

# Certificate of Completion Health Informatics

2022-2023

# **McLENNAN COMMUNITY COLLEGE**

# **Degree Description**

The Health Informatics certificate program provides students with the foundation needed to work with database systems, use programming tools, communicate effectively, and understand medical terminology and health information systems.

Graduates will gain the knowledge and skills necessary to take on additional health care IT-related responsibilities or branch into new careers related to the management of patient data within electronic health record systems. Opportunities exist within large health care organizations, physician practices and vendors.

Marketable Skills

- 1. Application of software: word processing, database, data analytics. 2. Presentation of data.
- 3. Reporting of patient safety and quality management

through electronic systems.

4. Comply with ethical standards of practice. 5. Evaluate the consequences of a breach of healthcare ethics.

Semester I	Hours
ITCC 1310 Cisco Disc 1: Network Home/Small Bus or ITNW 1354 Implementing and Support Servers	3 hours
ITSY 1342 Information Tech Security	3 hours
HITT 1205 Medical Terminology I	2 hours
HITT 1301 Health Data Content & Structure	3 hours
HITT 1353 Legal and Ethical Aspects of Health Information	3 hours
	14 hours

Semester II	Hours
BCIS 1305 Business Computer Applications	3 hours
HITT 1311 Health Information Systems	3 hours
HITT 2343 Quality Assessment and Performance Improvement	3 hours
ITSW 1307 Introduction to Database	3 hours
ITSC 1305 Introduction to PC Operating Systems	3 hours
	15 hours

Total hours: 29 hours

## **Course Descriptions**

### ITCC 1310 Cisco Disc 1: Network Home/Small Bus

This introductory course teaches students the skills needed to obtain entry-level home and small business network installer jobs as network technicians, computer technicians, cable installers, and help desk technicians. It provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in home and small business environments. Labs include PC installation, Internet connectivity, wireless connectivity, file and print sharing, and the installation of game consoles, scanners, and cameras. This is the first course in the four-course series preparing students for the CISCO Certified Network Administrator certification. Semester Hours 3 (2 lec/3 lab)

#### **ITNW 1354 Implementing and Support Servers**

Develops skills necessary to implement, administer, and troubleshoot information systems that incorporate servers in a networked computing environment using Microsoft Windows-based servers. Students will learn to configure peripherals and devices; set up servers for various client computers; configure directory replication; and manage licensing, user groups accounts, user profiles, system policies, and profiles. Students will also learn to administer remote servers and disk resources, create and share resources, implement permissions and security, implement fault-tolerance data storage measures and configure servers for interoperability with various network operating systems servers. Course will teach how to install and configure Remote Access Service (RAS), identify and monitor performance bottlenecks, and resolve configuration problems. Prerequisite: ITSC 1305. Semester Hours 3 (2 lec/2 lab)

#### **ITSY 1342 Information Tech Security**

Instruction in security for network computer hardware, software, virtualization, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. Topics may adapt to changes in industry practices. Students will learn to ensure the physical security of file servers and other network components using best practices; develop backup procedures to provide for data security; use network operating system features to implement network security; describe the nature of computer viruses, their methods of spreading, and means of protecting networks from viruses; use relevant tools to provide for network security; and use encryption techniques to protect network data. Semester Hours 3 (2 lec/2 lab)

## HITT 1205 Medical Terminology I

Introduces the study of medical terms through word origin and structure. Introduction to abbreviations and symbols, surgical and diagnostic procedures, and medical specialties. Semester Hours 2 (2 lec)

#### HITT 1301 Health Data Content & Structure

Introduces systems and processes for collecting, maintaining and disseminating primary and secondary health-related information, including content of health record, documentation requirements, registries, indices, licensing, regulatory agencies, forms and screens. Prerequisites: Admission to the Health Information Technology program or approval of the program director. Semester Hours 3 (2 lec/2 lab)

## HITT 1353 Legal and Ethical Aspects of Health Information

Presents concepts of privacy, security, confidentiality, ethics, health care legislation, and regulations related to the maintenance and use of health information. Offered only in fall semester. Semester Hours 3 (3 lec)

### **BCIS 1305 Business Computer Applications**

Introduces and develops foundational skills in applying essential and emerging business productivity information technology tools. The focus of this course is on business productivity software applications, including word processing, spreadsheets, databases, presentation graphics, data analytics, and business-oriented utilization of the internet. (BCIS 1305 is included in the Business Field of Study.) Semester Hours 3 (2 lec/2 lab)

#### **HITT 1311 Health Information Systems**

Introduces health IT standards, health-related data structures, software applications and enterprise architecture in health care and public health. Semester Hours 3 (2 lec/3 lab)

### HITT 2343 Quality Assessment and Performance Improvement

Presents a study of quality standards and methodologies in the health information management environment. Topics include licensing, accreditation, compilation and presentation of data in statistical formats, quality management and performance improvement functions, utilization management, risk management, and medical staff data quality issues. Approaches to assessing patient safety issues and implementation of quality management and reporting through electronic systems. Offered only in spring semester. Prerequisites: HITT 1301 with a grade of C or better. Semester Hours 3 (3 lec)

### ITSW 1307 Introduction to Database

Introduces relational and non-relational database theory and the practical applications of a contemporary databases. Topics may adapt to changes in industry practices. Semester Hours 3 (2 lec/2 lab)

### ITSC 1305 Introduction to PC Operating Systems

Introduction to personal computer operating systems, including installation, configuration, file management, memory and storage management, control of peripheral devices and use of utilities. Semester Hours 3 (2 lec/2 lab)