.
Prerequisites: None

BSC 1086 - Anatomy & Physiology II **3 credits 45 clock hours**
This course is a continuation of BSC 1085 lecture. Students will continue to will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved.
Prerequisites: BSC 1085

BSC 1086L- Anatomy & Physiology II Lab **1 credit 30 clock hours**
Students will explore the structure and function of tissues and organs in a laboratory setting. This will include visiting the office of the Medical Examiner, Video web cast of dissections and autopsies.
Prerequisites: None

HUM1101 – Humanities I **3 Credits 45 Clock Hours**
This course offers an interdisciplinary approach to the humanities. Students study major works in art, music, literature, and philosophy with historical framework.
Prerequisites: None

ENC 1101 - English Composition **3 Credits 45 clock hours**
Students will learn grammar, punctuation and usage skills that are useful in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course.
Prerequisites: None

MAC 1105 - College Algebra **3 Credits 45 clock hours**
Students in this course will explore college algebra through a detailed examination of practical applications. Students will calculate algebraic problems with linear equations, exponents, polynomials, factors, and rational expressions. Student will solve problems using graphs, slopes, inequalities, linear equations, roots, radicals and quadratic equations.
Prerequisites: None

PSY 1012 - Introduction to Psychology **3 Credits 45 clock hours**
In this course, students learn basic principles of human behavior. Challenges,

responsibilities, problems and satisfactions of being a health care provider are discussed. Theories of human behavior and personality development are included.
Prerequisites: None

SPC 1016 - Fundamentals of Speech **3 Credits 45 clock hours**
Students will learn the foundations of communications including public presentations and interviewing skills.
Prerequisites: None

MBC110 Computers in Healthcare **3 Credits 60 Clock Hours**
This course is designed to prepare students to become proficient at using Microsoft Office software. Students will become familiar with using the features and capabilities of Microsoft Office Word, Excel & PowerPoint. Application based topics include email use, word processing, spreadsheets, presentation tools. Special attention is given to information technology and communication for the health profession. Prerequisites: None

MBC140 Fundamentals of ICD Coding **4 Credits 75 Clock Hours**
This course covers clinical vocabularies and classification systems, as well as the principles and guidelines for using ICD-10-CM to code diagnoses. Students will gain an understanding of validating and determining diagnostic codes accordance to official guidelines. The student will evaluate and understand how ICD is used in an inpatient setting. Assignments will include practical examples of patient records to provide practice in coding and sequencing of diagnoses. The applications of coding principles are also explored using encoder software tools. Prerequisites: BSC1085, BSC1085L, BSC1086, BSC1086L, MEA1239

MBC170 Insurance and Reimbursement Procedures **4 Credits 60 Clock Hours**
This course provides an overview of the insurance, reimbursement and payment methodologies that apply to various healthcare settings. Various payment systems for healthcare services are explored. Topics related to insurance, third party, prospective payment, revenue cycle processes and managed care capitation are also explored along with issues of policy, regulatory requirements, case mix, DRG's, severity of illnesses and data exchange among providers. The course also focuses on the components of revenue cycle management and clinical documentation improvement. In addition, roles, responsibilities, and processes to manage financial and physical resources are presented. The application of these functions will be explored in the inpatient, ambulatory, and physician office environments. Prerequisites: MBC140

HIT110 Health Information Systems **3 Credits 45 Clock Hours**
This course introduces the health information management profession to the different health care delivery systems. Topics include looking at different health care settings, patient record, electronic health records (EHRs), information systems, databases and analytical tools to structure, analyze and present information and legal aspects of health information. Students gain hands-on experience with a virtual EHR and examine the impact of EHRs on healthcare. Prerequisites: MBC110, ENC1101

HIT115 Health Data and Content Structure **3 Credits 45 Clock Hours**
This course addresses the transition from paper-based and hybrid medical records to electronic health records. Information Governance principles, concepts, and models are used to address the transition and management of electronic data. Topics include, but are not limited to, record retention, data architecture, data analytics, data integrity, and enterprise content management. Prerequisites: ENC1101

HIT120 Pharmacology Essentials **2 Credits 30 Clock Hours**
This course includes an introduction to the principles of pharmacology and drug administration, including basic math skills. The course also covers ratio and proportion, drug names (brand, generic, and chemical) and classifications, the use of PDR, pharmaceutical preparations, drug storage and handling, controlled substances, the role of administering and dispensing drugs, and routes and methods of drug administration including topical, oral, rectal, sublingual, and injection. Proper documentation and factors influencing dosage and drug action are also covered. Prerequisites: BSC1085, BSC1085L, BSC1086, BSC1086L, MEA1239

HIT125 Healthcare Delivery Systems **2 Credits 30 Clock Hours**
This course provides an introduction to healthcare delivery in the United States from a systems theory perspective. Topics of study include the types of professionals employed in healthcare, the institutions that provide services across the care continuum, and the effects of internal and external environments on the healthcare delivery system. Developments in the evolution of healthcare in the U.S. and changes in the current healthcare environment are also examined. Prerequisites: ENC1101

HIT130 Health Information Technology **2 Credits 30 Clock Hours**
This course focuses on the principles of computer technology related to health care with an emphasis on computerized medical billing and coding, health care data collection, storage, retrieval, security arrangement, presentation, and verification. This course will also introduce the students to the components and requirements of the electronic health record. Prerequisites: ENC1101

HIT140 Principles of CPT/HCPCS **4 Credits 90 clock Hours**
This course will expand on the knowledge of clinical classification systems through the use of Current Procedural Terminology (CPT) coding principles. Assignments, practice exercises and assessments of patient records will provide practice in coding and sequencing of procedure codes. Exercises allow students to apply guidelines for CPT codes and modifier assignment, in addition to the purpose and use of the Healthcare Common Procedure Coding System (HCPCS). The applications of coding principles are also explored through the use of encoding software tools. Prerequisites: BSC1085, BSC1085L, BSC1086, BSC1086L, MEA1239

HIT150 Legal Aspects of Healthcare **2 Credits 30 Clock Hours**
This course introduces the health information management profession and departmental

functions related to legal aspects. It covers the basic functions, content, and structure of the healthcare record as well as paper and electronic medical record systems and management. Various aspects related to health record documentation guidelines and standards are explored as well as the influence of accreditation and regulatory bodies. Health information processes and relationships among organizational departments and healthcare providers are also addressed. This course also emphasizes legal principles, procedures, and regulations, which affect the control, use, and release of health information, including HIPAA. Prerequisites: ENC1101, HIT125

HIT160 Clinical Quality Assessment 2 Credits 30 Clock Hours
This course provides an overview of the rules and regulations that govern quality improvement within healthcare. The course reviews the integration of quality improvement models and strategies that assist with implementing quality improvement, utilization management, and risk management initiatives. Prerequisites: ENC1101, HIT125

HIT170 Comparative Health Records and Data Security 2 Credits 30 Clock Hours
This course explores the use of health information in the delivery of healthcare with an emphasis on its creation, storage, manipulation, reporting, and use in strategic decisions for clinical support. It also examines emerging information technologies. The determination of information system needs, system implementation, system evaluation, and confidentiality/security are also addressed. The course will introduce students to healthcare data sets, secondary sources of data and healthcare statistics. Methods, tools, technologies, and processes for querying data, designing, generating, and analyzing reports are examined. In addition, we will provide methods to abstract, present, and maintain data for clinical indices/databases/registries. Prerequisites ENC1101

HIT180 Healthcare Statistics 3 Credits 45 Clock Hours
This course focuses on the compilation, the analysis, the presentation, and the maintenance of healthcare research and statistical techniques. Institutional Review Board (IRB) processes, research protocol monitoring, and knowledge-based research techniques are reviewed. Emphasis is placed on the use of basic statistical principles, indices, databases, registries, vital statistics, descriptive statistical models, and the use of data analysis for decision-making. Prerequisites MAC1105

HIT200 Intermediate Coding 4 Credits 90 clock Hours
This course will cover clinical vocabularies and classification systems, as well as the principles and guidelines for using ICD to code diagnoses. Students will gain an understanding of ICD as it is used in an inpatient setting and the severity of illness and case mix analysis systems. Assignments and practical examples of patient records will provide practice in coding and sequencing of diagnoses. The applications of coding principles are also explored through the use of software tools. Prerequisites: BSC1085, BSC1085L, BSC1086, BSC1086L, MEA1239

HIT210 Virtual Lab Practicum **3 Credits 90 clock Hours**

This course includes a comprehensive review of all courses addressed within the health information management program. Application of current principles, concepts, regulations, rules and guidelines are bridged into the practicum experience in a hospital or related organization. Prerequisites: All Core Courses

INFORMATION TECHNOLOGY PROGRAMS

COMPUTER NETWORKING

720 clock Hours – 60 Weeks
Credential Awarded: Certificate
Type of Instructional Delivery: Blended

Program Objectives

The program offers preparation in the knowledge and skills for students to enter employment in a variety of entry-level occupations in the information technology industry including desktop technical work and network administration or enter additional training to meet the demands of various organizations, including medical offices, hospitals, medical centers, long-term care facilities, clinics, or other appropriate businesses.

Program Description

This program focuses on operation, configuration, and troubleshooting of current operating systems, mobile devices, PC hardware and software. Included is development of skills in installing, configuring and troubleshooting of business applications, fundamental network concepts, printers, cabling, PC hardware, software, iOS, Android and more. The program develops attitudes and relationship skills required in the healthcare industry and the customer service industry with focus on technical skill sets required by local employers in the IT field and healthcare. The structure of this program is intended to prepare students to complete the CompTIA A+, and, optionally, the Network+ industry certification and a healthcare IT-related certification. The course content includes, but is not limited to, communication, leadership skills, human relations, employability skills, and safe and efficient work practices.

Program Outline

Course Number	Course Title Clock	Hours
CIT1000	Introduction to Information Technology Including Google IT Support Professional Certification Exam Preparation	60
CNT1100	Transmission Control Protocol/Internet Protocol (TCP/IP) Configuration	60
CNT1200	Computer Hardware Fundamentals including CompTIA A+ Certification Exam Preparation	60
CNT1300	Computer Software Fundamentals including CompTIA A+ Certification Exam Preparation	60
CNT1400	Routing and Switching	60
CNT1500	Operating Systems Fundamentals	60
CNT2000	Advanced Operating Systems	60

CNT2100	Desktop Support Technician	60
CNT2200	Network and Security Foundations	60
CNT2300	Network Technician including CompTIA Network + Certification Exam Preparation	60
CNT2400	Cloud Foundations including CompTIA Cloud + Certification Exam Preparation	60
DPM2400	Introduction to IT Project Management Including CompTIA Project+ Certification Exam Preparation	60
Grand Total		**720**

Course Descriptions

Course: CIT1000: Introduction to Information Technology (IT) 60 Clock Hours
Introduction to IT examines information technology as a discipline and the various roles and functions of the IT department as business support. Students are presented with various IT disciplines including systems and services, network and security, scripting and programming, data management, and business of IT, with a survey of technologies in every area and how they relate to each other and to the business. May include the Google IT Support Professional Certification Exam Preparation or other similar certification exam preparation.
Prerequisites: None

Course: CNT1100: Transmission Control Protocol/Internet Protocol (TCP/IP) Configuration 60 Clock Hours
This course is designed to provide students with the knowledge and skills required to install, configure, use, support and troubleshoot the TCP/IP suite on operating systems. The course will be focused on IP addressing, IP packet structures, data links, and network layer protocols. Students will practice how to determine and use the transmission control protocols/internet protocol.
Prerequisites: None

Course: CNT1200: Computer Hardware Fundamentals including CompTIA A+ Certification Exam Preparation 60 clock Hours
Computer Hardware Fundamentals is the foundation of IT and is the first course in a two-part series preparatory for the CompTIA A+ exam, Part I. Students will gain an understanding of personal computer components and their functions in a desktop system; computer data storage and retrieval; classifying, installing, configuring, optimizing, upgrading, and troubleshooting printers, laptops, portable devices, operating systems, networks, and system security; recommending appropriate tools, diagnostic procedures, preventative maintenance and troubleshooting techniques for personal computer components in a desktop system; strategies for identifying, preventing, and reporting safety hazards and environmental/human accidents in a technological environments; and

effective communication with colleagues and clients as well as job-related professional behavior.
Prerequisites: None

Course: CNT1300: Computer Software Fundamentals including CompTIA A+ Certification Exam Preparation 60 Clock Hours
Computer Software Fundamentals is the application of IT and is a continuation of the Computer Hardware Fundamentals course preparatory for the CompTIA A+ exam, Part II. Students will gain an understanding of personal computer components and their functions in a desktop system. Also covered is computer data storage and retrieval including classifying, installing, configuring, optimizing, upgrading, and troubleshooting printers, laptops, portable devices, operating systems, networks, and system security. Other areas include recommending appropriate tools, diagnostic procedures, preventative maintenance, and troubleshooting techniques for personal computer components in a desktop system. The course then finishes with strategies for identifying, preventing, and reporting safety hazards and environmental/human accidents in a technological environment, and effective communication with colleagues and clients as well as job-related professional behavior. This course builds on the understanding of hardware from Computer Hardware Fundamentals and is designed to build the skills to support 4 core components: Operating Systems, Security, Software Troubleshooting, and Operational Procedures. These are core skills for IT professionals from cloud engineers to data analysts, and will empower you with a better understanding of the tools used during your career.
Pre-requisite: None

Course: CNT1400: Routing and Switching 60 Clock Hours
This course covers the components used to segment a LAN (Local Area Network) including bridges, switches, and routers. The course provides a greater understanding of the access control list, routing protocols, LAN (Local Area Network) and WAN (Wide Area Network) design, switching, VLAN (Virtual Local Area Network), and Frame Relay. Students will develop the skills required for implementing and configuring network devices. Lab included.
Prerequisites: None

Course: CNT1500: Operating Systems Fundamentals 60 Clock Hours
In this course, the student will learn to demonstrate proficiency with installation and configuration of enterprise desktop-laptop operating systems, installing and configuring expansion cards, RAM, storage devices, video adapters, audio, and a variety of system components, installing, updating and troubleshooting drivers in desktop-laptop-tablet devices. Students will also learn to demonstrate proficiency with PC Laptops. Laptop systems for a variety of corporate functions such as, basic desktop user, CAD, CAE, video-audio editing and client-side virtualization, demonstrate the importance of health, safety, and environmental procedures in organizations and their importance to organizational and personal performance and regulatory compliance, and demonstrate proficiency in connecting, configuring and troubleshooting multi-displays, data projectors, smart boards,

and document cameras and kiosks systems.
Prerequisites: None

Course: CNT2000: Advanced Operating Systems 60 Clock Hours
In this course, students will demonstrate proficiency of installing, configuring and troubleshooting enterprise desktop-laptop operating systems in a network environment, a variety of business applications in a network environment, basic desktop, laptop network connectivity, including software, services, cables, switches, and access points, and understanding the fundamentals of active directory domains, organization units, the role of computers and users in that environment.
Prerequisites: None

Course: CNT2100: Desktop Support Technician 60 Clock Hours
In this course, students will demonstrate proficiency of command-line fundamentals, file security, network architectural structure, tools and equipment for troubleshooting network connectivity, network devices, and TCP/IP, OSI and Internet models of network layer addressing.
Prerequisites: None

Course: CNT2200: Network and Security Foundations 60 Clock Hours
Network and Security - Foundations introduces students to the components of a computer network and the concept and role of communication protocols. The course covers widely used categorical classifications of networks (e.g., LAN, MAN, WAN, WLAN, PAN, SAN, CAN, and VPN) as well as network topologies, physical devices, and layered abstraction. The course also introduces students to basic concepts of security covering vulnerabilities of networks and mitigation techniques, security of physical media, and security policies and procedures.
Prerequisites: None

Course: CNT2300: Network Technician including CompTIA Network + Certification Exam Preparation 60 Clock Hours
In this course, students will demonstrate proficiency of switches, IP addressing schemes and IP services, routers, WLAN, servers, VPN, VOIP, and Virtualization.
Prerequisites: None

Course: CNT2400: Cloud Foundations including CompTIA Cloud+ Certification Exam Preparation 60 Clock Hours
More and more companies are shifting to a cloud computing model of doing business. The Cloud Foundations course focuses on the real-world issues and practical solutions of cloud computing in business and IT. Knowledge in this course will be demonstrated by the successful completion of the CompTIA Cloud Essentials certification exam.
Prerequisites: None

Course: DPM1100: Introduction to IT Project Management including CompTIA Project+ Certification Exam Preparation 60 Clock Hours

In this course, students will build on industry standard concepts, techniques, and processes to develop a comprehensive foundation for project management activities. During a project's life cycle, students will develop the critical skills necessary to initiate, plan, execute, monitor, control, and close a project. Students will apply best practices in areas such as scope management, resource allocation, project planning, project scheduling, quality control, risk management, performance measurement, and project reporting. This course prepares students for the following certification exam: CompTIA Project+.

Prerequisites: None

COMPUTER NETWORKING

1080 clock Hours – 75 Weeks
60 Semester Credits
Credential Awarded: Associate of Science
Type of Instructional Delivery: Blended

Program Objectives

The program offers preparation in the knowledge and skills for students to enter employment in a variety of entry-level occupations in the information technology industry including desktop technical work and network administration or enter additional training to meet the demands of various organizations, including medical offices, hospitals, medical centers, long-term care facilities, clinics, or other appropriate businesses.

Program Description

This program focuses on operation, configuration, and troubleshooting of current operating systems, mobile devices, PC hardware and software. Included is development of skills in installing, configuring and troubleshooting of business applications, fundamental network concepts, printers, cabling, PC hardware, software, iOS, Android and more. The program develops attitudes and relationship skills required in the healthcare industry and the customer service industry with focus on technical skill sets required by local employers in the IT field and healthcare. The structure of this program is intended to prepare students to complete the CompTIA A+, and, optionally, the Network+ industry certification and a healthcare IT-related certification. The course content includes, but is not limited to, communication, leadership skills, human relations, employability skills, and safe and efficient work practices.

Program Outline

Course Number	Course Title Clock	Credits	Hours
CIT1000	Introduction to Information Technology Including Google IT Support Professional Certification Exam Preparation	3	60
CNT1100	Transmission Control Protocol/Internet Protocol (TCP/IP) Configuration	3	60
CNT1200	Computer Hardware Fundamentals including CompTIA A+ Certification Exam Preparation	3	60
CNT1300	Computer Software Fundamentals including CompTIA A+ Certification Exam Preparation	3	60
CNT1400	Routing and Switching	3	60
CNT1500	Operating Systems Fundamentals	3	60

CNT2000	Advanced Operating Systems	3	60
CNT2100	Desktop Support Technician	3	60
CNT2200	Network and Security Foundations	3	60
CNT2300	Network Technician including CompTIA Network + Certification Exam Preparation	3	60
CNT2400	Cloud Foundations including CompTIA Cloud + Certification Exam Preparation	3	60
DPM2400	Introduction to IT Project Management Including CompTIA Project+ Certification Exam Preparation	3	60
HIT2700	Legal Aspects of Healthcare	3	45
HIT2800	Health Information Technology	3	45
ENC 1101	English Composition	3	45
HSC 1000	Introduction to Health Science	3	45
MAC 1105	College Algebra	3	45
CTS1050	Introduction to Computers	3	45
PSY 1012	Introduction to Psychology	3	45
SPC 1016	Fundamentals of Speech	3	45
Grand Total		**60**	**1080**

Course Descriptions

ENC 1101 English Composition **3 Credits 45 Clock Hours**

Students will learn grammar, punctuation and usage skills that are useful in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course. Students will review readings for writing to aid in essay preparation and completion.

Prerequisites: None

HSC 1000 Introduction to Health Science **3 Credits 45 Clock Hours**

This course will exam the health care professionals and how they interact with patients. Professional organizations, OSHA standards, asepsis, and isolation techniques will be covered.

Prerequisites: None

MAC 1105 College Algebra **3 Credits 45 Clock Hours**

Students in this course will explore college algebra through a detailed examination of practical applications. Students will calculate algebraic problems with linear equations, exponents, polynomials, factors, and rational expressions. Student will solve problems using graphs, slopes, inequalities, linear equations, roots, radicals and quadratic equations.

Prerequisites: None

PSY 1012 Introduction to Psychology **3 Credits 45 Clock Hours**
In this course, students learn basic principles of human behavior. Challenges, responsibilities, problems and satisfactions of being a health care provider are discussed. Theories of human behavior and personality development are included.
Prerequisites: None

SPC 1016 Fundamentals of Speech **3 Credits 45 Clock Hours**
Students will learn the foundations of communications including public presentations and interviewing skills.
Prerequisites: None

CTS 1050 - Introduction to Computers **3 Credits 45 clock hours**
Students will learn the basic operation of Microsoft Word, Excel, and PowerPoint. Student will learn proper techniques for business letter writing and resume writing.
Prerequisites: None

Course: CIT1000: Introduction to Information Technology (IT) 3 Credits 60 Clock Hours
Introduction to IT examines information technology as a discipline and the various roles and functions of the IT department as business support. Students are presented with various IT disciplines including systems and services, network and security, scripting and programming, data management, and business of IT, with a survey of technologies in every area and how they relate to each other and to the business. May include the Google IT Support Professional Certification Exam Preparation or other similar certification exam preparation.
Prerequisites: None

Course: CNT1100: Transmission Control Protocol/Internet Protocol (TCP/IP) Configuration **3 Credits 60 Clock Hours**
This course is designed to provide students with the knowledge and skills required to install, configure, use, support and troubleshoot the TCP/IP suite on operating systems. The course will be focused on IP addressing, IP packet structures, data links, and network layer protocols. Students will practice how to determine and use the transmission control protocols/internet protocol.
Prerequisites: None

Course: CNT1200: Computer Hardware Fundamentals including CompTIA A+ Certification Exam Preparation **3 Credits 60 clock Hours**
Computer Hardware Fundamentals is the foundation of IT and is the first course in a two-part series preparatory for the CompTIA A+ exam, Part I. Students will gain an understanding of personal computer components and their functions in a desktop system; computer data storage and retrieval; classifying, installing, configuring, optimizing, upgrading, and troubleshooting printers, laptops, portable devices, operating systems, networks, and system security; recommending appropriate tools, diagnostic procedures, preventative maintenance and troubleshooting techniques for personal computer

components in a desktop system; strategies for identifying, preventing, and reporting safety hazards and environmental/human accidents in a technological environments; and effective communication with colleagues and clients as well as job-related professional behavior.
Prerequisites: None

Course: CNT1300: Computer Software Fundamentals including CompTIA A+ Certification Exam Preparation 3 Credits 60 Clock Hours
Computer Software Fundamentals is the application of IT and is a continuation of the Computer Hardware Fundamentals course preparatory for the CompTIA A+ exam, Part II. Students will gain an understanding of personal computer components and their functions in a desktop system. Also covered is computer data storage and retrieval including classifying, installing, configuring, optimizing, upgrading, and troubleshooting printers, laptops, portable devices, operating systems, networks, and system security. Other areas include recommending appropriate tools, diagnostic procedures, preventative maintenance, and troubleshooting techniques for personal computer components in a desktop system. The course then finishes with strategies for identifying, preventing, and reporting safety hazards and environmental/human accidents in a technological environment, and effective communication with colleagues and clients as well as job-related professional behavior.

This course builds on the understanding of hardware from Computer Hardware Fundamentals and is designed to build the skills to support 4 core components: Operating Systems, Security, Software Troubleshooting, and Operational Procedures. These are core skills for IT professionals from cloud engineers to data analysts, and will empower you with a better understanding of the tools used during your career.

Course: CNT1400: Routing and Switching 3 Credits 60 Clock Hours
This course covers the components used to segment a LAN (Local Area Network) including bridges, switches, and routers. The course provides a greater understanding of the access control list, routing protocols, LAN (Local Area Network) and WAN (Wide Area Network) design, switching, VLAN (Virtual Local Area Network), and Frame Relay. Students will develop the skills required for implementing and configuring network devices. Lab included.
Prerequisites: None

Course: CNT1500: Operating Systems Fundamentals 3 Credits 60 Clock Hours
In this course, the student will learn to demonstrate proficiency with installation and configuration of enterprise desktop-laptop operating systems, installing and configuring expansion cards, RAM, storage devices, video adapters, audio, and a variety of system components, installing, updating and troubleshooting drivers in desktop-laptop-tablet devices. Students will also learn to demonstrate proficiency with PC Laptops. Laptop systems for a variety of corporate functions such as, basic desktop user, CAD, CAE, video-audio editing and client-side virtualization, demonstrate the importance of health, safety,

and environmental procedures in organizations and their importance to organizational and personal performance and regulatory compliance, and demonstrate proficiency in connecting, configuring and troubleshooting multi-displays, data projectors, smart boards, and document cameras and kiosks systems.
Prerequisites: None

Course: CNT2000: Advanced Operating Systems 3 Credits 60 Clock Hours
In this course, students will demonstrate proficiency of installing, configuring and troubleshooting enterprise desktop-laptop operating systems in a network environment, a variety of business applications in a network environment, basic desktop, laptop network connectivity, including software, services, cables, switches, and access points, and understanding the fundamentals of active directory domains, organization units, the role of computers and users in that environment.
Prerequisites: None

Course: CNT2100: Desktop Support Technician 3 Credits 60 Clock Hours
In this course, students will demonstrate proficiency of command-line fundamentals, file security, network architectural structure, tools and equipment for troubleshooting network connectivity, network devices, and TCP/IP, OSI and Internet models of network layer addressing.
Prerequisites: None

Course: CNT2200: Network and Security Foundations 3 Credits 60 Clock Hours
Network and Security - Foundations introduces students to the components of a computer network and the concept and role of communication protocols. The course covers widely used categorical classifications of networks (e.g., LAN, MAN, WAN, WLAN, PAN, SAN, CAN, and VPN) as well as network topologies, physical devices, and layered abstraction. The course also introduces students to basic concepts of security covering vulnerabilities of networks and mitigation techniques, security of physical media, and security policies and procedures.
Prerequisites: None

Course: CNT2300: Network Technician including CompTIA Network + Certification Exam Preparation 3 Credits 60 Clock Hours
In this course, students will demonstrate proficiency of switches, IP addressing schemes and IP services, routers, WLAN, servers, VPN, VOIP, and Virtualization.
Prerequisites: None

Course: CNT2400: Cloud Foundations including CompTIA C3 Credits loud+ Certification Exam Preparation 3 Credits 60 Clock Hours
More and more companies are shifting to a cloud computing model of doing business. The Cloud Foundations course focuses on the real-world issues and practical solutions of cloud computing in business and IT. Knowledge in this course will be demonstrated by the successful completion of the CompTIA Cloud Essentials certification exam.

Prerequisites: None

Course: DPM1100: Introduction to IT Project Management including CompTIA Project+ Certification Exam Preparation 3 Credits 60 Clock Hours

In this course, students will build on industry standard concepts, techniques, and processes to develop a comprehensive foundation for project management activities. During a project's life cycle, students will develop the critical skills necessary to initiate, plan, execute, monitor, control, and close a project. Students will apply best practices in areas such as scope management, resource allocation, project planning, project scheduling, quality control, risk management, performance measurement, and project reporting. This course prepares students for the following certification exam: CompTIA Project+.

Prerequisites: None

CYBER AND NETWORK SECURITY

720 Clock Hours – 60 Weeks
Credential Awarded: Certificate
Type of Instructional Delivery: Blended

Program Objectives

The Cyber and Network Security Diploma program offers preparation in the knowledge and skills for students to enter employment in a variety of entry-level occupations in the business and information technology industries including security professionals or enter additional training to meet the demands of various organizations, including health-related businesses.

Program Description

This program focuses on cyber and network security through risk assessment and digital forensics to safeguard infrastructure and secure data through continuity planning and disaster recovery operations. It includes proven methods for information security using software analysis techniques and networking strategies to prevent, detect, and mitigate cyberattacks. In response to an increasing demand for network and security professionals, students will learn to apply knowledge and skills in network security and secure data through effective IT policies and procedures, to ensure uptime, performance, resources, and security of networks to meet the needs of the organization. Additionally, students will learn to describe the role of an information technology security specialist, demonstrate compliance and operational security, the use of ethical hacking, how to prevent IT attacks, the use of physical security, and the proficiency in network device security and access control models. The program develops attitudes and relationship skills required in organizations including the healthcare industry with a focus on technical skill sets required by local employers in the IT and related fields, including healthcare IT. The structure of this program is intended to prepare students to be ready for future certifications. The course content includes, but is not limited to, communication, leadership skills, human relations, employability skills, and safe and efficient work practices.

Program Outline

Course Number	Course Title	Clock Hours
CIT1000	Introduction to Information Technology Including Google IT Support Professional Certification Exam Preparation	60
CNT1200	Computer Hardware Fundamentals including CompTIA A+ Certification Exam Preparation	60
CNT1300	Computer Software Fundamentals including	

	CompTIA A+ Certification Exam Preparation	60
CNS1000	Fundamentals of Information Security in	60
	Healthcare	60
CNS1200	Designing Customized Security	60
CNS1300	Managing Web Security including Certified	60
	Internet Webmaster Web Security Associate	60
	(CIW WSA) Exam Preparation	
CNS2000	Digital Forensics in Cybersecurity	60
CNS2100	Managing Information Security*	60
CNT2200	Network and Security Foundations	60
CNS2200	Network and Security Applications including	60
	CompTIA Security + Certification Exam	
	Preparation	60
CNS2300	Cyber Defense and Countermeasures including	60
	Certified Incident Handler (EC-Council ECIH)	
	Exam Preparation	60
CNS2400	Information Systems Security Technology	60
	Specialist including Systems Security Certified	60
	Practitioner (ISC2 SSCP) exam preparation and	
	EC-Council Certified Ethical Hacker exam	
	preparation	
Total		**720**

Course Descriptions

Course: CIT1000: Introduction to Information Technology (IT) 60 Clock Hours
Introduction to IT examines information technology as a discipline and the various roles and functions of the IT department as business support. Students are presented with various IT disciplines including systems and services, network and security, scripting and programming, data management, and business of IT, with a survey of technologies in every area and how they relate to each other and to the business. May include the Google IT Support Professional Certification Exam Preparation or other similar certification exam preparation.
Prerequisites: None

Course: CNT1200: Computer Hardware Fundamentals including CompTIA A+ Certification Exam Preparation 60 clock Hours
Computer Hardware Fundamentals is the foundation of IT and is the first course in a two-part series preparatory for the CompTIA A+ exam, Part I. Students will gain an understanding of personal computer components and their functions in a desktop system; computer data storage and retrieval; classifying, installing, configuring, optimizing, upgrading, and troubleshooting printers, laptops, portable devices, operating systems, networks, and system security; recommending appropriate tools, diagnostic procedures,

preventative maintenance and troubleshooting techniques for personal computer components in a desktop system; strategies for identifying, preventing, and reporting safety hazards and environmental/human accidents in a technological environments; and effective communication with colleagues and clients as well as job-related professional behavior.
Prerequisites: None

Course: CNT1300: Computer Software Fundamentals including CompTIA A+ Certification Exam Preparation 60 Clock Hours
Computer Software Fundamentals is the application of IT and is a continuation of the Computer Hardware Fundamentals course preparatory for the CompTIA A+ exam, Part II. Students will gain an understanding of personal computer components and their functions in a desktop system. Also covered is computer data storage and retrieval including classifying, installing, configuring, optimizing, upgrading, and troubleshooting printers, laptops, portable devices, operating systems, networks, and system security. Other areas include recommending appropriate tools, diagnostic procedures, preventative maintenance, and troubleshooting techniques for personal computer components in a desktop system. The course then finishes with strategies for identifying, preventing, and reporting safety hazards and environmental/human accidents in a technological environment, and effective communication with colleagues and clients as well as job-related professional behavior.

This course builds on the understanding of hardware from Computer Hardware Fundamentals and is designed to build the skills to support 4 core components: Operating Systems, Security, Software Troubleshooting, and Operational Procedures. These are core skills for IT professionals from cloud engineers to data analysts, and will empower you with a better understanding of the tools used during your career.
Prerequisites: None

CNS1000 Fundamentals of Information Security in Healthcare 60 Clock Hours
This course lays the foundation for understanding terminology, principles, processes, and best practices of information security at local and global levels including those in healthcare environments. It further provides an overview of basic security vulnerabilities and countermeasures for protecting information assets through planning and administrative controls within an organization.
Prerequisite: None

CNS1200 Designing Customized Security 60 Clock Hours
This course supports the assessments for Designing Customized Security. The assessment for this course is Cisco's Implementing Cisco Network Security (IINS) Exam, a certification exam valued by many employers. Learning resources provided include detailed videos from CBT Nuggets, the contents of the CCNA Security 210-260 Official Cert Guide book and practice activities from Cisco within the uCertify platform, and practice exams from Boson and Pearson that you can use to review the material for the exam and discover areas

where you are weaker for you to study further. A detailed pacing guide provides a roadmap for making your way through the course efficiently.
Prerequisites: None

CNS1300 Managing Web Security including Certified Internet Webmaster Web Security Associate (CIW WSA) Exam Preparation **60 Clock Hours**
Almost all businesses and organizations require a web presence. The security needs, demands, and defenses for these online environments differ from those of an isolated single computer or intranet. This course introduces best practices for preventing security breaches by applying web security protocols, firewalls, and system configurations. This course prepares students for the Web Security Associate (CIW WSA) certification exam.
Prerequisites: None

CNS2000 Digital Forensics in Cybersecurity **60 Clock Hours**
Digital forensics, the science of investigating cybercrimes, seeks evidence that reveals who, what, when, where, and how threats compromise information. This course examines the relationships between incident categories, evidence handling, and incident management. Students identify consequences associated with cyber threats and security laws using a variety of tools to recognize and recover from unauthorized, malicious activities.
Prerequisites: None

CNS2100 Managing Information Security* **60 Clock Hours**
This course expands on fundamentals of information security by providing an in-depth analysis of the relationship between an information security program and broader business goals and objectives. Students develop knowledge and experience in the development and management of an information security program essential to ongoing education, career progression, and value delivery to enterprises. Students apply best practices to develop an information security governance framework, analyze mitigation in the context of compliance requirements, align security programs with security strategies and best practices, and recommend procedures for managing security strategies that minimize risk to an organization.
Prerequisites: None

CNT2200 Network and Security Foundations **60 Clock Hours**
Network and Security - Foundations introduces students to the components of a computer network and the concept and role of communication protocols. The course covers widely used categorical classifications of networks (e.g., LAN, MAN, WAN, WLAN, PAN, SAN, CAN, and VPN) as well as network topologies, physical devices, and layered abstraction. The course also introduces students to basic concepts of security covering vulnerabilities of networks and mitigation techniques, security of physical media, and security policies and procedures.
Prerequisites: None

CNS2200 Network and Security Applications including CompTIA Security + Certification Exam Preparation **60 Clock Hours**

Network and Security - Applications prepares students for the CompTIA Security+ certification exam. Successfully completing the course ensures the student will demonstrate the knowledge and skills required to install and configure systems to secure applications, networks, and devices; perform threat analysis and respond with appropriate mitigation techniques; participate in risk mitigation activities; and operate with an awareness of applicable policies, laws, and regulations.

Prerequisites: None

CNS2300 Cyber Defense and Countermeasures including Certified Incident Handler (EC-Council ECIH) Exam Preparation **60 Clock Hours**

Traditional defenses such as firewalls, security protocols, and encryption sometimes fail to stop attackers determined to access and compromise data. This course provides the fundamental skills to handle and respond to the computer security incidents in an information system. The course addresses various underlying principles and techniques for detecting and responding to current and emerging computer security threats. Students learn how to handle various types of incidents, risk assessment methodologies, and various laws and policies related to incident handling. This course prepares students for the Certified Incident Handler (EC-Council ECIH) certification exam.

Prerequisites: None

CNS2400 Information Systems Security Technology Specialist including Systems Security Certified Practitioner (ISC2 SSCP) exam preparation and EC-Council Certified Ethical Hacker exam preparation **60 Clock Hours**

This course will provide an overview of the IT security field and the knowledge to prepare for the ISC2 SSCP and EC-Ethical Hacker certification exams.

Prerequisites: None

CYBER AND NETWORK SECURITY

60 Credits 1080 Clock Hours – 75 Weeks
Credential Awarded: Associate of Science
Type of Instructional Delivery: Blended

Program Objectives

The Cyber and Network Security Associate Degree program offers preparation in the knowledge and skills for students to enter employment in a variety of entry-level occupations in the business and information technology industries including security professionals or enter additional training to meet the demands of various organizations, of various organizations, including health-related businesses. It includes an overview of the health information technology field and health information management field and includes an introduction to general education knowledge of science, technology, math, English, and psychology.

Program Description

This program focuses on cyber and network security through risk assessment and digital forensics to safeguard infrastructure and secure data through continuity planning and disaster recovery operations. It includes proven methods for information security using software analysis techniques and networking strategies to prevent, detect, and mitigate cyberattacks. In response to an increasing demand for network and security professionals, students will learn to apply knowledge and skills in network security and secure data through effective IT policies and procedures, to ensure uptime, performance, resources, and security of networks to meet the needs of the organization. Additionally, students will learn to describe the role of an information technology security specialist, demonstrate compliance and operational security, the use of ethical hacking, how to prevent IT attacks, the use of physical security, and the proficiency in network device security and access control models. The program develops attitudes and relationship skills required in organizations including the healthcare industry with a focus on technical skill sets required by local employers in the IT and related fields, including healthcare IT. The structure of this program is intended to prepare students to be ready for future certifications. The course content includes, but is not limited to, communication, leadership skills, human relations, employability skills, and safe and efficient work practices.

Program Outline

Course Number	Course Title Clock	Credits	Hours
CIT1000	Introduction to Information Technology Including Google IT Support Professional Certification Exam Preparation	3	60

CNT1200	Computer Hardware Fundamentals including CompTIA A+ Certification Exam Preparation	3	60
CNT1300	Computer Software Fundamentals including CompTIA A+ Certification Exam Preparation	3	60
CNS1000	Fundamentals of Information Security in	3	60
	Healthcare	3	60
CNS1200	Designing Customized Security	3	60
CNS1300	Managing Web Security including Certified	3	60
	Internet Webmaster Web Security Associate (CIW WSA) Exam Preparation	3	60
CNS2000	Digital Forensics in Cybersecurity	3	60
CNS2100	Managing Information Security*	3	60
CNT2200	Network and Security Foundations	3	60
CNS2200	Network and Security Applications including	3	60
	CompTIA Security + Certification Exam Preparation	3	60
CNS2300	Cyber Defense and Countermeasures including	3	60
	Certified Incident Handler (EC-Council ECIH) Exam Preparation	3	60
CNS2400	Information Systems Security Technology	3	60
	Specialist including Systems Security Certified	3	60
	Practitioner (ISC2 SSCP) exam preparation and EC-Council Certified Ethical Hacker exam preparation		
HIT2700	Legal Aspects of Healthcare	3	45
HIT2800	Health Information Technology	3	45
ENC 1101	English Composition	3	45
HUM1101	Humanities I	3	45
MAC 1105	College Algebra	3	45
CTS1050	Introduction to Computers	3	45
PSY 1012	Introduction to Psychology	3	45
SPC 1016	Fundamentals of Speech	3	45
Grand Total		**60**	**1080**

Course Descriptions

ENC 1101 English Composition **3 Credits 45 Clock Hours**

Students will learn grammar, punctuation and usage skills that are useful in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course. Students will review readings for writing to aid in essay preparation and completion.

Prerequisites: None

HUM1101 – Humanities I **3 Credits 45 Clock Hours**
This course offers an interdisciplinary approach to the humanities. Students study major works in art, music, literature, and philosophy with historical framework.
Prerequisites: None

MAC 1105 College Algebra **3 Credits 45 Clock Hours**
Students in this course will explore college algebra through a detailed examination of practical applications. Students will calculate algebraic problems with linear equations, exponents, polynomials, factors, and rational expressions. Student will solve problems using graphs, slopes, inequalities, linear equations, roots, radicals and quadratic equations.
Prerequisites: None

PSY 1012 Introduction to Psychology **3 Credits 45 Clock Hours**
In this course, students learn basic principles of human behavior. Challenges, responsibilities, problems and satisfactions of being a health care provider are discussed. Theories of human behavior and personality development are included.
Prerequisites: None

SPC 1016 Fundamentals of Speech **3 Credits 45 Clock Hours**
Students will learn the foundations of communications including public presentations and interviewing skills.
Prerequisites: None

CTS 1050 - Introduction to Computers **3 Credits 45 clock Hours**
Students will learn the basic operation of Microsoft Word, Excel, and PowerPoint. Student will learn proper techniques for business letter writing and resume writing.
Prerequisites: None

Course: CIT1000: Introduction to Information Technology (IT)
3 Credits60 Clock Hours
Introduction to IT examines information technology as a discipline and the various roles and functions of the IT department as business support. Students are presented with various IT disciplines including systems and services, network and security, scripting and programming, data management, and business of IT, with a survey of technologies in every area and how they relate to each other and to the business. May include the Google IT Support Professional Certification Exam Preparation or other similar certification exam preparation.
Prerequisites: None

Course: CNT1200: Computer Hardware Fundamentals including CompTIA A+ Certification Exam Preparation **3 Credits 60 clock Hours**
Computer Hardware Fundamentals is the foundation of IT and is the first course in a two-part series preparatory for the CompTIA A+ exam, Part I. Students will gain an understanding of personal computer components and their functions in a desktop system;

computer data storage and retrieval; classifying, installing, configuring, optimizing, upgrading, and troubleshooting printers, laptops, portable devices, operating systems, networks, and system security; recommending appropriate tools, diagnostic procedures, preventative maintenance and troubleshooting techniques for personal computer components in a desktop system; strategies for identifying, preventing, and reporting safety hazards and environmental/human accidents in a technological environments; and effective communication with colleagues and clients as well as job-related professional behavior.
Prerequisites: None

Course: CNT1300: Computer Software Fundamentals including CompTIA A+ Certification Exam Preparation 3 Credits 60 Clock Hours
Computer Software Fundamentals is the application of IT and is a continuation of the Computer Hardware Fundamentals course preparatory for the CompTIA A+ exam, Part II. Students will gain an understanding of personal computer components and their functions in a desktop system. Also covered is computer data storage and retrieval including classifying, installing, configuring, optimizing, upgrading, and troubleshooting printers, laptops, portable devices, operating systems, networks, and system security. Other areas include recommending appropriate tools, diagnostic procedures, preventative maintenance, and troubleshooting techniques for personal computer components in a desktop system. The course then finishes with strategies for identifying, preventing, and reporting safety hazards and environmental/human accidents in a technological environment, and effective communication with colleagues and clients as well as job-related professional behavior.

This course builds on the understanding of hardware from Computer Hardware Fundamentals and is designed to build the skills to support 4 core components: Operating Systems, Security, Software Troubleshooting, and Operational Procedures. These are core skills for IT professionals from cloud engineers to data analysts, and will empower you with a better understanding of the tools used during your career.
Prerequisites: None

CNS1000 Fundamentals of Information Security in Healthcare
3 Credits 60 Clock Hours
This course lays the foundation for understanding terminology, principles, processes, and best practices of information security at local and global levels including those in healthcare environments. It further provides an overview of basic security vulnerabilities and countermeasures for protecting information assets through planning and administrative controls within an organization.
Prerequisite: None

CNS1200 Designing Customized Security 3 Credits 60 Clock Hours
This course supports the assessments for Designing Customized Security. The assessment

for this course is Cisco's Implementing Cisco Network Security (IINS) Exam, a certification exam valued by many employers. Learning resources provided include detailed videos from CBT Nuggets, the contents of the CCNA Security 210-260 Official Cert Guide book and practice activities from Cisco within the uCertify platform, and practice exams from Boson and Pearson that you can use to review the material for the exam and discover areas where you are weaker for you to study further. A detailed pacing guide provides a roadmap for making your way through the course efficiently.
Prerequisites: None

CNS1300 Managing Web Security including Certified Internet Webmaster Web Security Associate (CIW WSA) Exam Preparation **3 Credits 60 Clock Hours**
Almost all businesses and organizations require a web presence. The security needs, demands, and defenses for these online environments differ from those of an isolated single computer or intranet. This course introduces best practices for preventing security breaches by applying web security protocols, firewalls, and system configurations. This course prepares students for the Web Security Associate (CIW WSA) certification exam.
Prerequisites: None

CNS2000 Digital Forensics in Cybersecurity **3 Credits 60 Clock Hours**
Digital forensics, the science of investigating cybercrimes, seeks evidence that reveals who, what, when, where, and how threats compromise information. This course examines the relationships between incident categories, evidence handling, and incident management. Students identify consequences associated with cyber threats and security laws using a variety of tools to recognize and recover from unauthorized, malicious activities.
Prerequisites: None

CNS2100 Managing Information Security* **3 Credits 60 Clock Hours**
This course expands on fundamentals of information security by providing an in-depth analysis of the relationship between an information security program and broader business goals and objectives. Students develop knowledge and experience in the development and management of an information security program essential to ongoing education, career progression, and value delivery to enterprises. Students apply best practices to develop an information security governance framework, analyze mitigation in the context of compliance requirements, align security programs with security strategies and best practices, and recommend procedures for managing security strategies that minimize risk to an organization.
Prerequisites: None

CNT2200 Network and Security Foundations **3 Credits 60 Clock Hours**
Network and Security - Foundations introduces students to the components of a computer network and the concept and role of communication protocols. The course covers widely used categorical classifications of networks (e.g., LAN, MAN, WAN, WLAN, PAN, SAN, CAN, and VPN) as well as network topologies, physical devices, and layered abstraction. The course also introduces students to basic concepts of security covering vulnerabilities of

networks and mitigation techniques, security of physical media, and security policies and procedures.
Prerequisites: None

CNS2200 Network and Security Applications including CompTIA Security + Certification Exam Preparation 3 Credits 60 Clock Hours
Network and Security - Applications prepares students for the CompTIA Security+ certification exam. Successfully completing the course ensures the student will demonstrate the knowledge and skills required to install and configure systems to secure applications, networks, and devices; perform threat analysis and respond with appropriate mitigation techniques; participate in risk mitigation activities; and operate with an awareness of applicable policies, laws, and regulations. Prerequisites: None

CNS2300 Cyber Defense and Countermeasures including Certified Incident Handler (EC-Council ECIH) Exam Preparation 3 Credits 60 Clock Hours
Traditional defenses such as firewalls, security protocols, and encryption sometimes fail to stop attackers determined to access and compromise data. This course provides the fundamental skills to handle and respond to the computer security incidents in an information system. The course addresses various underlying principles and techniques for detecting and responding to current and emerging computer security threats. Students learn how to handle various types of incidents, risk assessment methodologies, and various laws and policies related to incident handling. This course prepares students for the Certified Incident Handler (EC-Council ECIH) certification exam.
Prerequisites: None

CNS2400 Information Systems Security Technology Specialist including Systems Security Certified Practitioner (ISC2 SSCP) exam preparation and EC-Council Certified Ethical Hacker exam preparation 3 Credits 60 Clock Hours
This course will provide an overview of the IT security field and the knowledge to prepare for the ISC2 SSCP and EC-Ethical Hacker certification exams.
Prerequisites: None

DATA AND PROJECT MANAGEMENT

720 Clock Hours – 60 Weeks
Credential Awarded : Certificate
Type of Instructional Delivery : Blended

Program Objectives

The Data and Project Management Diploma program offers preparation in the knowledge and skills for students to enter employment in a variety of entry-level occupations in businesses in the information technology industry and healthcare-related industries as data and project management support professionals for setting up a database environment, design databases, acquire data, wrangle it, analyze it, and visualize it to different audiences as part of the decision-making process and developing a comprehensive foundation for project management activities.

Program Description

This program focuses on developing skills to understand, analyze, wrangle, and visualize data, organizing project management activities while developing specialized skills in office management with an understanding of accounting and human resources with an emphasis on organizations including healthcare-related businesses. It also includes an overview of desktop and computer support functions. The program develops attitudes and relationship skills required in organizations including the healthcare industry with a focus on technical skill sets required by local employers in the IT and related fields, including healthcare IT. The structure of this program is intended to prepare students to be ready for future certifications. The course content includes, but is not limited to, communication, leadership skills, human relations, employability skills, and safe and efficient work practices.

Program Outline

Course Number	Course Title	Clock Hours
CIT1000	Introduction to Information Technology Including Google IT Support Professional Certification Exam Preparation	60
CNT1200	Computer Hardware Fundamentals including CompTIA A+ Certification Exam Preparation	60
CNT1300	Computer Software Fundamentals including CompTIA A+ Certification Exam Preparation	60
DPM1000	Microsoft Office Specialist	60
DPM1100	Introduction to IT Project Management including CompTIA Project+ Certification Exam Preparation	60
DPM1200	Healthcare Business Accounting and Human	

	Resources	60
DPM2000	Data Foundations and Applications	60
DPM2100	Healthcare Project Specialist	60
DPM2200	Introduction to Data Science, Analytics, Wrangling and Visualization	60
DPM2300	Internet Webmaster Data Analytics including Certified Internet Webmaster Data Analyst Exam Preparation	60
DPM2400	Business of IT – Project Management Including Certified Associate in Project Management Exam Preparation	60
DPM2500	Healthcare Business and Data Analytics – Including Structured Query Language-related Certification Exam Preparation	60
Grand Total		**720**

Course Descriptions

Course: CIT1000: Introduction to Information Technology (IT) 60 Clock Hours
Introduction to IT examines information technology as a discipline and the various roles and functions of the IT department as business support. Students are presented with various IT disciplines including systems and services, network and security, scripting and programming, data management, and business of IT, with a survey of technologies in every area and how they relate to each other and to the business. May include the Google IT Support Professional Certification Exam Preparation or other similar certification exam preparation.
Prerequisites: None

Course: CNT1200: Computer Hardware Fundamentals including CompTIA A+ Certification Exam Preparation 60 clock Hours
Computer Hardware Fundamentals is the foundation of IT and is the first course in a two-part series preparatory for the CompTIA A+ exam, Part I. Students will gain an understanding of personal computer components and their functions in a desktop system; computer data storage and retrieval; classifying, installing, configuring, optimizing, upgrading, and troubleshooting printers, laptops, portable devices, operating systems, networks, and system security; recommending appropriate tools, diagnostic procedures, preventative maintenance and troubleshooting techniques for personal computer components in a desktop system; strategies for identifying, preventing, and reporting safety hazards and environmental/human accidents in a technological environments; and effective communication with colleagues and clients as well as job-related professional behavior.
Prerequisites: None

Course: CNT1300: Computer Software Fundamentals including CompTIA A+ Certification Exam Preparation **60 Clock Hours**

Computer Software Fundamentals is the application of IT and is a continuation of the Computer Hardware Fundamentals course preparatory for the CompTIA A+ exam, Part II. Students will gain an understanding of personal computer components and their functions in a desktop system. Also covered is computer data storage and retrieval including classifying, installing, configuring, optimizing, upgrading, and troubleshooting printers, laptops, portable devices, operating systems, networks, and system security. Other areas include recommending appropriate tools, diagnostic procedures, preventative maintenance, and troubleshooting techniques for personal computer components in a desktop system. The course then finishes with strategies for identifying, preventing, and reporting safety hazards and environmental/human accidents in a technological environment, and effective communication with colleagues and clients as well as job-related professional behavior.

This course builds on the understanding of hardware from Computer Hardware Fundamentals and is designed to build the skills to support 4 core components: Operating Systems, Security, Software Troubleshooting, and Operational Procedures. These are core skills for IT professionals from cloud engineers to data analysts, and will empower you with a better understanding of the tools used during your career.
Prerequisites: None

DPM1000 Microsoft Office Specialist **60 Clock Hours**

In this course, students will build on industry standard concepts, techniques, and processes to develop a comprehensive foundation for project management activities. During a project's life cycle, students will develop the critical skills necessary to initiate, plan, execute, monitor, control, and close a project. Students will apply best practices in areas such as scope management, resource allocation, project planning, project scheduling, quality control, risk management, performance measurement, and project reporting. This course prepares students for the following certification exam: CompTIA Project+.
Prerequisites: None

DPM1100 Introduction to IT Project Management including CompTIA Project+ Certification Exam Preparation **60 Clock Hours**

In this course, students will build on industry standard concepts, techniques, and processes to develop a comprehensive foundation for project management activities. During a project's life cycle, students will develop the critical skills necessary to initiate, plan, execute, monitor, control, and close a project. Students will apply best practices in areas such as scope management, resource allocation, project planning, project scheduling, quality control, risk management, performance measurement, and project reporting. This course prepares students for the following certification exam: CompTIA Project+.
Prerequisites: None

DPM1200 Healthcare Business Accounting and Human Resources 60 Clock Hours
This course offers relevant technical knowledge and skills needed to prepare for further education and careers such as accounts receivable coordinators, accounts payable coordinators, bookkeepers, credit and collections coordinators, payroll coordinators, accountants, auditors, and other accounting paraprofessionals in advanced professional accounting occupations with an additional emphasis in the healthcare field. The content includes but is not limited to the principles, procedures, and theories of organizing, maintaining and auditing business and financial transactions and the preparation of accompanying financial records and reports for internal and external uses. The content includes but is not limited to human resources management, recruitment and staffing, compensation & benefits administration, employment law, records management, and introduction to business.
Prerequisites: None

DPM2000 Data Foundations and Applications 60 clock Hour
This course introduces students to the concepts and terminology used in the field of data management. They will be introduced to Structured Query Language (SQL) and will learn how to use Data Definition Language (DDL) and Data Manipulation Language (DML) commands to define, retrieve, and manipulate data. This course covers differentiations of data—structured vs. unstructured and quasi-structured (relational, hierarchical, XML, textual, visual, etc.); it also covers aspects of data management (quality, policy, storage methodologies). Foundational concepts of data security are included.
Prerequisites: None

DPM2100 Healthcare Project Specialist 60 clock Hours
Health Care Project Management develops both the project management skills needed to improve health care delivery and the people management skills to create an effective project management environment. Participants explore the topics of creating and managing teams, delegation, motivation, conflict resolution, and negotiation in order to more effectively engage stakeholders and build support for project outcomes. Technical project management skills are layered on top of these topics to ensure project effectiveness.
Prerequisites: None

DPM2200 Introduction to Data Science, Analytics, Wrangling and Visualization 60 Clock Hours
This course introduces the data analysis process and common statistical techniques necessary for the analysis of data. Students will ask questions that can be solved with a given data set, set up experiments, use statistics and data wrangling to test hypotheses, find ways to speed up their data analysis code, make their data set easier to access, and communicate their findings. helping to develop skills crucial to the field of data science and analysis. It explores how to wrangle data from diverse sources and shape it to enable data-driven applications—a common activity in many data scientists' routine. Topics covered include gathering and extracting data from widely-used data formats, assessing the quality

of data, and exploring best practices for data cleaning. It also covers the application of design principles, human perception, color theory, and effective storytelling in the context of data visualization. It addresses presenting data to others.
Prerequisites: None

DPM2300 Internet Webmaster Data Analytics including Certified Internet Webmaster Data Analyst Exam Preparation 60 Clock Hours
Data Analyst is part of the CIW Web and Mobile Design series. In this course you will learn how to use data to analyze all aspects of a company's operation and make appropriate business decisions. You will study how to compare and contrast structured and unstructured data. You will learn how to deploy tools for capturing and analyzing data, including Hadoop, R Project, and custom database solutions. In addition, you will study how to extrapolate information using data obtained from new and traditional data sources, including Web and social media logs, marketing, sales, technical support, and customer relations. You will also learn how to determine relationships between organizational efforts and business outcomes. Finally, you will study the ways to capture and represent data, including creating dashboards, executive summaries, reports and charts, using both traditional and Web-based tools.
Prerequisites: None

DPM2400 Business of IT – Project Management Including Certified Associate in Project Management Exam Preparation 60 Clock Hours
Project Management is a thorough exploration of the inputs, tools, techniques, and outputs across the five process groups and 10 knowledge areas identified in the Project Management Body of Knowledge (PMBOK) Guide. The essential concepts and practical scenarios included enable students to build the skills required to successfully complete the CAPM certification exam. There is no prerequisite for this course.
Prerequisites: None

DPM2500 Healthcare Business and Data Analytics –Including Structured Query Language-related Certification Exam Preparation 60 Clock Hours
Business and financial healthcare practices have a significant impact on organizational outcomes. In the Principles of Healthcare Business and Financial Management course, future nurse leaders examine scarce resources, financial principles, and tools for financial and business management. They will also use financial budgeting and management practices and analyze the impact of regulations on the current healthcare environment.

This course provides an introduction to a variety of tools and techniques used in the field of data analytics. Students will summarize data, review statistical models, explore data mining techniques, and contemplate ethical considerations associated with the field of data analytics.
Prerequisites: None

DATA AND PROJECT MANAGEMENT

60 Credits 1080 Clock Hours – 75 Weeks
Credential Awarded: Associate of Science
Type of Instructional Delivery: Blended

Program Objectives

The Data and Project Management Associate Degree program offers preparation in the knowledge and skills for students to enter employment in a variety of entry-level occupations in businesses in the information technology industry and healthcare-related industries as data and project management support professionals for setting up a database environment, design databases, acquire data, wrangle it, analyze it, and visualize it to different audiences as part of the decision-making process and developing a comprehensive foundation for project management activities. It includes an overview of the health information technology field and health information management field and includes an introduction to general education knowledge of science, technology, math, English, and psychology.

Program Description

This program focuses on developing skills to understand, analyze, wrangle, and visualize data, organizing project management activities while developing specialized skills in office management with an understanding of accounting and human resources with an emphasis on organizations including healthcare-related businesses. It also includes an overview of desktop and computer support functions. The program develops attitudes and relationship skills required in organizations including the healthcare industry with a focus on technical skill sets required by local employers in the IT and related fields, including healthcare IT. The structure of this program is intended to prepare students to be ready for future certifications. The course content includes, but is not limited to communication, leadership skills, human relations, employability skills, and safe and efficient work practices.

Program Outline

Course Number	Course Title	Clock Hours	Credits
CIT1000	Introduction to Information Technology Including Google IT Support Professional Certification Exam Preparation	3	60
CNT1200	Computer Hardware Fundamentals including CompTIA A+ Certification Exam Preparation	3	60
CNT1300	Computer Software Fundamentals including CompTIA A+ Certification Exam Preparation	3	60
DPM1000	Microsoft Office Specialist	3	60

DPM1200	Healthcare Business Accounting and Human Resources	3	60
DPM2000	Data Foundations and Applications	3	60
DPM2100	Healthcare Project Specialist	3	60
DPM2200	Introduction to Data Science, Analytics, Wrangling and Visualization	3	60
DPM2300	Internet Webmaster Data Analytics including Certified Internet Webmaster Data Analyst Exam Preparation		
DPM2400	Business of IT – Project Management Including Certified Associate in Project Management Exam Preparation	3	60
DPM2500	Healthcare Business and Data Analytics – Including Structured Query Language-related Certification Exam Preparation	3	60
HIT2700	Legal Aspects of Healthcare	3	45
HIT2800	Health Information Technology	3	45
ENC 1101	English Composition	3	45
HUM1101	Humanities I	3	45
MAC 1105	College Algebra	3	45
CTS1050	Introduction to Computers	3	45
PSY 1012	Introduction to Psychology	3	45
SPC 1016	Fundamentals of Speech	3	45
Grand Total		**60**	**1080**

Course Descriptions

ENC 1101 English Composition **3 Credits 45 Clock Hours**

Students will learn grammar, punctuation and usage skills that are useful in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course. Students will review readings for writing to aid in essay preparation and completion.

Prerequisites: None

HUM1101 – Humanities I **3 Credits 45 Clock Hours**

This course offers an interdisciplinary approach to the humanities. Students study major works in art, music, literature, and philosophy with historical framework.

Prerequisites: None

MAC 1105 College Algebra **3 Credits 45 Clock Hours**

Students in this course will explore college algebra through a detailed examination of practical applications. Students will calculate algebraic problems with linear equations, exponents, polynomials, factors, and rational expressions. Student will solve problems

using graphs, slopes, inequalities, linear equations, roots, radicals and quadratic equations.
Prerequisites: None

PSY 1012 Introduction to Psychology 3 Credits 45 Clock Hours
In this course, students learn basic principles of human behavior. Challenges, responsibilities, problems and satisfactions of being a health care provider are discussed. Theories of human behavior and personality development are included.
Prerequisites: None

SPC 1016 Fundamentals of Speech 3 Credits 45 Clock Hours
Students will learn the foundations of communications including public presentations and interviewing skills.
Prerequisites: None

CTS 1050 - Introduction to Computers 3 Credits 45 clock hours
Students will learn the basic operation of Microsoft Word, Excel, and PowerPoint. Student will learn proper techniques for business letter writing and resume writing.
Prerequisites: None

Course: CIT1000: Introduction to Information Technology (IT) 3 Credits 60 Clock Hours
Introduction to IT examines information technology as a discipline and the various roles and functions of the IT department as business support. Students are presented with various IT disciplines including systems and services, network and security, scripting and programming, data management, and business of IT, with a survey of technologies in every area and how they relate to each other and to the business. May include the Google IT Support Professional Certification Exam Preparation or other similar certification exam preparation.
Prerequisites: None

Course: CNT1200: Computer Hardware Fundamentals including CompTIA A+ Certification Exam Preparation 3 Credits 60 clock Hours
Computer Hardware Fundamentals is the foundation of IT and is the first course in a two-part series preparatory for the CompTIA A+ exam, Part I. Students will gain an understanding of personal computer components and their functions in a desktop system; computer data storage and retrieval; classifying, installing, configuring, optimizing, upgrading, and troubleshooting printers, laptops, portable devices, operating systems, networks, and system security; recommending appropriate tools, diagnostic procedures, preventative maintenance and troubleshooting techniques for personal computer components in a desktop system; strategies for identifying, preventing, and reporting safety hazards and environmental/human accidents in a technological environments; and effective communication with colleagues and clients as well as job-related professional behavior.
Prerequisites: None

Course: CNT1300: Computer Software Fundamentals including CompTIA A+ Certification Exam Preparation 3 Credits 60 Clock Hours

Computer Software Fundamentals is the application of IT and is a continuation of the Computer Hardware Fundamentals course preparatory for the CompTIA A+ exam, Part II. Students will gain an understanding of personal computer components and their functions in a desktop system. Also covered is computer data storage and retrieval including classifying, installing, configuring, optimizing, upgrading, and troubleshooting printers, laptops, portable devices, operating systems, networks, and system security. Other areas include recommending appropriate tools, diagnostic procedures, preventative maintenance, and troubleshooting techniques for personal computer components in a desktop system. The course then finishes with strategies for identifying, preventing, and reporting safety hazards and environmental/human accidents in a technological environment, and effective communication with colleagues and clients as well as job-related professional behavior. This course builds on the understanding of hardware from Computer Hardware Fundamentals and is designed to build the skills to support 4 core components: Operating Systems, Security, Software Troubleshooting, and Operational Procedures. These are core skills for IT professionals from cloud engineers to data analysts, and will empower you with a better understanding of the tools used during your career.

DPM1000 Microsoft Office Specialist 3 Credits 60 Clock Hours

In this course, students will build on industry standard concepts, techniques, and processes to develop a comprehensive foundation for project management activities. During a project's life cycle, students will develop the critical skills necessary to initiate, plan, execute, monitor, control, and close a project. Students will apply best practices in areas such as scope management, resource allocation, project planning, project scheduling, quality control, risk management, performance measurement, and project reporting. This course prepares students for the following certification exam: CompTIA Project+.
Prerequisites: None

DPM1100 Introduction to IT Project Management including CompTIA Project+ Certification Exam Preparation 3 Credits 60 Clock Hours

In this course, students will build on industry standard concepts, techniques, and processes to develop a comprehensive foundation for project management activities. During a project's life cycle, students will develop the critical skills necessary to initiate, plan, execute, monitor, control, and close a project. Students will apply best practices in areas such as scope management, resource allocation, project planning, project scheduling, quality control, risk management, performance measurement, and project reporting. This course prepares students for the following certification exam: CompTIA Project+.
Prerequisites: None

DPM1200 Healthcare Business Accounting and Human Resources
3 Credits 60 Clock Hours

This course offers relevant technical knowledge and skills needed to prepare for further education and careers such as accounts receivable coordinators, accounts payable

coordinators, bookkeepers, credit and collections coordinators, payroll coordinators, accountants, auditors, and other accounting paraprofessionals in advanced professional accounting occupations with an additional emphasis in the healthcare field. The content includes but is not limited to the principles, procedures, and theories of organizing, maintaining and auditing business and financial transactions and the preparation of accompanying financial records and reports for internal and external uses. The content includes but is not limited to human resources management, recruitment and staffing, compensation & benefits administration, employment law, records management, and introduction to business.
Prerequisites: None

DPM2000 Data Foundations and Applications 3 Credits 60 clock Hour
This course introduces students to the concepts and terminology used in the field of data management. They will be introduced to Structured Query Language (SQL) and will learn how to use Data Definition Language (DDL) and Data Manipulation Language (DML) commands to define, retrieve, and manipulate data. This course covers differentiations of data—structured vs. unstructured and quasi-structured (relational, hierarchical, XML, textual, visual, etc.); it also covers aspects of data management (quality, policy, storage methodologies). Foundational concepts of data security are included.
Prerequisites: None

DPM2100 Healthcare Project Specialist 3 Credits 60 clock Hours
Health Care Project Management develops both the project management skills needed to improve health care delivery and the people management skills to create an effective project management environment. Participants explore the topics of creating and managing teams, delegation, motivation, conflict resolution, and negotiation in order to more effectively engage stakeholders and build support for project outcomes. Technical project management skills are layered on top of these topics to ensure project effectiveness.
Prerequisites: None

DPM2200 Introduction to Data Science, Analytics, Wrangling and Visualization 3 Credits 60 Clock Hours
This course introduces the data analysis process and common statistical techniques necessary for the analysis of data. Students will ask questions that can be solved with a given data set, set up experiments, use statistics and data wrangling to test hypotheses, find ways to speed up their data analysis code, make their data set easier to access, and communicate their findings. helping to develop skills crucial to the field of data science and analysis. It explores how to wrangle data from diverse sources and shape it to enable data-driven applications—a common activity in many data scientists' routines. Topics covered include gathering and extracting data from widely-used data formats, assessing the quality of data, and exploring best practices for data cleaning. It also covers the application of design principles, human perception, color theory, and effective storytelling in the context

of data visualization. It addresses presenting data to others.
Prerequisites: None

DPM2300 Internet Webmaster Data Analytics including Certified Internet Webmaster Data Analyst Exam Preparation 3 Credits 60 Clock Hours
Data Analyst is part of the CIW Web and Mobile Design series. In this course you will learn how to use data to analyze all aspects of a company's operation and make appropriate business decisions. You will study how to compare and contrast structured and unstructured data. You will learn how to deploy tools for capturing and analyzing data, including Hadoop, R Project, and custom database solutions. In addition, you will study how to extrapolate information using data obtained from new and traditional data sources, including Web and social media logs, marketing, sales, technical support, and customer relations. You will also learn how to determine relationships between organizational efforts and business outcomes. Finally, you will study the ways to capture and represent data, including creating dashboards, executive summaries, reports and charts, using both traditional and Web-based tools.
Prerequisites: None

DPM2400 Business of IT – Project Management Including Certified Associate in Project Management Exam Preparation 3 Credits 60 Clock Hours
Project Management is a thorough exploration of the inputs, tools, techniques, and outputs across the five process groups and 10 knowledge areas identified in the Project Management Body of Knowledge (PMBOK) Guide. The essential concepts and practical scenarios included enable students to build the skills required to successfully complete the CAPM certification exam. There is no prerequisite for this course.
Prerequisites: None

DPM2500 Healthcare Business and Data Analytics – Including Structured Query Language-related Certification Exam Preparation 3 Credits 60 Clock Hours
Business and financial healthcare practices have a significant impact on organizational outcomes. In the Principles of Healthcare Business and Financial Management course, future nurse leaders examine scarce resources, financial principles, and tools for financial and business management. They will also use financial budgeting and management practices and analyze the impact of regulations on the current healthcare environment. This course provides an introduction to a variety of tools and techniques used in the field of data analytics. Students will summarize data, review statistical models, explore data mining techniques, and contemplate ethical considerations associated with the field of data analytics.
Prerequisites: None

BACHELOR OF SCIENCE DEGREE IN COMPUTER NETWORKING PROGRAM

75 weeks- hours may vary
120 semester hours
(60 semesters credits awarded for prior learning and admission requirements*)
1125 clock hours
Method of Delivery – 100% Online

Admission Requirements for the BS in Computer Networking

• Provide documentation of completion of an associate degree in Computer Network or comparable education program at an institution recognized by the U.S. Department of Education (foreign diploma must be evaluated as equivalent)

• Provide official transcript evidencing the successful completion of at least 21 semester/ 32 quarter credits in general education (2.0 or better) to include the following pre-requisite courses:

Anatomy and Physiology I and II with labs

English Composition

College Algebra

Psychology

Introduction to Computer (or pass literacy test)

• Pay registration fee based on signed arrangement
• Complete appropriate documents
• Submit all required forms by the designated deadlines
• Attend online orientation session

Program Description

The Computer Networking prepares students to enter a vast arena of the Information Technology Field. The Computer Networking Program provides students with the opportunity to obtain the knowledge and skills needed to receive an entry level employment in the field of Computer Networking. At the completion of the program the student will eligible to take vast variety of certifications.

Program Objective

The Bachelor of Science degree in Computer Networking prepares IT professionals to apply knowledge and experience in the delivery of network and cloud computing solutions with operating systems, systems security, and cloud technologies and simultaneously apply knowledge and experience in network design, network operations, network security, and cloud security to manage network infrastructure and secure data through effective IT policies and procedures These are used to manage system infrastructure and secure data through effective IT policies and procedures (DevOps). The BSCC curriculum includes industry standard methods to ensure uptime, performance, resource availability, and the security of networks and computing resources to meet the needs of the organization.

PROGRAM OUTLINE

Course Number	Course Title Clock	Credits	Hours
BSC301	Pathophysiology	3	45
ENC402	College Writing	3	45
MAC310	Statistics	3	45
PSY401	Abnormal Psychology	3	45
COM301	Microcomputer Applications	3	45
DPM2000	Data Management Foundations and Applications	3	60
CNS3200	Scripting and Programming Foundations	3	60
CNT3300	Implementing and Administering Network Solutions	3	60
CNT3400	Cloud Deployment and Operations	3	60
CNT3500	Introduction to Artificial Intelligence and Machine Learning	3	60
CNT3600	Introduction to Digital Device and the Internet Of Things	3	60
CNT4000	Software Engineering	3	60
CNT4100	Scripting, Automation, and Scaling Tools	3	60
CNT4200	Desktop Virtualization	3	60
CNT4300	Cloud Applications	3	60
CNT4400	Cloud Platform Solutions and Architecture	3	60
ITM4500	Information Technology Capstone Project	3	60
CNS5000	Managing Cloud Security	3	60
CNT5100	Advanced Data Visualization	3	60
ITM5200	Technical Communications	3	60
Total		**60**	**1125**

Course Descriptions

BSC301 Pathophysiology 3 Credits 45 Clock Hours
In an online delivery, this course provides a study of variations in physiologic functioning and alterations in physiologic response of body systems. The course addresses physiologic changes that will help identify alterations in body systems and their relationship to the patient's state of health. Topics include altered cell functioning, genetic disorders, risk factors, and health promotion and disease prevention.
Prerequisites: None

ENC402 College Writing 3 Credits 45 Clock Hours
In an online delivery, this course equips developing writers with the critical thinking skills they need to interpret and analyze information and express their ideas clearly and logically in writing.
Prerequisites: None

MAC310 Statistics 3 Credits 45 Clock Hours
In an online delivery, this course provides the essentials of statistics with new and interesting data sets, examples, and exercises in statistics. The course fosters personal growth of students through critical thinking, use of technology, collaborative work, and development of communication skills. The course incorporates the latest and best methods used by professional statisticians.
Prerequisites: None

PSY401 Abnormal Psychology 3 Credits 45 Clock Hours
In an online delivery, this course offers students a researched, engaging, and up-to-date explanation of psychopathology, creating a learning experience that provokes thought and increases awareness. This course reflects the ever-changing field of abnormal psychology.
Prerequisites: None

COM301 Microcomputers Applications 3 Credits 45 Clock Hours
This course prepares students to utilize Windows-based applications within the Windows environment. Through a hands-on approach, students will achieve advanced application knowledge of Windows, word processing, presentation software, and spreadsheets.
Prerequisites: None

DPM 2000 Data Management Foundations and Applications 3 Credits 60 Clock Hours
This course introduces students to the concepts and terminology used in the field of data management. Students will be introduced to Structured Query Language (SQL) and will learn how to use Data Definition Language (DDL) and Data Manipulation Language (DML) commands to define, retrieve, and manipulate data. This course covers differentiations of data—structured vs. unstructured and quasi-structured (relational, hierarchical, XML, textual, visual, etc); it also covers aspects of data management (quality, policy, storage

methodologies). Foundational concepts of data security are included. This course also covers conceptual data modeling and provides an introduction to MySQL. Students will learn how to create simple to complex SELECT queries including subqueries and joins, and students will also learn how to use SQL to update and delete data. Topics covered in this course include exposure to MySQL; developing physical schemas; creating and modifying databases, tables, views, foreign keys/primary keys (FKs/PKs), and indexes; populating tables; and developing simple Select-From-Where (SFW) queries to complex 3+ table join queries.
Prerequisites: None

CNS 3200 Scripting and Programming Foundations 3 Credits 60 Clock Hours
This course provides an introduction to programming, covering basic elements such as variables, data types, flow control, and design concepts. The course is language-agnostic in nature, ending in a survey of languages and introduces the distinction between interpreted and compiled languages.
Prerequisites: None

CNT 3300 Implementing and Administering Networking Solutions
3 Credits 60 Clock Hours
This course prepares students for the Cisco Certified Network Associate (CCNA) certification exam CCNA-200-301.
Prerequisites: None

CNT 3400 Cloud Deployment and Operations 3 Credits 60 Clock Hours
This course provides students with the technical skills in deployment, management, and operations of cloud services. This course allows students to examine stability and scalability, backup and recovery processes, and deployment best practices. Provisioning of cloud resources, monitoring of cloud resources, and managing connectivity are also examined. Competency in this course is demonstrated by successfully preparing for the Amazon Web Services (AWS) Certified SysOps Administrator - Associate certification exam.
Prerequisites: None

CNT 3500 Introduction to Artificial Intelligence and Machine Learning
3 Credits 60 Clock Hours
This course explores the foundational principles and practices of artificial intelligence (AI), machine learning, and robotics. The course prepares students to analyze relationships, build agents, and create models relevant to AI problems. This course also presents the end-to-end process of investigating data through a machine learning lens. Topics covered include techniques for extracting data, identifying useful features that best represent data, a survey of commonly used machine learning algorithms, and methods for evaluating the performance of machine learning algorithms.
Prerequisites: None

CNT 3600 Introduction to Digital Devices and The Internet of Things
3 Credits 60 Clock Hours
This course explores digital concepts, devices and connectivity within the realm of the Internet of Things (IoT). The basics of networking, computing, and digital devices are further explored. Practical application of IoT systems and concepts are accomplished throughout the course. IoT solutions are derived to solve industry or societal problems from a global perspective. This course also focuses on the Internet of Things (IoT) as a networked system. Coursework examines meshes, wireless networks, sensor nets and other configurations using low-power, low-cost modern devices interconnected into a robust system. Also addressed are data mining systems that gather information from many sources and identify patterns within it. IoT applications in which devices function and communicate with the Internet are explored.
Prerequisites: None

CNT 4000 Software Engineering 3 Credits 60 Clock Hours
This course introduces the concepts of software engineering to students who have completed the core courses in programming and project management. The principles build on previously acquired concepts, switching the emphasis from programming simple routines to engineering robust and scalable software solutions. This course does not cover programming but provides an overview of software engineering processes and their challenging nature, focusing on the need for a disciplined approach to software engineering. A generic process framework provides the groundwork for formal process models. Prescriptive process models such as the waterfall model and agile development are included. An introduction to the elements and phases of software engineering is included, which explores requirements for engineering, design concepts, and software quality.
Prerequisites: None

CNT 4100 Scripting, Automation, and Scaling Tools 3 Credits 60 Clock Hours
This course is the foundation for automating tasks in operating systems. Students will learn how to create PowerShell scripts that take tedious and repetitious tasks and turn them into programs that will save time. Students will learn PowerShell, an automation and configuration management tool based on a command-line shell and .NET Framework. This course also examines the skills and knowledge needed to effectively write scripts for tools to monitor system and network resources. Through practical application in labs, students will gain hands-on experience for planning, deploying, and maintaining scalable and elastic design, system monitoring, and performance tuning solutions. Students will learn how to identify common constraints and performance considerations, configure monitoring tools to efficiently balance system resources for a given environment, and ensure appropriate systematic response. This course provides students authentic learning opportunities for high-demand skills related to system automation and scaling
Prerequisites: None

CNT 4200 Desktop Virtualization **3 Credits 60 Clock Hours**
Desktop (client) virtualization is a virtualization technology used to separate the computer desktop environment from the physical computer. It is considered a type of client-server computing model because the virtualized desktop is stored on a centralized, remote server and not on the physical machine being virtualized. Users interact with a virtual desktop the same way they would use a physical desktop. Additionally, the virtualization lets users remotely log in to access their desktop from any location. This approach enables the information technology (IT) department of an organization to centrally manage all endpoints while lowering costs and complexity and while increasing efficacy.
Prerequisites: None

CNT 4300 Cloud Applications **3 Credits 60 Clock Hours**
This course teaches students to implement and maintain cloud technologies and enables them to jump into a rapidly growing market. As more businesses shift their IT operations to cloud platforms, skills in cloud computing and virtualization have become a frequently required qualification for IT professionals. This course prepares students for the following certification exam: CV0-002 CompTIA Cloud+.
Prerequisites: None

CNT 4400 Cloud Platform Solutions and Architecture **3 Credits 60 Clock Hours**
This course examines the skills and knowledge students need to configure cloud storage, security, networking, compute resources through PowerShell, command line interface, and the Azure portal. Students will learn how to manage Azure resources; configure and manage storage; configure and manage virtual machines and networks; and manage identities using tools such as Azure Active Directory (AD) join, Azure AD objects, and hybrid identities through Azure AD Connect.
Prerequisites: None

ITM 4500 Information Technology Capstone Project **3 Credits 60 Clock Hours**
The capstone project consists of a technical work proposal, the proposal's implementation, and a post implementation report that describes the graduate's experience in developing and implementing the capstone project. The capstone project should be presented and approved by the faculty in relation to the student's technical emphasis.
Prerequisites: None

CNS 5000 Managing Cloud Security **3 Credits 60 Clock Hours**
This course will prepare students to design solutions for cloud-based platforms and operations that maintain data availability while protecting the confidentiality and integrity of information. Many of today's companies and organizations have outsourced data management, availability, and operational processes through cloud computing. Topics include security controls, disaster recovery plans, and continuity management plans that address physical, logical, and human factors.
Prerequisites: None

CNT 5100 Advanced Data Visualization **3 Credits 60 Clock Hours**

This course enables organizations to extract and analyze raw data. Skillful data management allows organizations to discover and explore data in ways that uncover trends, issues, and their root causes. In turn, businesses are better equipped to capitalize on opportunities and more accurately plan for the future. As organizations continue to extract larger and more detailed volumes of data, the need is rapidly growing for IT professionals possessing data management skills. These skills include performing advanced relational data modeling as well as designing data marts, lakes, and warehouses. This course will empower software developers with the skills to build business logic at the database layer to employ more stability and higher data-processing speeds. Data analysts will gain the ability to automate common tasks to summarize and integrate data as they prepare it for analysis.

Prerequisites: None

ITM 5200 Technical Communications **3 Credits 60 Clock Hours**

This course covers basic elements of technical communication, including professional written communication proficiency; the ability to strategize approaches for different audiences; and technical style, grammar, and syntax proficiency.

Prerequisites: None

BACHELOR OF SCIENCE DEGREE IN CYBER AND NETWORK SECURITY

75 weeks- hours may vary
120 semester hours
(60 semesters credits awarded for prior learning and admission requirements*)
1125 clock hours
Method of Delivery – 100% Online

Admission Requirements for the BS in Computer Networking

• Provide documentation of completion of an associate degree in Computer Network or comparable education program at an institution recognized by the U.S. Department of Education (foreign diploma must be evaluated as equivalent)

• Provide official transcript evidencing the successful completion of at least 21 semester/ 32 quarter credits in general education (2.0 or better) to include the following pre-requisite courses:

Anatomy and Physiology I and II with labs

English Composition

College Algebra

Psychology

Introduction to Computer (or pass literacy test)

• Pay registration fee based on signed arrangement
• Complete appropriate documents
• Submit all required forms by the designated deadlines
• Attend online orientation session

Program Description

The Cyber and Network Security program prepares students to enter a vast arena of the Information Technology Field. The Cyber and Network Security Program provides students with the opportunity to obtain the knowledge and skills needed to receive an entry level employment in the field of Cyber and Network Security. At the completion of the program the student will eligible to take vast variety of certifications.

Program Objective

To meet an increasing demand for cybersecurity professionals, the Bachelor of Science in Cyber and Network Security degree program prepares IT professionals to apply knowledge and experience in risk management and digital forensics to safeguard infrastructure and secure data through continuity planning and disaster recovery operations. Expand on this to reflect modernization.

PROGRAM OUTLINE

Course Number	Course Title Clock	Credits	Hours
BSC301	Pathophysiology	3	45
ENC402	College Writing	3	45
MAC310	Statistics	3	45
PSY401	Abnormal Psychology	3	45
COM301	Microcomputer Applications	3	45
DPM2000	Data Management Foundations and Applications	3	60
CNT2100	Network Technician	3	60
DPM2400	Business of IT – Project Management	3	60
CNS3000	Information Technology Instructure, Development And Operations	3	60
CNS3100	Ethics in Technology	3	60
CNS3200	Scripting and Programming Foundations	3	60
CNS4000	Information Gathering and Vulnerability Analysis	3	60
CNS4100	Introduction to Cryptography	3	60
CNS4200	Web Development Foundations and Applications	3	60
CNS4300	Information Systems Security	3	60
CNS4400	Legal Issues in Information Security	3	60
ITM4500	Information Technology Capstone Project	3	60
CNS5300	Emerging Technologies in Cybersecurity	3	60
CNS5000	Managing Cloud Security	3	60
ITM5200	Technical Communications	3	60
Total		**60**	**1125**

Course Descriptions

BSC301 Pathophysiology 3 Credits 45 Clock Hours

In an online delivery, this course provides a study of variations in physiologic functioning and alterations in physiologic response of body systems. The course addresses physiologic changes that will help identify alterations in body systems and their relationship to the patient's state of health. Topics include altered cell functioning, genetic disorders, risk factors, and health promotion and disease prevention.

Prerequisites: None

ENC402 College Writing 3 Credits 45 Clock Hours
In an online delivery, this course equips developing writers with the critical thinking skills they need to interpret and analyze information and express their ideas clearly and logically in writing.
Prerequisites: None

MAC310 Statistics 3 Credits 45 Clock Hours
In an online delivery, this course provides the essentials of statistics with new and interesting data sets, examples, and exercises in statistics. The course fosters personal growth of students through critical thinking, use of technology, collaborative work, and development of communication skills. The course incorporates the latest and best methods used by professional statisticians.
Prerequisites: None

PSY401 Abnormal Psychology 3 Credits 45 Clock Hours
In an online delivery, this course offers students a researched, engaging, and up-to-date explanation of psychopathology, creating a learning experience that provokes thought and increases awareness. This course reflects the ever-changing field of abnormal psychology.
Prerequisites: None

COM301 Microcomputers Applications 3 Credits 45 Clock Hours
This course prepares students to utilize Windows-based applications within the Windows environment. Through a hands-on approach, students will achieve advanced application knowledge of Windows, word processing, presentation software, and spreadsheets.
Prerequisites: None

DPM 2000 Data Management Foundations and Applications 3 Credits 60 Clock Hours
This course introduces students to the concepts and terminology used in the field of data management. Students will be introduced to Structured Query Language (SQL) and will learn how to use Data Definition Language (DDL) and Data Manipulation Language (DML) commands to define, retrieve, and manipulate data. This course covers differentiations of data—structured vs. unstructured and quasi-structured (relational, hierarchical, XML, textual, visual, etc); it also covers aspects of data management (quality, policy, storage methodologies). Foundational concepts of data security are included. This course also covers conceptual data modeling and provides an introduction to MySQL. Students will learn how to create simple to complex SELECT queries including subqueries and joins, and students will also learn how to use SQL to update and delete data. Topics covered in this course include exposure to MySQL; developing physical schemas; creating and modifying databases, tables, views, foreign keys/primary keys (FKs/PKs), and indexes; populating tables; and developing simple Select-From-Where (SFW) queries to complex 3+ table join queries.
Prerequisites: None

CNT 2100 Network Technician **3 Credits 60 Clock Hours**
Networks for undergraduates focuses on the general concepts and applications of computer operating systems and network topologies. The fundamental knowledge and skills gained in this course prepares students for the CompTIA Network+ (N10-007) certification exam.
Prerequisites: None

DPM 2400 Business of IT – Project Management **3 Credits 60 Clock Hours**
In this course, students will build on industry standard concepts, techniques, and processes to develop a comprehensive foundation for project management activities. During a project's life cycle, students will develop the critical skills necessary to initiate, plan, execute, monitor, control, and close a project. Students will apply best practices in areas such as scope management, resource allocation, project planning, project scheduling, quality control, risk management, performance measurement, and project reporting. This course prepares students for the following certification exam: CompTIA Project+.
Prerequisites: None

CNS 3000 Information Technology Infrastructure, Development, and Operations
3 Credits 60 Clock Hours
This course examines Information Technology Infrastructure Library (ITIL®) terminology, structure, policies, and concepts. Focusing on the management of information technology (IT) infrastructure, development, and operations, students will explore the core principles of ITIL practices for service management to prepare them for careers as IT professionals, business managers, and business process owners.
Prerequisites: None

CNS 3100 Ethics in Technology **3 Credits 60 Clock Hours**
This course examines the ethical considerations of technology in each of four categories: privacy, accuracy, property, and access. The course presents a range of technologies and issues that challenge technologists in the field of information ethics. Students are introduced to a decision-making process as informed by ethical frameworks that outline key ethical considerations within the technologies presented. Students will study specific cases to help inform their professional responsibilities in how to navigate the important controversies in topics such as surveillance, social media, hacking, data manipulation, plagiarism and piracy, artificial intelligence, responsible innovation, and the digital divide.
Prerequisites: None

CNS 3200 Scripting and Programming Foundations **3 Credits 60 Clock Hours**
This course provides an introduction to programming, covering basic elements such as variables, data types, flow control, and design concepts. The course is language-agnostic in nature, ending in a survey of languages and introduces the distinction between interpreted and compiled languages.
Prerequisites: None

CNS 4000 Information Gathering and Vulnerability Analysis
3 Credits 60 Clock Hours
This course and Vulnerability Analysis introduces students to the skills necessary to perform penetration testing and vulnerability management within an organization. The course covers widely used penetration testing techniques that focus on planning and scoping, information gathering, vulnerability identification, and attacks and exploits. The course also introduces students to tools that can be used for penetration testing and reporting and communication.
Prerequisites: None

CNS 4100 Introduction to Cryptography 3 Credits 60 Clock Hours
This course provides students with knowledge of cryptographic algorithms, protocols, and their uses in the protection of information in various states.
Prerequisites: None

CNS 4200 Web Development Foundations and Applications
3 Credits 60 Clock Hours
This course introduces students to web design and development by presenting them with HTML5 and Cascading Style Sheets (CSS), the foundational languages of the web, by reviewing media strategies and by using tools and techniques commonly employed in web development. This course also builds upon a student's manual coding skills by teaching how to develop web documents and pages using the web development trifecta: Hypertext Markup Language version 5 (HTML5), Cascading Style Sheets version 3 (CSS3), and JavaScript. Students will utilize the skills learned in this course to create web documents and pages that easily adapt to display on both traditional and mobile devices. In addition, students will learn techniques for code validation and testing, form creation, inline form field validation, and mobile design for browsers and apps, including Responsive Web Design (RWD).
Prerequisites: None

CNS 4300 Information Systems Security 3 Credits 60 Clock Hours
IT security professionals must be prepared for the operational demands and responsibilities of security practitioners including authentication, security testing, intrusion detection and prevention, incident response and recovery, attacks and countermeasures, cryptography, and malicious code countermeasures. This course provides a comprehensive, up-to-date global body of knowledge that ensures students have the right information, security knowledge, and skills to be successful in IT operational roles to mitigate security concerns and guard against the impact of malicious activity. Students demonstrate how to manage and restrict access control systems; administer policies, procedures, and guidelines that are ethical and compliant with laws and regulations; implement risk management and incident handling processes; execute cryptographic systems to protect data; manage network security; and analyze common attack vectors and countermeasures to assure information integrity and confidentiality in various systems. This course prepares students for the Systems Security Certified Practitioner (ISC2 SSCP)

certification exam.
Prerequisites: None

CNS 4400 Legal Issues in Information Security 3 Credits 60 Clock Hours
Security information professionals have the role and responsibility for knowing and applying ethical and legal principles and processes that define specific needs and demands to assure data integrity within an organization. This course addresses the laws, regulations, authorities, and directives that inform the development of operational policies, best practices, and training to assure legal compliance and to minimize internal and external threats. Students analyze legal constraints and liability concerns that threaten information security within an organization and develop disaster recovery plans to assure business continuity.
Prerequisites: None

ITM 4500 Information Technology Capstone Project 3 Credits 60 Clock Hours
The capstone project consists of a technical work proposal, the proposal's implementation, and a post implementation report that describes the graduate's experience in developing and implementing the capstone project. The capstone project should be presented and approved by the faculty in relation to the student's technical emphasis.
Prerequisites: None

CNS 5000 Managing Cloud Security 3 Credits 60 Clock Hours
This course will prepare students to design solutions for cloud-based platforms and operations that maintain data availability while protecting the confidentiality and integrity of information. Many of today's companies and organizations have outsourced data management, availability, and operational processes through cloud computing. Topics include security controls, disaster recovery plans, and continuity management plans that address physical, logical, and human factors.
Prerequisites: None

ITM 5200 Technical Communications 3 Credits 60 Clock Hours
This course covers basic elements of technical communication, including professional written communication proficiency; the ability to strategize approaches for different audiences; and technical style, grammar, and syntax proficiency.
Prerequisites: None

CNS 5300 Emerging Technologies in Cybersecurity 3 Credits 60 Clock Hours
The continual evolution of technology means that cybersecurity professionals must be able to analyze and evaluate new technologies in information security such as wireless, mobile, and internet technologies. Students review the adoption process that prepares an organization for the risks and challenges of implementing new technologies. This course focuses on comparison of evolving technologies to address the security requirements of an organization. Students learn underlying principles critical to the operation of secure

networks and adoption of new technologies.
Prerequisites: None

BACHELOR OF SCIENCE DEGREE IN DATA MANAGEMENT AND ANALYTICS

75 weeks- hours may vary
120 semester hours
(60 semesters credits awarded for prior learning and admission requirements*)
1125 clock hours
Method of Delivery – 100% Online

Admission Requirements for the BS in Data Management and Analytics

• Provide documentation of completion of an associate degree in Project Management or comparable education program at an institution recognized by the U.S. Department of Education (foreign diploma must be evaluated as equivalent)

• Provide official transcript evidencing the successful completion of at least 21 semester/ 32 quarter credits in general education (2.0 or better) to include the following pre-requisite courses:

Anatomy and Physiology I and II with labs

English Composition

College Algebra

Psychology

Introduction to Computer (or pass literacy test)

• Pay registration fee based on signed arrangement

• Complete appropriate documents

• Submit all required forms by the designated deadlines

• Attend online orientation session

Program Description

The Data Management and Analytics program prepares students to enter a vast arena of the Information Technology Field. The Data Management and Analytics Program provides students with the opportunity to obtain the knowledge and skills needed to receive an entry level employment in the field of Data Management and Analytics. At the completion of the program the student will eligible to take vast variety of certifications.

Program Objective

The Bachelor of Science degree in Data Management and Analytics is designed to prepare professionals who can set up a database environment, design databases, acquire data, wrangle it, analyze it, and visualize it to different audiences as part of the decision-making process for a variety of organizations.

PROGRAM OUTLINE

Course Number	Course Title Clock	Credits	Hours
BSC301	Pathophysiology	3	45
ENC402	College Writing	3	45
MAC310	Statistics	3	45
PSY401	Abnormal Psychology	3	45
COM301	Microcomputer Applications	3	45
DMA3300	Data Science	3	60
DMA3400	Structured Query Language	3	60
DMA5400	Data Mining and Analytics	3	60
CNT3500	Introduction to Artificial Intelligence and Machine Learning	3	60
CNS3100	Ethics in Technology	3	60
CNS3200	Scripting and Programming Foundations	3	60
DMA3600	Data Visualization	3	60
DMA4000	Data Structures and Algorithms	3	60
DMA4100	Database Server Administration	3	60
CNS4200	Web Development Foundations and Application	3	60
DMA4300	Data Analysis with R	3	60
DMA4400	Data Wrangling with MongoDB	3	60
ITM4500	Information Technology Capstone Project	3	60
CNT5100	Advanced Data Visualization	3	60
ITM5200	Technical Communications	3	60
Total		**60**	**1125**

Course Descriptions

BSC301 Pathophysiology 3 Credits 45 Clock Hours

In an online delivery, this course provides a study of variations in physiologic functioning and alterations in physiologic response of body systems. The course addresses physiologic changes that will help identify alterations in body systems and their relationship to the patient's state of health. Topics include altered cell functioning, genetic disorders, risk factors, and health promotion and disease prevention.

Prerequisites: None

ENC402 College Writing 3 Credits 45 Clock Hours
In an online delivery, this course equips developing writers with the critical thinking skills they need to interpret and analyze information and express their ideas clearly and logically in writing.
Prerequisites: None

MAC310 Statistics 3 Credits 45 Clock Hours
In an online delivery, this course provides the essentials of statistics with new and interesting data sets, examples, and exercises in statistics. The course fosters personal growth of students through critical thinking, use of technology, collaborative work, and development of communication skills. The course incorporates the latest and best methods used by professional statisticians.
Prerequisites: None

PSY401 Abnormal Psychology 3 Credits 45 Clock Hours
In an online delivery, this course offers students a researched, engaging, and up-to-date explanation of psychopathology, creating a learning experience that provokes thought and increases awareness. This course reflects the ever-changing field of abnormal psychology.
Prerequisites: None

COM301 Microcomputers Applications 3 Credits 45 Clock Hours
This course prepares students to utilize Windows-based applications within the Windows environment. Through a hands-on approach, students will achieve advanced application knowledge of Windows, word processing, presentation software, and spreadsheets.
Prerequisites: None

CNS 3100 Ethics in Technology 3 Credits 60 Clock Hours
This course examines the ethical considerations of technology in each of four categories: privacy, accuracy, property, and access. The course presents a range of technologies and issues that challenge technologists in the field of information ethics. Students are introduced to a decision-making process as informed by ethical frameworks that outline key ethical considerations within the technologies presented. Students will study specific cases to help inform their professional responsibilities in how to navigate the important controversies in topics such as surveillance, social media, hacking, data manipulation, plagiarism and piracy, artificial intelligence, responsible innovation, and the digital divide.
Prerequisites: None

CNS 3200 Scripting and Programming Foundations 3 Credits 60 Clock Hours
This course provides an introduction to programming, covering basic elements such as variables, data types, flow control, and design concepts. The course is language-agnostic in nature, ending in a survey of languages and introduces the distinction between interpreted and compiled languages.

Prerequisites: None

DMA 3300 Data Science **3 Credits** **60 Clock Hours**
This course introduces the data analysis process and common statistical techniques necessary for the analysis of data. Students will ask questions that can be solved with a given data set, set up experiments, use statistics and data wrangling to test hypotheses, find ways to speed up their data analysis code, make their data set easier to access, and communicate their findings.
Prerequisites: None

DMA 3400 Structured Query Language **3 Credits** **60 Clock Hours**
This course introduces students to the concepts and terminology used in the field of data management. Students will be introduced to Structured Query Language (SQL) and will learn how to use Data Definition Language (DDL) and Data Manipulation Language (DML) commands to define, retrieve, and manipulate data. This course covers differentiations of data—structured vs. unstructured and quasi-structured (relational, hierarchical, XML, textual, visual, etc); it also covers aspects of data management (quality, policy, storage methodologies). Foundational concepts of data security are included.
Prerequisites: None

CNT 3500 Introduction to Artificial Intelligence and Machine Learning
3 Credits **60 Clock Hours**
This course explores the foundational principles and practices of artificial intelligence (AI), machine learning, and robotics. The course prepares students to analyze relationships, build agents, and create models relevant to AI problems. This course also presents the end-to-end process of investigating data through a machine learning lens. Topics covered include techniques for extracting data, identifying useful features that best represent data, a survey of commonly used machine learning algorithms, and methods for evaluating the performance of machine learning algorithms.
Prerequisites: None

DMA 3600 Data Visualization **3 Credits** **60 Clock Hours**
This course covers the application of design principles, human perception, color theory, and effective storytelling in the context of data visualization. It addresses presenting data to others and advancing technology with visualization tools, enabling data scientists to share their findings and support organizational decision-making processes. Additionally, this course focuses on how to visually encode and present data to an audience.
Prerequisites: None

DMA 4400 Data Structures and Algorithms **3 Credits** **60 Clock Hours**
This course covers the fundamentals of dynamic data structures, such as bags, lists, stacks, queues, trees, hash tables, and their associated algorithms. With Python software as the basis, the course discusses object-oriented design and abstract data types as a design paradigm. The course emphasizes problem solving and techniques for designing efficient,

maintainable software applications. Students will implement simple applications using the techniques learned.
Prerequisites: None

DMA 4100 Database Server Administration 3 Credits 60 Clock Hours
This course reviews the information to prepare students to gain knowledge and skills related to the competencies within the Oracle Database 12c: Installation and Administration OCA certification exam preparation material.
Prerequisites: None

CNS 4200 Web Development Foundations and Applications
3 Credits 60 Clock Hours
This course introduces students to web design and development by presenting them with HTML5 and Cascading Style Sheets (CSS), the foundational languages of the web, by reviewing media strategies and by using tools and techniques commonly employed in web development. This course also builds upon a student's manual coding skills by teaching how to develop web documents and pages using the web development trifecta: Hypertext Markup Language version 5 (HTML5), Cascading Style Sheets version 3 (CSS3), and JavaScript. Students will utilize the skills learned in this course to create web documents and pages that easily adapt to display on both traditional and mobile devices. In addition, students will learn techniques for code validation and testing, form creation, inline form field validation, and mobile design for browsers and apps, including Responsive Web Design (RWD).

DMA 4300 Data Analysis with R 3 Credits 60 Clock Hours
This course focuses on exploratory data analysis (EDA) utilizing R. EDA is an approach for summarizing and visualizing the important characteristics of a data set. Exploratory data analysis focuses on exploring data to understand the data's underlying structure and variables to develop intuition about the data set, to consider how that data set came into existence, and to decide how it can be investigated with more formal statistical methods.
Prerequisites: None

DMA 4400 Data Wrangling with MongoDB 3 Credits 60 Clock Hours
This course elaborates on concepts covered in Introduction to Data Science, helping to develop skills crucial to the field of data science and analysis. It explores how to wrangle data from diverse sources and shape it to enable data-driven applications— a common activity in many data scientists' routine. Topics covered include gathering and extracting data from widely-used data formats, assessing the quality of data, and exploring best practices for data cleaning. This course also introduces MongoDB, covering the essentials of storing data and the MongoDB query language together with exploratory analysis using the MongoDB aggregation framework.
Prerequisites: None

ITM 4500 Information Technology Capstone Project 3 Credits 60 Clock Hours
The capstone project consists of a technical work proposal, the proposal's implementation, and a post implementation report that describes the graduate's experience in developing and implementing the capstone project. The capstone project should be presented and approved by the faculty in relation to the student's technical emphasis.
Prerequisites: None

CNT 5100 Advanced Data Visualization 3 Credits 60 Clock Hours
This course enables organizations to extract and analyze raw data. Skillful data management allows organizations to discover and explore data in ways that uncover trends, issues, and their root causes. In turn, businesses are better equipped to capitalize on opportunities and more accurately plan for the future. As organizations continue to extract larger and more detailed volumes of data, the need is rapidly growing for IT professionals possessing data management skills. These skills include performing advanced relational data modeling as well as designing data marts, lakes, and warehouses. This course will empower software developers with the skills to build business logic at the database layer to employ more stability and higher data-processing speeds. Data analysts will gain the ability to automate common tasks to summarize and integrate data as they prepare it for analysis.
Prerequisites: None

ITM 5200 Technical Communications 3 Credits 60 Clock Hours
This course covers basic elements of technical communication, including professional written communication proficiency; the ability to strategize approaches for different audiences; and technical style, grammar, and syntax proficiency.
Prerequisites: None

DMA 5400 Data Mining and Analytics 3 Credits 60 Clock Hours
This course expands predictive modeling into nonlinear dimensions, enhancing the capabilities and effectiveness of the data analytics lifecycle. In this course, learners implement supervised models—specifically classification and prediction data mining models—to unearth relationships among variables that are not apparent with more surface-level techniques. The course provides frameworks for assessing models' sensitivity and specificity. It adds vital tools to data analytics arsenal that incorporates unsupervised models. This course explains when, how, and why to use these tools to best meet organizational needs and prepares students for career-long growth in steadily advancing tools and techniques and provides emerging concepts in data analysis. This course hones the mental and theoretical flexibility that will be required of analysts in the coming decades while grounding their approach firmly in ethical and organizational-need-focused practice. Topics include machine learning, neural networks, randomness, and unconventional data sources.
Prerequisites: None

BACHELOR OF SCIENCE DEGREE IN PROJECT MANAGEMENT

75 weeks- hours may vary
120 semester hours
(60 semesters credits awarded for prior learning and admission requirements*)
1125 clock hours
Method of Delivery – 100% Online

Admission Requirements for the BS in Project Management

• Provide documentation of completion of an associate degree in Project Management or comparable education program at an institution recognized by the U.S. Department of Education (foreign diploma must be evaluated as equivalent)

• Provide official transcript evidencing the successful completion of at least 21 semester/ 32 quarter credits in general education (2.0 or better) to include the following pre-requisite courses:

Anatomy and Physiology I and II with labs

English Composition

College Algebra

Psychology

Introduction to Computer (or pass literacy test)

• Pay registration fee based on signed arrangement

• Complete appropriate documents

• Submit all required forms by the designated deadlines

• Attend online orientation session

Program Description

The Project Management program prepares students to enter a vast arena of the Information Technology Field. The Project Management Program provides students with the opportunity to obtain the knowledge and skills needed to receive an entry level employment in the field of Project Management. At the completion of the program the student will eligible to take vast variety of certifications.

Program Objective

The Bachelor of Science in Project Management is designed to prepare professionals to lead projects and make an impact with their work with the ability to apply knowledge and skills in a variety of industries and across all professions. The degree is designed to guide students to become effective project managers, equipped with technical skills and leadership skills necessary to deliver successful projects in their area of passion. A project management education reviews industry standards including project management methodology and considers various ------- coordinates the Project Management Body of Knowledge (PMBOK) areas.

PROGRAM OUTLINE

Course Number	Course Title Clock	Credits	Hours
BSC301	Pathophysiology	3	45
ENC402	College Writing	3	45
MAC310	Statistics	3	45
PSY401	Abnormal Psychology	3	45
COM301	Microcomputer Applications	3	45
CNT2200	Network and Security Foundations	3	60
CNS3000	Information Technology Instructure, Development And Operations	3	60
CNS3100	Ethics in Technology	3	60
PMG3200	Methods Improvement and Change Management	3	60
PMG3300	Purchasing and Sourcing Management	3	60
PMG3400	Project Performance, Quality Management and Assurance	3	60
PMG4000	Project Management and Scheduling	3	60
PMG4100	Customer Relationship Management, Negotiation And Competitive Decision Making	3	60
CNS4200	Web Development Foundations and Applications	3	60
PMG4300	Project Cost, Risk, and Liability Analysis	3	60
PMG4400	Managing Projects Under Uncertainty	3	60
ITM4500	Information Technology Capstone Project	3	60
ITM5200	Technical Communications	3	60
PMG5500	Project and Process Communications Management and Leadership	3	60
PMG5600	Emerging Trends in Project Management and Consulting	3	60
Total		**60**	**1125**

Course Descriptions

BSC301 Pathophysiology 3 Credits 45 Clock Hours
In an online delivery, this course provides a study of variations in physiologic functioning and alterations in physiologic response of body systems. The course addresses physiologic changes that will help identify alterations in body systems and their relationship to the patient's state of health. Topics include altered cell functioning, genetic disorders, risk factors, and health promotion and disease prevention.
Prerequisites: None

ENC402 College Writing 3 Credits 45 Clock Hours
In an online delivery, this course equips developing writers with the critical thinking skills they need to interpret and analyze information and express their ideas clearly and logically in writing.
Prerequisites: None

MAC310 Statistics 3 Credits 45 Clock Hours
In an online delivery, this course provides the essentials of statistics with new and interesting data sets, examples, and exercises in statistics. The course fosters personal growth of students through critical thinking, use of technology, collaborative work, and development of communication skills. The course incorporates the latest and best methods used by professional statisticians.
Prerequisites: None

PSY401 Abnormal Psychology 3 Credits 45 Clock Hours
In an online delivery, this course offers students a researched, engaging, and up-to-date explanation of psychopathology, creating a learning experience that provokes thought and increases awareness. This course reflects the ever-changing field of abnormal psychology.
Prerequisites: None

COM301 Microcomputers Applications 3 Credits 45 Clock Hours
This course prepares students to utilize Windows-based applications within the Windows environment. Through a hands-on approach, students will achieve advanced application knowledge of Windows, word processing, presentation software, and spreadsheets.
Prerequisites: None

CNT2200 Network and Security Foundations 3 Credits 60 Clock Hours
This course introduces students to the components of a computer network and the concept and role of communication protocols. The course covers widely used categorical classifications of networks (e.g., LAN, MAN, WAN, WLAN, PAN, SAN, CAN, and VPN) as well as network topologies, physical devices, and layered abstraction. The course also introduces students to basic concepts of security, covering vulnerabilities of networks and

mitigation techniques, security of physical media, and security policies and procedures.
Prerequisites: None

CNS 3000 Information Technology Infrastructure, Development, and Operations
3 Credits 60 Clock Hours
This course examines Information Technology Infrastructure Library (ITIL®) terminology, structure, policies, and concepts. Focusing on the management of information technology (IT) infrastructure, development, and operations, students will explore the core principles of ITIL practices for service management to prepare them for careers as IT professionals, business managers, and business process owners.
Prerequisites: None

CNS 3100 Ethics in Technology 3 Credits 60 Clock Hours
This course examines the ethical considerations of technology in each of four categories: privacy, accuracy, property, and access. The course presents a range of technologies and issues that challenge technologists in the field of information ethics. Students are introduced to a decision-making process as informed by ethical frameworks that outline key ethical considerations within the technologies presented. Students will study specific cases to help inform their professional responsibilities in how to navigate the important controversies in topics such as surveillance, social media, hacking, data manipulation, plagiarism and piracy, artificial intelligence, responsible innovation, and the digital divide.
Prerequisites: None

PMG 3200 Methods Improvement and Change Management
3 Credits 60 Clock Hours
This course reviews and analyzes productive and non-productive work elements for the purpose of productivity improvements and establishing time standards. Organizations cannot remain static in today's ever-changing business environments. To do so would result in business failure. Projects and project managers aim to address this concern. With the understanding that projects are change endeavors, project managers are change agents and are looked to for leadership in times of business transition. With focus on diagnosing the root causes and need for organizational change, the personal psychology of change, and why change efforts commonly fail, this course enables the student to be an effective contributor and change agent in a constantly changing organization. To accomplish this aim, various organizational change management and business transition theories, concepts, techniques, and interventions are explored. Each student will define differing change management approaches most effectively applied in varying organizational situations and will create a business transition and change management strategy along with an integrated project plan and schedule that addresses the need for change and its interdependencies in complex business systems of today.
Prerequisites: None

PMG 3300 Purchasing and Sourcing Management 3 Credits 60 Clock Hours
This course covers the tools, techniques and approaches used for managing the

procurement and sourcing processes. Topics such as cost analysis, price analysis, negotiations, contract management will be discussed using lectures, industry experts and case studies.
Prerequisites: None

PMG 3400 Project Performance, Quality Management and Assurance
3 Credits 60 Clock Hours
This course focuses on providing the student with tools and techniques to ensure that a project achieves the desired level of quality outcome. Students will learn about quality, who defines it and how it is defined, and tools and techniques such as quality plans, control charts, peer review, check lists, and process mapping. The student will have an opportunity to practice managing a process improvement project where they define baseline measures, identify key performance indicators, and use tools like process mapping to improve an everyday activity.
Prerequisites: None

PMG 4000 Project Management and Scheduling 3 Credits 60 Clock Hours
This course is intended to teach the students an introduction to project management and project software and how to apply each phase of a PM methodology, with solid documentation processes. The topics include reviewing project management careers, explaining the PM role, discussing basic terminology, creating a business case for a project, demonstrating how to complete each activity required to define, plan, execute and close a project, documentation process and a deep understanding of how to track a project in an electronic software package.
Prerequisites: None

PMG 4100 Customer Relationship Management, Negotiation, and Competitive Decision Making 3 Credits 60 Clock Hours
This course will help you understand the basic concepts of customer relationship management and how they manifest themselves into business strategy. It will also explore concepts and skills of complex negotiations in greater depth while concentrating on refining managerial decision making to achieve better results in a variety of competitive environments. The primary focus of this course is to provide vital tools for formulating a productive, effective approach to negotiation and deal-making with a focus on procurement. Students will learn to use analytical decision-making approaches to craft both competitive and cooperative business strategies, develop interpersonal effectiveness at the table, and engineer agreements to create value.
Prerequisites: None

CNS 4200 Web Development Foundations and Applications
3 Credits 60 Clock Hours
This course introduces students to web design and development by presenting them with HTML5 and Cascading Style Sheets (CSS), the foundational languages of the web, by reviewing media strategies and by using tools and techniques commonly employed in web

development. This course also builds upon a student's manual coding skills by teaching how to develop web documents and pages using the web development trifecta: Hypertext Markup Language version 5 (HTML5), Cascading Style Sheets version 3 (CSS3), and JavaScript. Students will utilize the skills learned in this course to create web documents and pages that easily adapt to display on both traditional and mobile devices. In addition, students will learn techniques for code validation and testing, form creation, inline form field validation, and mobile design for browsers and apps, including Responsive Web Design (RWD).
Prerequisites: None

PMG 4300 Project Cost, Risk, and Liability Analysis 3 Credits 60 Clock Hours
This course will analyze cost behavior and to develop and interpret financial information at the process, project, and organization levels for purposes of management decision making. This course will focus on the analysis of project risks, liabilities and constraints and how to overcome. It will assess the influences of different cultural constraints on a project and how to mitigate the risk of culture impeding a project's success.
Prerequisites: None

PMG 4400 Managing Projects Under Uncertainty 3 Credits 60 Clock Hours
This course focuses on decision-making in project management and introduces different methods for leveraging modeling and analytical skills to address uncertainty. Many project aspects can contribute to the area of uncertainty and project managers need tools to proactively identify, clarify, and act to reduce uncertainty. Key topics include application of root cause analysis, problem framing, and agile project techniques and analytical simulation and optimization techniques to minimize uncertainty using tools such as linear programming, probability analysis, Monte Carlo simulation, and decision trees. Gaining knowledge in these areas can facilitate decision-making to reduce project uncertainty.
Prerequisites: None

ITM 4500 Information Technology Capstone 3 Credits 60 Clock Hours
The capstone project consists of a technical work proposal, the proposal's implementation, and a post implementation report that describes the graduate's experience in developing and implementing the capstone project. The capstone project should be presented and approved by the faculty in relation to the student's technical emphasis.
Prerequisites: None

ITM 5200 Technical Communications 3 Credits 60 Clock Hours
This course covers basic elements of technical communication, including professional written communication proficiency; the ability to strategize approaches for different audiences; and technical style, grammar, and syntax proficiency.
Prerequisites: None

PMG 5500 Project and Process Communications Management and Leadership

3 Credits 60 Clock Hours

This course introduces communication strategies and proven techniques especially valuable in addressing stakeholder management. Students will also learn how to plan communication and identify all organizational stakeholders, analyze, and assess stakeholder objectives, and then develop a stakeholder management plan that satisfies the needs while managing competing objectives across the organization. The aim is to improve communication planning, stakeholder management, and evaluate the sources of organizational politics and power struggles, and the resulting impact on a program or project. The skills developed will help increase clarity, relevance, and precision in communication to better interact among a diverse workforce and set of stakeholders. Importantly, students learn how communication can facilitate decision-making processes; manage negotiations between competing stakeholder objectives, and keep alignment between project outcomes and business goals. This course focuses on the development of project leadership with emphasis on advancing your own personal leadership style, learning how to assemble and build a team, managing performance, basic human resource functions and problem solving, negotiation, emotional intelligence, communication, coaching, entrepreneurship, and resource planning. Case studies, class discussion, written assignments, and oral presentations are utilized in instructional delivery.
Prerequisites: None

PMG 5600 Emerging Trends in Project Management and Consulting

3 Credits 60 Clock Hours

This course explores emerging trends in project management and consulting, including how organizations utilize a well-planned Enterprise Project Management Office report to exceed goals and objectives through various global trends in project management. It also covers an overview of best strategies and operational processes for developing a project management consulting business.
Prerequisites: None

BACHELOR OF SCIENCE DEGREE IN HEALTH INFORMATION MANAGEMENT PROGRAM

120 Semester Credits
1950 Clock Hours
135 weeks
Type of Instructional Delivery: 100% Distant Education

Program Description

The Health Information Management Program prepares students to enter a vast arena of health care activities responsible for providing data to address population health, record integrity, and data management. The Health Information Management Program provides students with the opportunity to obtain the knowledge and skills needed to ensure that: Medical records are accessible to patients, physicians, and other ancillary teams, Accurate billing and coding is completed based on physician documentation, Information sharing occurs to promote continuity of care, Critical and analytical skills are developed that support the decision-making process, Utilize health care applications and systems to complete daily tasks and improve the quality and performance within HIM, Support healthcare data analysis and management using applicable systems. At the completion of the program the student will eligible to take the following credentialing exams. Registered Health Information Administrator (RHIA), Certified Coding Specialist, and Certified Coding Associate.

Program Objective

The objective of the Health Information Management program prepares graduates with the ability to achieve the skills necessary to perform the activities addressed in CAHIIM Domain/Competencies and bridge theoretical components of the student learning experience to the practical components of HIM by doing the following:

Develop and demonstrate the ability to respond to the changing informational needs of the patient, the providers of health care, researchers and educators.

Develop and demonstrate awareness of the technologies and equipment affecting information storage and retrieval and to develop the ability to utilize these resources appropriately.

Function as a member of the health team by development and acceptance of his/her responsibilities in the total health care of the patient.

Develop and demonstrate the ability to communicate with ease in a group setting in both the leadership and supportive roles and to communicate effectively in written form.

Develop and demonstrate an understanding of the history and evolution of health information management with particular emphasis on current and future developments in the profession.

Develop and demonstrate an understanding of the current scope and responsibilities of health information management and its relationship to other professions.

Develop an awareness of the need for continued professional education and growth.

Develop an interest in the promotion of health information management as a career and in the encouragement of potential candidates toward this goal.

PROGRAM OUTLINE

Course Number	Course Title Clock	Credits	Hours
HUM1101	Humanities I	3	45
BSC1085	Anatomy & Physiology I	3	45
BSC1085L	Anatomy & Physiology I Lab	1	30
BSC1086	Anatomy & Physiology II	3	45
BSC1086L	Anatomy & Physiology II Lab	1	30
MEA1239	Medical Terminology	2	30
ENC1101	English Composition	3	45
MAC1105	College Algebra	3	45
PSY1012	Introduction to Psychology	3	45
SPC1016	Fundamentals of Speech	3	45
HUM101	Humanities I	3	45
CTS1050	Introduction to Computers	3	45
ENC1201	English Composition II	3	45
SOC1101	Introduction to Sociology	3	45
HIS1101	History I	3	45
ACC201	Accounting	3	45
PHA322	Pharmacology	4	60
HIS1201	History II	3	45
GOV2101	American Government	3	45
BSC401	Pathophysiology	4	60
HIM301	Introduction to Health Information Management	3	45
HIM302	Principles of Healthcare Management	3	45
HIM303	Legal & Ethical Aspects of Health Information Management	3	45
HIM304	CPT and HCPCS Coding	4	60
HIM311	Healthcare Records Data Management	4	75
HIM312	Electronic Health Records in Health Care		

	Today	4	75
HIM313	Project Management for HIM Professionals	3	45
HIM314	Healthcare Finance	3	45
HIM401	Health Information Management Organizational Leadership	3	45
HIM402	Principles of Healthcare Compliance	3	45
HIM403	Coding and Classification Systems I	4	75
HIM404	Healthcare Research and Data Analysis	3	45
HIM405	Data Governance for the HIM Profession	3	45
HIM411	Quality Performance Improvement Concepts	3	45
HIM412	Human Resources in Health Information Management	3	45
HIM413	Coding and Classification Systems I	4	75
HIM414	Revenue Cycle Management for the HIM Professional	3	45
HIM422	HIM Seminar (Quality, CDI, Population Health)	2	30
HIM421	Practicum	6	135
Total		**120**	**1950**

Course Descriptions

MEA 1239 - Medical Terminology **2 credits 30 clock hours**

This course will provide students with instruction in how to decipher useful medical terminology into everyday language. Students analyze and learn prefixes and suffixes, spelling use and correct pronunciation. Medical abbreviations and symbols are included.
Prerequisites: None

BSC 1085 - Anatomy & Physiology I **3 credits 45 clock hours**

This course will offer students the opportunity to learn about the structure and function of the human body. The concepts of cells, tissues, organs and systems are presented to form the framework for a comprehensive study of anatomic structures and basic functions of each body system. In addition, the concepts of biochemistry will be discussed. Also provided will be the concepts of structural anatomy as students analyze the complex functions of each system.
Prerequisites: None

BSC 1085L - Anatomy & Physiology I Lab **1 credit 30 clock hours**

Students in this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will

focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system.
Prerequisites: None

BSC 1086 - Anatomy & Physiology II **3 credits 45 clock hours**
This course is a continuation of BSC 1085 lecture. Students will continue to will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved.
Prerequisites: BSC 1085

BSC 1086L- Anatomy & Physiology II Lab **1 credit 30 clock hours**
Students will explore the structure and function of tissues and organs in a laboratory setting. This will include visiting the office of the Medical Examiner, Video web cast of dissections and autopsies. *Prerequisites: BSC 1085*

HUM1101 – Humanities I **3 Credits 45 Clock Hours**
This course offers an interdisciplinary approach to the humanities. Students study major works in art, music, literature, and philosophy with historical framework.
Prerequisites: None

ENC 1101 - English Composition **3 Credits 45 clock hours**
Students will learn grammar, punctuation and usage skills that are useful in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course.
Prerequisites: None

MAC 1105 - College Algebra **3 Credits 45 clock hours**
Students in this course will explore college algebra through a detailed examination of practical applications. Students will calculate algebraic problems with linear equations, exponents, polynomials, factors, and rational expressions. Student will solve problems using graphs, slopes, inequalities, linear equations, roots, radicals and quadratic equations.
Prerequisites: None

PSY 1012 - Introduction to Psychology **3 Credits 45 clock hours**
In this course, students learn basic principles of human behavior. Challenges, responsibilities, problems and satisfactions of being a health care provider are discussed. Theories of human behavior and personality development are included.
Prerequisites: None

SPC 1016 - Fundamentals of Speech **3 Credits 45 clock hours**
Students will learn the foundations of communications including public presentations and interviewing skills
Prerequisites: None

HUM1101 – Humanities I **3 Credits 45 Clock Hours**
This course offers an interdisciplinary approach to the humanities. Students study major works in art, music, literature, and philosophy with historical framework.
Prerequisites: None

CTS1050 – Introduction to Computers **3 Credits 45 Clock Hours**
Students will learn the basic operation of Microsoft Word, Excel, and PowerPoint. Student will learn proper techniques for business letter writing and resume writing.
Prerequisites: None

ENC1201 – English Composition II **3 Credits 45 Clock Hours**
This course is an expository writing course that helps students develop more advanced writing skills than English Composition I. The course also reviews and incorporates some of the same skills. ... A major component of this course will be an emphasis on the research process and information literacy.
Prerequisites: None

SOC1101 – Introduction to Sociology **3 Credits 45 Clock Hours**
This course is designed to introduce you to a range of basic sociological principles so that you can develop your own sociological imagination. You will learn about the origins of sociology as a discipline and be introduced to major sociological theories and methods of research. You will also explore such topics as sex and gender, deviance, and racism.
Prerequisites: None

HIS1101 – History I **3 Credits 45 Clock Hours**
Survey of the major developments in American history from the Columbian voyages to the Era of Reconstruction. Includes Colonial America, the Formative Years - 1776-1815, the Early National Period - 1815-1850, and the coming of the Civil War and its aftermath. Also includes the social, intellectual, and political aspects of early American life.
Prerequisites: None

ACC201 – Accounting **3 Credits 45 Clock Hours**
A study of analyzing, classifying, and recording business transactions in both manual and computerized environments. Emphasis is placed on understanding the complete accounting cycle and preparing financial statements, bank reconciliations, and payroll. The student will define accounting terminology; analyze and record business transactions in a manual and computerized environment; complete the accounting cycle, prepare financial statements; and apply accounting concepts related to cash and payroll.
Prerequisites: None

PHA322 – Pharmacology **4 Credits 60 Clock Hours**

This course is a basic study of medications and their safe administration to patients. Aspects of drug administration included are basic pharmacology terminology; dosage calculations; and basic drug classifications, their therapeutic use, common adverse effects, and precautions related to administration.

Prerequisites: None

HIS1201 – History II **3 Credits 45 Clock Hours**

Survey of the major developments in American history from era of Reconstruction to the present. Includes the era of Reconstruction, the emergence of modern America, the Early 20th Century, and America as a world power. Also includes the social, intellectual, and political aspects of contemporary American life.

Prerequisites: None

GOV2101 – American Government **3 Credits 45 Clock Hours**

This course is designed to introduce students to the rich complexity of politics in the American political system. It involves analysis of current political institutions and their development within the cultural setting, as well as applications and problems of citizenship in the United States. In order to appreciate government and politics we will explore some of the major concepts, perspectives, policies and arguments within the sub-field of American Politics. You will also be encouraged to critically think about and discuss political issues

Prerequisites: None

BSC401 – Pathophysiology **4 Credits 60 Clock Hours**

This course provides an in-depth study of human pathological processes and their effects on homeostasis. Emphasis is on interrelationships among organ systems in deviations from homeostasis. Upon completion, students should be able to demonstrate a detailed knowledge of pathophysiology. Course topics include the etiology, physical signs and symptoms, prognosis, and complications of commonly occurring diseases and their management.

Prerequisites: None

HIM301 - Introduction to Health Information Management **3 Credits 45 Clock Hours**

This course introduces the health information management profession and departmental functions related to filing and numbering methods, records management, retention and storage, and forms design. It covers the basic functions, content, and structure of the healthcare record as well as paper and electronic medical record systems and management. Various aspects related to health record documentation guidelines and standards are explored as well as the influence of accreditation and regulatory bodies. Health information processes and relationships among organizational departments and healthcare providers are also addressed.

Prerequisites: None

HIM302 - Principles of Healthcare Management 3 Credits 45 Clock Hours
The course presents the principles, techniques, and concepts needed for managerial analysis and decision-making in a health care setting. It highlights the effective management of planning, organizing, influencing, and controlling related to the internal and external environment and issues of ethics and social responsibility.
Prerequisites: None

HIM303 - Legal & Ethical Aspects of Health Information Management
3 Credits 45 Clock Hours
The course presents the principles, techniques, and concepts needed for managerial analysis and decision-making in a health care setting. It highlights the effective management of planning, organizing, influencing, and controlling related to the internal and external environment and issues of ethics and social responsibility.
Prerequisites: None

HIM304 - CPT and HCPCS Coding 3 Credits 60 Clock Hours
This course will expand on the clinical classification systems using Current Procedural Terminology (CPT) coding principles. Assignments and practical examples of patient records will provide practice in coding and sequencing of CPT codes. Exercises allow students to apply guidelines for Evaluation and Management (E/M) coding, modifier assignment, and the use of the Healthcare Common Procedure Coding System (HCPCS). The applications of coding principles are also explored using software tools.
Prerequisites: None

HIM311 - Healthcare Records Data Management 4 Credits 75 Clock Hours
This course focuses on the methods to collect, access, and retrieve and retaining health data and patient medical records. Topics include, but are not limited to the master patient index, record identification, and filing systems.
Prerequisites: ENC1101, CTS1050

HIM312 - Electronic Health Records in Health Care Toda 4 Credits 75 Clock Hours
The course presents the principles, techniques, and concepts needed for managerial analysis and decision-making in a health care setting. It highlights the effective management of planning, organizing, influencing, and controlling related to the internal and external environment and issues of ethics and social responsibility.
Prerequisites: ENC1101, CTS1050

HIM313 - Project Management for HIM Professionals 3 Credits 45 Clock Hours
This course provides a systematic and thorough introduction to all aspects of project management. Projects are an increasingly important aspect of modern business. Therefore, the course underlines the importance of understanding the relation between projects and the strategic goals of the organization. The course also discusses the technical, cultural, and interpersonal skills necessary to successfully manage projects from start to

finish. It emphasizes that project management is a professional discipline with its own tools, body of knowledge, and skills. Concepts are reinforced by case studies covering a wide variety of project types and industries.
Prerequisites: ENC1101

HIM314 - Healthcare Finance 3 Credits 45 Clock Hours
This web-based course is to prepare healthcare professionals for the responsibilities in maintaining a well -managed healthcare department/healthcare organization. This course provides a detailed understanding of health care financial management for decision - making. The course blends accounting and finance concepts to enhance the healthcare professional's decision - making skills. Topics covered include types of budgets; financial statements commonly used in healthcare environments; staffing; inventory and depreciation concepts; cost classifications; and trend analysis. The course will enhance the student's decision - making skills by utilizing case studies and practical applications to real world situations.
Prerequisites: ENC1101, ACC201

HIM401 - Health Information Management Organizational Leadership 3 Credits 45 Clock Hours
This course provides an analysis of the health information management professional's role within the healthcare environment. In addition, the course addresses the application of current principles, concepts, and models used for strategic planning and forecasting, leadership, motivation, diversity and inclusion, and change management.
Prerequisites: ENC1101

HIM402 - Principles of Healthcare Compliance 3 Credits 45 Clock Hours
This course focuses on compliance and regulatory trends that impact decisions made within health information management. Topics include, but are not limited to, HIPAA, fraud and abuse, coding auditing and compliance, and clinical documentation improvement practices.
Prerequisites: ENC1101, HIM301, HIM302, HIM303, HIM311, HIM312, HIM313, HIM314

HIM403 - Coding and Classification Systems I 4 Credits 75 Clock Hours
This course will cover clinical vocabularies and classification systems, as well as the principles and guidelines for using ICD to code diagnoses. Students will gain an understanding of ICD as it is used in an inpatient setting and the severity of illness and case mix analysis systems. Assignments and practical examples of patient records will provide practice in coding and sequencing of diagnoses. The applications of coding principles are also explored using software tools.
Prerequisites: ENC101, CTS1050, HIM304, MEA1239, BSC401, PHA322

HIM404 - Healthcare Research and Data Analysis 3 Credits 45 Clock Hours
This course focuses on the compilation, the analysis, the presentation, and the maintenance of healthcare research and statistical techniques. Institutional Review Board

(IRB) processes, research protocol monitoring, and knowledge-based research techniques are reviewed. Emphasis is placed on the use of basic statistical principles, indices, databases, registries, vital statistics, descriptive statistical models, and the use of data analysis for decision-making.
Prerequisites: ENC1101, CTS1050, HIM301, HIM302, HIM303, HIM311, HIM312, HIM313, HIM314

HIM405 - Data Governance for the HIM Profession 3 Credits 45 Clock Hours
This course addresses the use of data in health information management. In addition, the course focuses on decision making strategies for using data within health information management.
Prerequisites: ENC1101

HIM411- Quality Performance Improvement Concepts 3 Credits 45 Clock Hours
This course provides an overview of the rules and regulations that govern quality improvement within healthcare. The course reviews the integration of quality improvement models and strategies that assist with implementing quality improvement, utilization management, and risk management initiatives.
Prerequisites: ENC1101, CTS1050, HIM301, HIM302, HIM303, HIM311, HIM312, HIM313, HIM314, HIM401, HIM402, HIM404, HIM405

HIM412 - Human Resources in Health Information Management
3 Credits 45 Clock Hours
This course examines the role of the health information management professional as a strategic partner in managing healthcare organizations. Management and leadership functions such as recruitment, selection, development, appraisal, retention, and compensation are addressed. Current issues such as diversity training and sexual harassment policies are analyzed within the course.
Prerequisites: ENC1101, CTS1050

HIM413 - Coding and Classification Systems II 4 Credits 75 Clock Hours
This course provides an advanced overview of ICD-10 coding principles and concepts. This course provides emphasizes the use of proper assignment of codes for diagnoses and procedures. In addition, use of coding encoder systems is provided.
Prerequisites: ENC101, CTS1050, HIM304, MEA1239, HIM403, BSC401, PHA322

HIM414 - Revenue Cycle Management for the HIM Professional
3 Credits 45 Clock Hours
An introduction to electronic patient billing in ambulatory settings using various insurance and reimbursement systems. Students prepare health insurance claim forms for various types of insurance plans and use this information as a practice management and outcomes assessment tool. Additional topics include billing and claims management issues.
Prerequisites: None

HIM422 - HIM Seminar (Quality, CDI, Population Health) 2 Credits 30 Clock Hours
This is a capstone course that allows students to focus on a HIM area (Quality, CDI, Revenue Cycle, Population Health). The course emphasizes the integration of the knowledge, skills, and abilities developed as part of the health information management program. Students will develop a resume and gain skills specific to their chosen concentration.
Prerequisites: ENC1101, CTS1050, HIM301, HIM302, HIM303, HIM311, HIM312, HIM313, HIM314, HIM401, HIM402, HIM404, HIM405

HIM421 – Practicum 6 Credits 135 Clock Hours
This course includes a comprehensive review of all courses addressed within the health information management program. Application of current principles, concepts, regulations, rules and guidelines are bridged into the practicum experience in a hospital or related organization.
Prerequisites: All courses in the degree plan

FINANCIAL ASSISTANCE

Financial Aid

Veterans Administration – All Locations

Cambridge believes that students and their families have the primary responsibility for educational costs. However, we realize that many families are unable to immediately fund the entire cost of education. To that end, Cambridge participates in Federal Title IV financial assistance programs to aid students who qualify in meeting the cost of attending school. Many Cambridge students supplement Title IV aid with other financial assistance programs such as employer reimbursement, veteran benefits, agency sponsorship, and other educational financing sources. A student can enlist the help of the financial aid department if assistance is needed to obtain supplemental aid. Cambridge College participates in the Federal Financial Aid (Title IV) Program which is available for those students who qualify.

Some of the frequently used financial aid programs are listed here and described below:

- Pell Grants
- Federal Work Study
- Direct Subsidized Stafford Loans
- Direct Unsubsidized Stafford Loans
- Direct PLUS loans for parents of qualified dependent students
- Florida Student Assistance Grant (FSAG)
- Florida Bright Futures Grant
- Workforce Investment Act (WIA)
- 529 Prepaid College Plans
- Veteran Benefits
- Scholarships

Financial Aid Eligibility Requirements

A complete list of student eligibility standards and conditions may be found in The Student Guide, as published by the following U.S. Department of Education Financial Aid website at www.studentaid.ed.gov. All students must apply for financial assistance by completing a Free Application for Federal Student Aid (FAFSA) at FAFSA.ed.gov and by submitting appropriate documentation to the institution and Financial Aid Department. The Financial Aid Department maintains adequate records to ensure proper administration of aid funds through use of the campus management software system. This includes ensuring that aid given is not in excess of need and or the cost of attendance, annual and aggregate limits, limited to enrollment status and satisfactory academic progress. When a student completes the FAFSA and submits any required documents, the Financial Aid Officer will send the student an estimated award letter. Selection of students to receive financial aid will be made without regard to age, sex, race, color, religion, sexual orientation, national origin, disability or marital status. Participation Requirements for the Federal Direct Loan Program

In order to participate in the Direct Loan or Direct PLUS Loan programs students must:

- Complete a Free Application for Federal Student Aid (FAFSA)
- Department of Education Financial Aid website at www.studentaid.ed.gov.
- Sign award letter
- Submit a Master Promissory Note (MPN)
- Complete Entrance Counseling at studentloans.gov
- For PLUS Loans, the parent borrower must complete application, credit check, and MPN at www.studentloans.gov.

In accordance with Title 38 US Code 3679 subsection (e), this school adopts the following additional provisions for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation & Employment (Ch. 31) benefits, while payment to the institution is pending from the VA. This school will not:

- Prevent the student's enrollment;
- Assess a late penalty fee to the student;
- Require the student to secure alternative or additional funding;
- Deny the student access to any resources that are available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

- Produce the VA Certificate of Eligibility (COE) by the first day of class;
- Provide a written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in institutional policies.

Veteran Scholarship Program

Cambridge offers a College/Institute Scholarship for all campuses except the Miami Gardens location which is available for veterans accepted to Cambridge College. This scholarship award is granted in the amount of $3,500 towards tuition in all programs. This scholarship may be used in conjunction with other funding sources. The Cambridge College Veteran Scholarship Program is not a cash scholarship directed to students, but a scholarship that pays down the cost of tuition for those who apply and are awarded this scholarship. There are a limited number of scholarships available annually. Determination of award is based on a first come first serve basis, contingent upon proving Veterans status and acceptance to Cambridge College.

Attendance Policy for Veterans

Excused absences will be granted for extenuating circumstances only. Excused absences will be substantiated by entries in student files. Early departures, class cut, tardiness, etc., for any portion of an hour will be counted as one clock-hour of absence. Students exceeding three days unexcused absences in a calendar month, will be terminated from their VA benefits for unsatisfactory attendance. Regardless, all excused absences MUST be made up within the course period. Students with absences will be given a final grade of “I” (Incomplete) and granted up to two weeks after the end of a course to make up hours missed for the course. If the student has not met this requirement within the specified time frame, the faculty in conjunction with the Registrar’s office will rescind the “I” and award a final grade of “F” for the course.

Veterans Attendance Record Maintenance

The student’s attendance record will be retained in the veteran’s file for USDVA and SAA audit purposes.

Mandatory Entrance and Exit Loan Counseling

All borrowers must participate in Entrance Counseling at www.studentloans.gov. All first time borrowers must complete an entrance counseling session on the Department of Education web site before any loan funds can be disbursed. All students who are nearing program completion, leave the Institution, or drop below half time and who have borrowed

(an) educational loan(s), are required to complete the exit loan counseling session on the Department of Education's web site, www.nslds.ed.gov.

Financial Aid Verification

The federal government has established an application review process called, Verification, to ensure that all data provided on the Federal Application for Student Aid (FAFSA) is correct and complete. All students are encouraged to use the IRS Data Retrieval Tool when originally completing the FAFSA. Students who fail to link with the IRS Data Retrieval Tool will be asked to return to the FAFSA.ed.gov website and link. If the student is unable to link to the IRS, the student is required to submit an IRS Tax Transcript as mandated by the Department of Education. Applicants must comply with the requests for documentation within specified times or applicants may lose financial aid eligibility.

Cost of Attendance

A school's cost of attendance figures can help in financial planning for your education by providing an estimate of what it costs to attend a specific school for a year. When awarding financial aid, schools must take this cost of attendance into account. Federal, state and institutional aid awarded to a student cannot exceed a school's cost of attendance. The official cost of attendance includes:

- Tuition and Fees
- Books and Supplies
- Room and Board
- Transportation
- Miscellaneous Expenses

Federal Direct Loans

The Federal Direct Loan Program provides low-interest student loans to postsecondary students (undergraduates and graduate students) and to their parents. The William D. Ford Federal Direct Loan Program is issued and managed by the U.S. Department of Education and is the only government-backed student loan program in the United States.

The loan must be used to pay for direct and/or indirect educational expenses. Subsidized loans are based on financial need while unsubsidized loans are not. Repayment begins six months after the student graduates, withdraws from school, or falls below half-time enrollment status.

Federal Direct Subsidized Loans

Direct Subsidized Loans are federal student loans available to undergrads that do not accrue interest while the student is in school or when loans are deferred after graduation. The government sets the interest rates on Direct Subsidized Loans, there is no minimum

credit score required to qualify, and rates are fixed. Repayment begins six months after the student graduates, withdraws from school, or falls below half-time enrollment status.

Federal Direct Unsubsidized Loans

Direct Unsubsidized Loans are federal student loans available to undergrads that do accrue interest while the student is in school or when loans are deferred after graduation. The government sets the interest rates on Direct Unsubsidized Loans. There is no minimum credit score required to qualify, and rates are fixed. Repayment begins six months after the student graduates, withdraws from school, or falls below half-time enrollment status.

Federal Direct Parent Loan for Undergraduate Students (PLUS)

The Federal Direct PLUS loan is available to parents of dependent undergraduate students. These loans are not based on financial need but when combined with other resources, cannot exceed the student's cost of attendance. A credit check is required and either or both parents may borrow through this program. Repayment begins within 60 days of final disbursement of the loan within a loan period.

Florida Bright Futures

The Florida Bright Futures Scholarship Program establishes three lottery-funded scholarships to reward Florida high school graduates for high academic achievement.

The Florida Bright Futures Scholarship Program is comprised of the following three awards:

* Florida Academic Scholars (FAS) award (including Academic Top Scholars (ATS) award
* Florida Medallion Scholars (FMS) award
* Florida Gold Seal Vocational Scholars (GSV) award

Crossroads Scholarship Program

The purpose of this scholarship is to identify students who are having financial hardship. Financial Hardship as defined by this scholarship is an applicant who is having or had a downturn in employment or income due to current economic factors. The right candidate will show a passion in helping patients in the healthcare setting, but find they do not have the resources to make this transition.

Crossroads Medical Assistant Program Career Source Scholarship

The purpose of this scholarship is to identify students who are having financial hardship and have been approved for a Career Source Voucher. Financial Hardship as defined by this scholarship is an applicant who is having or had a downturn in employment or income due to current economic factors.

Institutional Payment Plan

The purpose of the Institutional Payment Plan is to assist Associate Degree seeking students with cash balances that exceed $5,000.00 after all other financial assistance has been applied to their account.

Eligibility Requirements:

- Student must be enrolled in an Associate Degree program.
- Cash balance exceeds $5,000 after all other financial assistance applied to student account.
- Student must complete the Private Education Loan Applicant Self-Certification.
- Student must sign Retail Installment Contract and a copy of Driver's License or
- state issued ID must accompany contract.
- Student must complete Reference Form with four (4) valid references.

Policy:

- Student must make monthly payments in the minimum amount of $200 while enrolled in program and four months past graduation.
- Student must make monthly payments in the minimum amount of $400 beginning on the fifth month after graduation until balance is satisfied.
- Payments will not exceed 24 months past the date of graduation.
- If a student withdraws from a program a refund calculation will be completed and student will be billed for remaining balance.
- Account will be turned over to collections when it becomes 90 days past due and payment contract will be cancelled. Additionally, student will not have access to official transcripts or degree.

Disclosures:

- **Right to Cancel:** You have a right to cancel the transaction until midnight of the third business day following the date on the contract. You may cancel by email or by calling your campus Financial Aid office.

- **Rights of Consumer:** You have the right to accept the terms of this extension of credit anytime within 30 calendar days following the date of the contract. The terms of the contract will be available and will not change for 30 days except as permitted by law.

- **Federal Loan Alternatives:** You may qualify for Federal Student Loans. For additional information and interest rates contact your campus Financial Aid office.

Florida Schools – Effective August 1, 2019

In accordance with Title 38 US Code 3679 subsection (e), this school adopts the following additional provisions for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation & Employment (Ch. 31) benefits, while payment to the institution is pending from the VA. This school will not:

- Prevent the student's enrollment;

- Assess a late penalty fee to the student;

- Require the student to secure alternative or additional funding;

- Deny the student access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

- Produce the VA Certificate of Eligibility (COE) by the first day of class;

- Provide a written request to be certified;

- Provide additional information needed to properly certify the enrollment as described in other institutional policies.

WITHDRAWAL

Policies for Withdrawal

A student who wishes to withdraw from a program must follow the withdrawal procedures described below:

A student who wishes to officially withdraw from Cambridge College must notify the office of the Registrar via email, certified mail or in person. Students who wish to withdraw must complete the appropriate paperwork.

If a student in a credit hour program misses fourteen (14) consecutive days, or a student in a clock hour program misses five (5) consecutive class days, the student will be

automatically terminated from Cambridge College without any entitlement to appeal such termination to the Academic Affairs Committee.

Students attending only online classes: If a student does not submit any coursework for 14 consecutive calendar days, the student will be automatically terminated without the opportunity to appeal.

Official withdrawal from the course, no credit earned.

If a student's last date of attendance is at or less than the 20% point of attendance of a course, they will receive a grade of W. If a student's last date of attendance is after the 20% but before the 60% point of attendance of course, they will receive a grade of WF. If a student's last date of attendance is at or above the 60% point of attendance, they will receive a grade of an F.

Add/Drop

The add/drop period for all courses in the associate degree programs is one week from the start of the course.

Determined Date of Withdrawal

This policy applies to students that voluntarily withdraw or have been terminated by the college from his/her program. The official withdrawal date is the last date of attendance or the date of determination that the student has withdrawn from the program. The formula for the college's pro-rata tuition refund policy is based upon the length of time a student remains enrolled in a program. Refunds will not be granted for books, supplies, materials or kits. Withdrawal after attendance has begun, through 60% completion of the program will result in a Pro Rata refund computed on the number of hours completed to the total program hours. Withdrawal after completing more than 60% of the program will result in no refund. If a credit balance appears on the student's account as a result of the refund, this credit balance will be issued to the student within 14 days.

Please note that the above policy may result in a reduction in school charges that is less than the amount of Title IV financial aid that must be returned. Therefore, the student may have an outstanding balance due the School that is greater than that which was owed prior to withdrawal. Accordingly, Students who are considering withdrawal from school are strongly advised to see a financial aid advisor to become familiar with the financial consequences of withdrawal

Last Day of Attendance

The last day of attendance for refund computation purposes is the last date of activity or attendance by a student in a class. The determined date of withdrawal is the date the School made a determination that a student had withdrawn. Any remaining credit balance

due to a student will be refunded within 14 days of the date the withdrawal is processed. If a student is less than 18 years of age, notice of withdrawal may be given only by the purchaser, parent or guardian.

TUITION REFUND POLICY (Clock hour programs)

The last day of attendance for refund computation purposes is the last date of activity or attendance by a student in a class. This policy applies to students that voluntarily withdraw or have been terminated by the college from his/her program. The official withdrawal date is the last date of attendance or the date of determination that the student has withdrawn from the program. "The formula for the college's pro-rata tuition refund policy is based upon the length of time a student remains enrolled in a payment period, through 60% completion of the payment period. No tuition refund is due after 60% of the payment period is completed. Any non-Title IV refund will be issued to the student within 30 days.

Credit Hour Programs

REFUND POLICY

The last day of attendance for refund computation purposes is the last date of activity or attendance by a student in a class. Students withdrawing from the College must comply with the policies and procedures as defined in the catalog. Students will be responsible for all tuition & fees for each course they are presently attending in addition to any prior account balance. Cambridge College charges students tuition and fees by credits. All books, equipment, supplies one set of uniform and other miscellaneous items are included in tuition and non-refundable. A detailed schedule of fees and charges associated with the programs offered are included in the catalog.

Tuition retained is calculated as shown below:

Withdrawing at any time during the first week of the course (add/drop period) - 100% refund of tuition only.
Withdrawing at any time during the second week of the course - 75% refund of tuition only
Withdrawing at any time during the third week of the course - 50% refund of tuition only
Withdrawing at any time during the fourth week of the course - 25% refund of tuition only
Withdrawing at any time after the fourth week of the course - no refund of tuition

Wk1	0%
WK2	25%
WK3	50%
Wk4	75%
Wk 5	100%

A detailed schedule of fees and charges associated with the programs offered are included in the catalog addendum.

RETURN OF TITLE IV FUNDS POLICY

Federal Law specifies how the school must determine the amount of FSA program assistance that a student earns if the student withdraws. The law requires that, when withdrawing during a payment period or period of enrollment, the amount of Student Financial Aid program assistance is earned up to that point is determined by a specific formula. Cambridge College defines a payment period by a semester. If a student received (or the school received on the student's behalf) less assistance than the amount that is earned, the student may be able to receive those additional funds. If more assistance was received than was earned, the excess funds must be returned. This process must be completed within 45 days of the date of determination that a student has withdrawn and returns will be made according to Federal Guidelines. For all Florida campuses, the process must be completed within 30 days.

The amount of assistance that is earned is determined on a pro-rata basis. That is, if a student completed 30% of the payment period or period of enrollment, he/she earns 30% of the assistance originally scheduled to be received. Once a student completes more than 60% of the payment period or period of enrollment, all of the assistance is earned.

Please note that as of 7/01/2021 the Department of Education implemented new regulations, which created exemptions for Return to Title IV purposes for non-clock hour programs. Based on federal guidelines scenarios that fall under Return to Title IV exemptions are not required to have a Return to Title IV calculation done. All student withdrawals are reviewed with the new guidelines first to determine if they meet the exemption requirements.

If a student received excess funds that must be returned, the school must return a portion of the excess equal to the lesser of:

- The collegial charges multiplied by the unearned percentage of the funds,
- Or the entire amount of the excess funds.

CANCELLATION POLICY

- Cancellation must be made in writing within 3 business days of signing the enrollment agreement. In this case, all monies will be refunded and the application fee will be retained.
- If a student is not accepted to the school or does not meet admissions requirements, the student's enrollment will be cancelled and the application fee will be retained.
- If a student is unable to meet their tuition obligations prior to beginning the program, the student's enrollment will be cancelled and the application fee will be retained.

STANDARDS OF SATISFACTORY ACADEMIC PROGRESS (SAP)

According to federal regulations, students participating in the federal financial aid program at Cambridge College of Healthcare & Technology must meet our Standards of Satisfactory Academic Progress (SAP). The SAP calculation uses cumulative credit/hour totals.

Definition and Purpose of Satisfactory Academic Progress (SAP)

Satisfactory Academic Progress (SAP) is measured in both qualitative and quantitative components. SAP is defined as a method of determining student eligibility for assistance under a Title IV, HEA program, and applies reasonable standards for measuring whether an otherwise eligible student is maintaining satisfactory progress in his or her educational program.

There are three standards that are used to measure academic progress for financial aid purposes:

Standard 1 - Qualitative: Cumulative grade point average (GPA) is at or above 2.0 for all students.

Standard 2 - Quantitative (Pace of Progression): Cumulative completion rate is at or above 67%. Students must successfully complete at least 67% of their cumulative attempted credit/clock hours to stay on pace with the Maximum Time Frame requirements. Anytime a student withdraws, fails, and/or repeats a class, it is counted as attempted but not completed for this measurement. For example, if a student has attempted 24 cumulative credit hours, but only completed 12 cumulative credit hours, this equates to a 50% completion rate.

Standard 3 - Maximum Timeframe: Credits/clock hours completed and/or attempted does not exceed 150% of the credits/clock hours required to complete the program. Financial aid recipients are required to complete their program within 150% of the published length of the program as measured by the cumulative number of credit/clock hours the student is required to complete and expressed in calendar time (Note that a student in a clock hour program cannot receive aid for hours beyond those in the program; the maximum timeframe applies to the amount of calendar time the student takes to complete those hours.). Students become ineligible for Title IV aid in the current program of study when it becomes mathematically impossible to complete the program within 150 percent of the length of the program, even when the student has not yet reached 150 percent.

Course Incompletes (I), Withdrawals (W/WF) and Repetitions

Grades including Incomplete (I), Fail (F), and Withdrawn (W/WF) are defined as unsuccessful completion. Accordingly, these courses count as the applicable credits/hours attempted and count as zero credits/hours earned in the SAP calculation. The grade of "F" additionally counts as zero quality points when the qualitative SAP standard is assessed. Grades of I and W/WF are not counted when the qualitative SAP standard is assessed. Grades of I and W/WF do not carry any quality points. Students who have a grade of incomplete that results in an unsatisfactory standing, may have their SAP status recalculated when they subsequently complete the course requirements those grades are later reported. Students who achieve satisfactory standing as the result of a grade recalculation will be evaluated for reinstatement of financial aid so long as all other eligibility criteria are met. The grade earned in a repeated course will be substituted for the original grade, if higher, in computing the grade point average for SAP.

Transfer Credits

Transfer credits that count toward the student's current program are counted as both attempted and completed hours in the quantitative measures.

The SAP Review

A review of SAP requires that both the qualitative and quantitative measures be reviewed.

- We will count all credits/clock hours that appear on a student's transcript as cumulative hours attempted and/or completed.
- If a student is enrolled in a credit granting program, we will calculate all standards at the end of each term.
- If a student is enrolled in a clock hour program, we will calculate all standards at the time he/she successfully completes the required hours in a payment period.

Notification

Students are notified via email when they have not met SAP requirements. The student is then required to meet with the Registrar and Program Official to discuss requirements for meeting SAP.

SAP Violations

If a satisfactory progress check shows that a student does not have the required GPA or is not maintaining the required pace, the following actions will occur:

- First violation: Student to be placed on SAP Warning status until the next check. During this time, the student will be eligible for aid. If the student is meeting SAP standards at the next checkpoint, the student will return to good standing.

- Second consecutive violation: At this time, the student will be placed on SAP Termination and will not be eligible for aid unless they successfully appeal. If appeal is successful, student will be placed on SAP Probation status until the next checkpoint.

SAP Termination - Students whose eligibility has been terminated (because of failure to meet the standards of satisfactory progress) that do not appeal, will not be eligible to receive aid, but may maintain enrollment. Student will be required to pay for their own classes until they have earned the minimum required GPA and/or completion rate. Students will not be reimbursed for courses taken while ineligible for aid. Eligibility will be regained once a student is found to be meeting both the Quantitative and Qualitative SAP standards, but while not exceeding the Maximum Time Frame.

Students whose eligibility has been terminated (because of failure to meet the standards of satisfactory progress) may, in certain cases, appeal their suspension of eligibility. Circumstances that may be considered for this special review (appeal) include: illness of student and/or immediate family member (mother, father, sister, brother, spouse), death of immediate family member and relocation due to military duty or employment. If there are extenuating circumstances that caused the student to fail SAP, the student may file an appeal. A student whose appeal is approved will have financial aid eligibility reinstated on a Probationary basis for one payment period. The student may continue to receive financial aid during this Probationary Period but must meet the regular SAP standards or be making progress under an approved improvement plan by the end of the Probationary Period. By the end of that term/payment period, your academic credentials must meet SAP standards. Appeals are not retroactive.

Procedure for SAP Appeal

Appeals are to be submitted to the Registrar's office. The Registrar will provide the appeal to the Academic Affairs Committee for a final decision. In order to appeal the decision on this basis; the following procedures must be used:

1. Complete SAP Appeals Form.
2. Type an appeal letter, or print legibly. Make sure to include a detailed explanation of the circumstances that occurred.
3. Provide documentation from a third party to support the appeal.
4. Be sure that the circumstances referenced apply to the term/payment period for which the student is claiming mitigating circumstances.
5. Once your appeal has been reviewed the student will be notified of the result by email.

Change of Program

Satisfactory Academic Progress starts over when a student enrolls in a new program.

Grade Quality Points – Core Courses

A equivalent	**96 -100**	**4.0**
A- equivalent	**92 - 95**	**3.7**
B+ equivalent to	**89 - 91**	**3.3**
B equivalent	**85 - 88**	**3.0**
B- equivalent	**82 - 84**	**2.7**
C+ equivalent to	**78 - 81**	**2.3**
C equivalent	**75 - 77**	**2.0**
F equivalent	**74 and below**	**0.0**

P – Pass; Satisfactory completion of course work where no letter grade is given. It is equivalent to a grade of C or higher and carries no quality points.

IP – In Progress; required work in the course is in progress. The method and time for completion of the work must be agreed upon, in writing, by student and instructor. IP work not completed by the end of the agreed upon time period will automatically change to a grade of F. If a student does not complete the requirements by the scheduled end date of the course, the student may receive a grade of In Progress (IP).

Grade Quality Points – General Education Courses

The following course fall under General Education Courses:

Anatomy & Physiology I & II with Lab
English Composition
College Math
Introduction to Computers
Psychology/Introduction to Psychology
Speech/Fundamentals of Speech
Medical Terminology

Humanities I
General Physics

A equivalent	**90 -100**	**4.0**
B equivalent	**80 – 89.99**	**3.0**
C equivalent	**70 – 79.99**	**2.0**
F equivalent	**69.99 and below**	**0.0**

LEAVE OF ABSENCE

A student may be granted an approved Leave of Absence (LOA) under the circumstances listed below:

- Medical (including pregnancy)
- Family Care (including unexpected loss of childcare and medical care of family)
- Military Duty
- Jury Duty

In order to be eligible for a LOA, there must be a reasonable expectation that the student will be able to return to school within the maximum time allotted. The request must be submitted in writing with appropriate documentation and the Registrar or a designated official, must approve it. In addition, the student is recommended to have completed his/her most recent term and received academic grades (A-F) for that term. Students may request an additional LOA, for well-documented reasons, so long as combined they do not exceed a total of 180 days in a 12-month calendar period. There will be no additional tuition charges incurred due to a leave of absence, nor any charge for re-entry upon return from the leave of absence.

Students on a leave of absence may be required to complete additional financial documents, and failure to return from a leave of absence may affect a student's loan repayment obligations. A leave of absence may also affect the disbursements of student financial loans.

Requests for a leave of absence must be made prior to the start of the leave unless the student was physically unable to do so. Examples of documented exceptions to completing the request in advance are car accidents, hospitalization and unexpected emergencies.

**All leave of absence requests must be submitted with the following:

- A written statement explaining the reason for the leave of absence
- Documentation such as a doctors 'note, jury summons, notice of childcare loss, etc.
- However, if unforeseen circumstances prevent a student from providing a prior written request, the institution may grant the student's request for a leave of absence, if the institution documents its decision and collects the written request at a later date.

In order to request a Leave of Absence, please contact the campus Registrar for the appropriate form.

STUDENT SERVICES

Orientation of New Students -- Orientation is conducted prior to the beginning of each program. Members of the administration and education department familiarize students with Cambridge's academic policies and procedures. Participation in orientation is mandatory.

Academic Advising -- Cambridge College of Healthcare & Technology provides individual assistance and advisement to students with academic problems in particular subjects. Students are encouraged to schedule an appointment with their instructors to work on any specific problem they may be having in their program. All academic advisement is provided by instructors and program staff.

The staff and faculty on each campus are available to assist students in academic and career guidance. The Program Team is available to answer questions concerning the student's individual major, provides academic advising and may also provide referral services to external agencies as necessary.

Library -- Cambridge College of Healthcare & Technology Library provides current reference materials, journals, computers with internet access and virtual resources, as well as other supplemental learning resources for student use. A librarian is available on campus during specific hours. The library also uses LIRN an online Library Database system that the students can utilize 24/7 for their library needs.

Tutoring -- Instructors are available by appointment to students who feel they need additional assistance outside normal class hours. Tutoring assistance is available at no charge and we urge those who desire this service to take advantage of this assistance.

Students who experience difficulty in their coursework and have a need for academic support should first contact their instructor to determine an academic success plan. If further support is required, the instructor or the student should notify the Program Dean to arrange for tutoring.

School Uniform -- All programs include the cost of one uniform. Additional uniforms may be purchased at the Bursar's office for $30. Students are required to wear closed-toe shoes.

Individuals With Disabilities: Cambridge College is an Equal Opportunity Educational Institution that does not discriminate against individuals on the basis of physical or mental disability and is fully committed to providing reasonable accommodations, including appropriate auxiliary aids and services and academic adjustments, to qualified individuals with disabilities, unless providing such accommodations would result in an undue burden or fundamentally alter the nature of the relevant program, benefit, or service provided by Cambridge College.

To request an auxiliary aid or service or academic adjustment please contact the ADA/504 Coordinator, at the campus. Applicants for admission or current students requesting an auxiliary aid, service or academic adjustment will need to complete an Application for Auxiliary Aid. The Application and information about the accommodation process is available from the Campus ADA/504 Coordinator. This form will enable

Cambridge College of Healthcare & Technology to evaluate the student's needs and provide appropriate reasonable accommodations in a timely fashion. Cambridge College requests that applicants or students complete and submit all required forms and documentation at least four (4) weeks before the first day of classes, or as soon as practicable.

No applicant or student shall be prohibited from receiving auxiliary aids or services for failure to submit the required forms and documentation within the above requested timeframe. Disagreements regarding an appropriate auxiliary aid and alleged violations of this policy may be raised pursuant to Cambridge College of Healthcare & Technology's Grievance Procedures.

CAREER SERVICES

It is the policy of Cambridge College of Healthcare & Technology to provide job search assistance to all graduates in the field for which they are trained. Although Cambridge provides employment assistance, it cannot guarantee employment upon graduation.

Recognizing that career development is an ongoing process, the Career Services team strives to help students understand the importance of self-assessment, occupational exploration, decision making, goal setting, networking, the job search, and developing productive connections in the workplace. Career Services offers a collaborative link

between students, faculty, and prospective employers within the global employment community. Career Services fosters a welcoming, accessible environment where diversity is celebrated and the uniqueness of each individual is valued and respected.

The Career Services staff will assist students in their job searches.

Many students choose to work on a part-time basis during their training to help with their education costs. Additional services include assistance with job search planning, resume and cover letter review, interview preparation, decision making, job offer negotiations, and various other job search and career-related issues.

STUDENT RIGHTS AND RESPONSIBILITIES

All students have the right to know:

- The School's accrediting and licensing agencies
- The School's programs, facilities and faculty
- Curriculum Content
- The right to receive an Institutional Catalog
- The Program’s accrediting agencies
- The cost of attending Cambridge College
- The financial assistance available
- How to submit appeals under various school policies
- The School's method of determining satisfactory academic progress and how it affects the student's financial aid eligibility

All students have the following responsibilities:

- To maintain professional behavior and conduct at all times
- To review and consider all aspects of the School programs before enrolling
- To provide additional documentation, verification, correction, etc. as requested by the School or agency
- To read, understand and keep copies of all forms received
- To notify the School of a name or address change
- To understand the School's Institutional Policies

Retake Course Policy and Fees:

Each Course failed will have a Retake Fee assessed to the student's ledger card.

- The Retake Fee for Degree programs is the cost per credit for each specific program depending on the amount of credits for each course.
- The Retake Fee for Non-Degree programs will be $300.00 per course

- If a failed course is not offered to retake in the next semester the student will be dropped and re-entered at the appropriate time to retake the course.
- Retake fee is assessed when the student is scheduled and starts repeating the failed course.
- For the semester credit programs the repeat course can be counted in the credits attempted in the semester for one repeat only (i.e., the student has two attempts to pass a course).
- For clock hour programs the hours in the repeated course can only be counted for one repeat (i.e., the student has two attempts to pass a course)

Payment Policy -- Tuition and fees are due at the start of the program. The College reserves the right to remove any student from class that has not satisfied his or her financial obligations. Students are welcome to make payments on tuition and fee charges using checks, money orders, or credit cards. Cambridge offers institutional payment plans to students during their enrollment.

Period of Obligation -- The length of the program shall determine the period of financial obligation for all courses. An application fee of $50 is due on the day of enrollment. A predetermined initial payment is due on the first day of class in some programs. A student must pay his/her tuition payment according to an agreed upon financial schedule. A student that does not meet his/her financial schedule obligation may be withheld from attending class until all financial payments are current. Cambridge College reserves the right to change tuition and fees without notice. Students who are actively attending class will not be affected by any tuition changes. Cambridge College will withhold a student's diploma and official transcript until all academic and financial obligations are met. A student that fails or withdraws from his/her class, if re-instated, will be charged tuition and fees as stated in the current catalog. A student that drops from his/her class or is terminated from the school is obligated to pay for tuition and fees according to the refund policy.

STUDENT CONDUCT

Cambridge College expects students to conduct themselves at all times in a professional manner. The forms of misconduct below are considered to be in conflict with the educational objectives of Cambridge College. Students who engage in such misconduct may be subject to dismissal by Cambridge College. Examples of such behavior are outlined below, but are not limited to:

- Information to Cambridge and forgery, alteration or use of;
- Cambridge documents or identification with intent to defraud;
- Plagiarism is defined as:
    - Direct quotation or paraphrasing from published sources that are not properly acknowledged through a bibliography.
    - The use of other persons or services to prepare work that is submitted as one's own.
    - The use of previously submitted papers, written by other students.
    - Submission of the same or very similar papers by collaborating students.
- Intentional disruption or obstruction of teaching, research, administration, disciplinary proceedings, meetings or other Cambridge College activities;
- Physical or verbal abuse of any person within the Cambridge College organization. This also includes affiliate's property, clinical site, or functions sponsored or supervised by Cambridge College.
- Sexual Harassment (as defined in the catalog);
- Theft or damage to any property belonging to or occupied by Cambridge College and/or any damage to the property or damage to equipment of any affiliate of Cambridge College;
- Students will be charged for the repair or replacement of any equipment lost or damaged through negligence or willful misconduct. This includes damage to any part of a building or its immediate surroundings or educational equipment where activities of Cambridge College (as well as a campus or clinical site or an affiliate’s property) take place;
- Noncompliance with directions from employees, instructors, program deans, administrators, officers or management personnel of Cambridge College. This also includes medical or clinical facility supervisors acting in the performance of their respective duties; and

- Students in violation of the Student Conduct Policy may be suspended while the violation is reviewed by the Academic Affairs Committee. The Academic Affairs Committee decision is final, binding and conclusive.

CONSUMER INFORMATION

The Consumer Information is located on our website and can be found through the following links:

Consumer Reporting
https://www.cambridgehealth.edu/financial-aid/consumer-information/

Drug & Alcohol Prevention Program

https://www.cambridgehealth.edu/wp-content/uploads/2014/01/Drug-Alcohol-Prevention-Program1.pdf

Copyright Infringement

https://www.cambridgehealth.edu/wp-content/uploads/2014/01/copyright-infringement-policies-sanctions1.pdf

Annual Safety and Security Report – Title IX Page 8-14

https://www.cambridgehealth.edu/wp-content/uploads/2021/09/ASR-2021-CY-2020-REV-10.2021.pdf

https://www.cambridgehealth.edu/ferpa/

Hazing

StopHazing.org

The main purpose of StopHazing.org is to serve as a resource for accurate, up-to-date hazing information for students, parents, and educators. StopHazing.org now helps to educate over 30,000 visitors/month.

Cambridge College of Healthcare & Technology has an absolute prohibition on hazing. Hazing is defined as an action or situation created on or off campus which recklessly or intentionally harms, damages, or endangers the mental or physical health or safety of a student for the purposes of, including, but not limited to, initiation or admission into or affiliation with any organization operating within the College.

Hazing includes, but is not limited to:

- Pressuring or coercing a student into violating the institutions rules or local, state or federal law;
- Brutality of a physical nature, such as whipping, beating, branding, forced calisthenics, exposure to the elements;

- Forced/encouraged consumption of any food, liquor, drug, or other substance, or other forced/encouraged physical activity that could adversely affect the physical or mental health or safety of the student;
- Any activity that would subject the student to extreme mental stress, such as sleep deprivation;
- Forced/encouraged exclusion from social contact;
- Forced/encouraged conduct that could result in extreme embarrassment;
- Forced/encouraged activity that could adversely affect the mental health or dignity of the student;
- Any other activity which is inconsistent with the regulations and policies of the Institution.

It is not considered a defense to a charge of hazing that:

- The consent of the alleged victim had been obtained;
- The conduct of activity that resulted in the death or injury of a person was not part of an official organizational event or was not otherwise sanctioned or approved by the organization;
- The conduct or activity that resulted in death or injury of the person was not done as a condition of membership to an organization;
- The conduct or activity was not done to intentionally cause physical or emotional harm;

To report any such intent of the Colleges Anti-Hazing Policy: Contact the Campus Dean at your specific campus.

***Language**:* All classes are taught in English Only

See Catalog Addendum for:
Corporate Listing
Administrative Listing
Faculty Listing
Class Schedule
Holiday Breaks