

Health Sciences Technology (HSCT)

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The Health Sciences Technology program at Cincinnati State offers a flexible curriculum designed to meet the changing needs of the healthcare field. Students are trained to perform multiple functions in more than one discipline, while working towards the completion of an Associate of Applied Science degree.

Students are required to meet with an advisor before deciding on their areas of study. To complete the associate's degree requirements, students combine certificate program coursework (chosen from the certificates listed) with core technical coursework in areas such as science, medical terminology, and professional standards, as well as courses in communication and other basic studies. Most graduates practice in the area of one of the completed certificates.

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All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 12 credit hours taken at Cincinnati State.

Semester 1		Lec	Lab	Credits
MCH 100	Healthcare Informatics	2	0	2
MCH 101	Medical Terminology 1	2	0	2
ENG 101	English Composition 1	3	0	3
PST 135	Disaster Preparedness for Healthcare Workers	2	0	2
XXX XXX Certificate				6
Electives 1				
Semester 2				
ENG 102	English Composition 2: Contemporary Issues	3	0	3
MCH 102	Medical Terminology 2	2	0	2
COMM 110	Public Speaking	3	0	3
MCH 138	Patient Care Skills	1	3	2
XXX XXX Certificate				5
Electives 2				
Semester 3				
EMS 100	CPR and First Aid for the Health Care Professional	1	0	1
PSY 110	Introduction to Psychology	3	0	3
BIO 151	Anatomy and Physiology 1	3	2	4
XXX XXX Certificate				5
Electives 3				
Semester 4				
MCH 114	Law and Ethics for Healthcare	2	0	2
MCH 116	Cultural Competency for Health and Public Safety Professions	3	0	3
BIO 152	Anatomy and Physiology 2	3	2	4
PSY 200	Abnormal Psychology	3	0	3
XXX XXX Certificate				5
Electives 4				
Total Credits:		36	7	60

Certificate Electives

Students must complete at least two of the following certificates and must earn a minimum of 20 credits in certificate courses that are not already required for the Health Sciences Technology degree:

Aquatic Group Fitness Instructor Certificate

HFT 128	Aquatic Group Fitness Instructor	4
Aquatic Personal Trainer Certificate		
HFT 160	Aquatic Personal Trainer	2
Coding Specialist Certificate		
BIO 240	Pathophysiology	3
HIM 100	Introduction to Health Information Management	4
HIM 115	Clinical Abstracting of Health Data	2
HIM 125	CPT Coding	3
HIM 205	International Classification of Diseases (ICD) Coding	4
HIM 210	Healthcare Reimbursement Methodologies	3
HIM 215	Advanced Medical Coding	4
Community Health Worker Certificate		
CHW 100	Community Health Worker Training	4
CHW 180	Community Health Worker Practicum	3
MCH 106	Health and Wellness Promotion	2
Electrocardiography (Basic) Certificate		
MCH 141	Electrocardiography 1	3
Electrocardiography (Advanced) - Arrhythmia Recognition Certificate		
MCH 142	Electrocardiography 2	4
Emergency Medical Technician Basic Certificate		
EMS 110	Emergency Medical Technician Theory and Practice	7
Emergency Medical Technician Paramedic Certificate		
EMS 211	Paramedic 1	12
EMS 212	Paramedic 2	12
EMS 213	Paramedic 3	12
Geriatric Activity Coordinator Certificate		
GAC 101	Activity Coordinator for Long Term Care 1	5
GAC 102	Activity Coordinator for Long Term Care 2	5
Group Fitness Instructor Certificate		
HFT 122	Group Fitness Instructor	4
Health and Fitness Special Populations Certificate		
HFT 164	Health and Fitness Training: Chronic Diseases and Conditions	3
HFT 168	Health and Fitness Training: Youth	3
HFT 172	Health and Fitness Training: Older Adults	3
HFT 176	Health and Fitness Training: Women's Health	3
Health Unit Coordinator Certificate		
MCH 110	Orientation to Health Records	3
MCH 120	Health Unit Coordinator Training	4
Medical Assistant Certificate		
BIO 117	Human Body in Health and Disease	3
MA 100	Clinical Procedures for Medical Assistants	4
MA 105	Administrative Procedures for Medical Assistants	4
MA 110	Medical Office Laboratory Procedures	5
MA 115	Pharmacology for Medical Assistants	3
MA 120	Medical Office Insurance Coding and Billing	2
MA 125	Externship and Seminar for Medical Assistants	4
MCH 104	Comprehensive Medical Terminology	3
PSY 225	Lifespan Development	3
Medication Aide Certificate		
MCH 134	Medication Aide Training	6
Nurse Aide Training Certificate		
MCH 130	Nurse Aide Training	5

Orthopedic Technician Certificate		
ORTH 100	Anatomy and Physiology and Radiology for the Orthopedic Technician	5
ORTH 180	Orthopedic Clinical Practice	3
Patient Care Assistant Certificate		
MCH 132	Patient Care Assistant Training	3
Personal Fitness Trainer Certificate		
HFT 151	Personal Fitness Trainer 1	4
HFT 152	Personal Fitness Trainer 2	4
HFT 156	Establishing a Personal Training Business	3
HFT 182	Personal Fitness Trainer Practicum	2
Pilates Mat Instructor Certificate		
HFT 116	Pilates Mat Instructor	2
HFT 180	Pilates Mat Practicum	2
Practical Nursing Certificate		
PN 110	Foundations of Practical Nursing	2
PN 121	Alterations in Health 1	6
PN 122	Alterations in Health 2	8
PN 180	Foundations of Practical Nursing Clinical	1
PN 181	Alterations in Health Clinical 1	2
PN 182	Alterations in Health Clinical 2	2
PN 185	Practical Nursing Role Transition	2
Resistance Training Certificate		
HFT 124	Resistance Training Instructor	4
Restorative Aide Certificate		
MCH 136	Restorative Aide Training	2

Other healthcare certificates may be used with the prior permission of the Health Sciences Technology Program Chair

Courses

MCH 100 Healthcare Informatics

2 Credits. 2 Lecture Hours. 0 Lab Hour.

A course on technology used in the healthcare delivery system and electronic health records (EHR) management. Topics include: hardware, software, user interfaces, telecommunications and networks, and health management information systems.

Prerequisites: IM 105 or 20 wpm keyboarding speed

MCH 101 Medical Terminology 1

2 Credits. 2 Lecture Hours. 0 Lab Hour.

A course on the basic structure of medical words and abbreviations. Topics include: prefixes, suffixes, word roots, combining forms, and singulars and plurals.

Prerequisites: AFL 085 or appropriate placement test score

MCH 102 Medical Terminology 2

2 Credits. 2 Lecture Hours. 0 Lab Hour.

A continuation of MCH 101. Topics include: defining, pronouncing, and spelling medical terms using prefixes, suffixes, roots, and combined forms.

Prerequisites: MCH 101 (minimum grade C)

MCH 104 Comprehensive Medical Terminology

3 Credits. 3 Lecture Hours. 0 Lab Hour.

A comprehensive study of medical terminology. Topics include: prefixes, suffixes, word roots, combining forms, singulars and plurals, and abbreviations associated with medical specialties.

Prerequisites: AFL 085 or appropriate placement test score

MCH 106 Health and Wellness Promotion

2 Credits. 2 Lecture Hours. 0 Lab Hour.

A course on promoting health and wellness issues to the public. Topics include: self-empowerment, stress reduction, physical fitness, healthy eating, addiction avoidance, identifying and reducing risk factors in disease, and alternative therapies.

Prerequisites: None

MCH 108 Professionalism in Healthcare

3 Credits. 3 Lecture Hours. 0 Lab Hour.

A course on professional standards applicable in healthcare settings. Topics include: communication skills, employability skills, healthcare teams, diversity, career planning, and professional development.

Prerequisites: AFL 080 or appropriate placement test score

MCH 110 Orientation to Health Records

3 Credits. 3 Lecture Hours. 0 Lab Hour.

A course on the content and format of health records. Topics include: standard forms, legal issues related to health records, maintaining health records, and filing and retrieving diagnostic reports.

Prerequisites: MCH 101 (minimum grade C), and IM 105 or appropriate keyboarding score

MCH 112 Issues in Health Economics

2 Credits. 2 Lecture Hours. 0 Lab Hour.

A course on current trends and concerns related to the economics of health care systems. Topics include: economic differences between medical care and other commodities.

Prerequisites: None

MCH 114 Law and Ethics for Healthcare

2 Credits. 2 Lecture Hours. 0 Lab Hour.

A course on fundamentals of medical jurisprudence and essentials of professional behavior in healthcare. Topics include: medical ethics, legal concerns in healthcare, and the healthcare provider's role as an agent of the physician.

Prerequisites: AFL 085 or appropriate placement test score

MCH 116 Cultural Competency for Health and Public Safety Professions

3 Credits. 3 Lecture Hours. 0 Lab Hour.

A course on the influences of race, culture, and ethnicity in shaping values, belief systems, and behaviors of Health and Public Safety professionals and patients/clients.

Prerequisites: ENG 101

MCH 118 Quality Improvement in Healthcare

2 Credits. 2 Lecture Hours. 0 Lab Hour.

A course on quality improvement in healthcare, focused on patient-centered care. Topics include: organizations responsible for healthcare accreditation and regulation, healthcare provider departments that address regulations, and trends affecting delivery of quality healthcare services.

Prerequisites: AFL 085 or appropriate placement test score

MCH 120 Health Unit Coordinator Training

4 Credits. 3 Lecture Hours. 2 Lab Hours.

A course on skills required for entry-level medical clerical workers. Topics include: patient charts, transcribing nursing treatment, using computer software, medication, respiratory and physical therapy orders, X-ray and MRI scan procedures, nuclear medicine, ultrasound, and endoscopy.

Prerequisites: MCH 101 or MCH 104 (minimum grade C for either)

MCH 130 Nurse Aide Training

5 Credits. 4 Lecture Hours. 2 Lab Hours.

A course on caring for the elderly in long-term care facilities. Topics include: communication skills, mental health and social service needs, resident rights, safety and emergency procedures, and restorative services. Students who complete the course successfully are qualified to take the Ohio Board of Health Competency Evaluation Test.

Prerequisites: None

MCH 132 Patient Care Assistant Training

3 Credits. 2 Lecture Hours. 2 Lab Hours.

A course that prepares students for employment in acute care facilities as nursing assistive personnel. Topics include: role definition/classification, communication, basic anatomy/physiology concepts with associated observations, overview of nutrition/diet therapy, introduction to common pathologies, and commonly delegated skills.

Prerequisites: AFL 085 or appropriate placement test score, and MCH 130, and on State Nurse Aide Registry or eligible for Registry

MCH 134 Medication Aide Training

6 Credits. 4 Lecture Hours. 4 Lab Hours.

A course that prepares students to distribute medications in long-term care and residential care facilities, through a minimum of 80 hours of lecture and laboratory practice and 40 hours of clinical experience.

Prerequisites: MCH 130, and on State Nurse Aide Registry or have one year of experience in a residential care setting

MCH 136 Restorative Aide Training

2 Credits. 1 Lecture Hour. 2 Lab Hours.

A course on rehabilitation services used to return individuals to optimal mobility and functioning following various conditions. Topics include: lifting, moving, and ambulation procedures; care of individuals with musculoskeletal, neurological, and integumentary conditions; and restorative approaches to meeting nutrition, hydration, and personal care needs.

Prerequisites: MCH 130, and on State Nurse Aide Registry or eligible for Registry

MCH 138 Patient Care Skills**2 Credits. 1 Lecture Hour. 3 Lab Hours.**

A course on fundamental health care concepts and skills for students planning a career in healthcare. Topics include: basic body mechanics, patient draping techniques, infection control techniques, oxygen therapy, and problem solving techniques.

Prerequisites: None

MCH 141 Electrocardiography 1**3 Credits. 2 Lecture Hours. 2 Lab Hours.**

A course on basic principles of electrocardiography. Topics include: the electrical conductive system of the heart, patient preparation, setting up the ECG machine, and recognizing and correcting distortion problems.

Prerequisites: BIO 100 or BIO 111 (minimum grade C for either)

MCH 142 Electrocardiography 2**4 Credits. 3 Lecture Hours. 2 Lab Hours.**

A continuation of MCH 141, including review of basic electrocardiography and 12 lead ECG interpretation. Topics include: cardiac electrophysiology, common dysrhythmia recognition, advanced cardiac dysrhythmias, chamber enlargement, pacemakers, myocardial ischemia, injury, infarct patterns, and effects of drugs and electrolytes on the ECG.

Prerequisites: MCH 141 (minimum grade C) or certification in EMT, Paramedic, or Nursing

MCH 198 First Year Special Topics in Multi-Competency Health Technology**1-9 Credits. 0 Lecture Hour. 0 Lab Hour.**

A course on selected topics related to Multi-Competency Health Technology, which gives students opportunities to study information not currently covered in other courses. Grades issued are A, B, C, D, or F.

Prerequisites: None

MCH 199 First Year Independent Project in Multi-Competency Health Technology**1-9 Credits. 0 Lecture Hour. 0 Lab Hour.**

A project related to Multi-Competency Health Technology that is completed by one or more students to meet specific educational goals. Projects must have prior approval and supervision by Multi-Competency Health Technology faculty. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: None

MCH 298 Second Year Special Topics in Multi-Competency Health Technology**1-9 Credits. 0 Lecture Hour. 0 Lab Hour.**

A course on selected topics related to Multi-Competency Health Technology, which gives students opportunities to study information not currently covered in other courses. Grades issued are A, B, C, D, or F.

Prerequisites: None

MCH 299 Second Year Independent Project in Multi-Competency Health Technology**1-9 Credits. 0 Lecture Hour. 0 Lab Hour.**

A project related to Multi-Competency Health Technology that is completed by one or more students to meet specific educational goals. Projects must have prior approval and supervision by Multi-Competency Health Technology faculty. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: Vary by section