

Health Sciences Technology (HSCT)

Health Sciences Technology (HSCT)

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 healthcare-related discipline, while working toward completion of an Associate of Applied Science degree.

Students must 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 as curriculum electives) with core technical coursework in areas such as science, medical terminology, and professional standards. Students also complete courses in communication and other foundation skill areas. Most program graduates are employed in a field related to one of their completed certificates.

For more information, please contact the Health and Public Safety Division at (513) 569-1670.

Health Sciences Technology (HSCT)

Semester 1		Lec	Lab	Credits
MCH 100	Healthcare Informatics (T)	2	0	2
MCH 101	Medical Terminology 1 (B)	2	0	2
ENG 101	English Composition 1 (G)	3	0	3
XXX XXX Certificate Electives 1 (T)		4	2	5
MAT 105	Quantitative Reasoning for the Sciences (G)	2	2	3
FYE 1XX First Year Experience Elective (B)		1	0	1
Semester 2				
MCH 102	Medical Terminology 2 (T)	2	0	2
COMM 110	Public Speaking (B)	3	0	3
MCH 138	Patient Care Skills (T)	1	3	2
ENG 10X English Composition Elective (G)		3	0	3
XXX XXX Certificate Electives 2 (T)		4	2	5
Semester 3				
EMS 100	CPR and First Aid for the Health Care Professional (B)	1	0	1
PSY 110	Introduction to Psychology (G)	3	0	3
BIO 151	Anatomy and Physiology 1 (G)	3	2	4
XXX XXX Certificate Electives 3 (T)		4	2	5
MCH 108	Professionalism in Healthcare (T)	3	0	3
Semester 4				
MCH 114	Law and Ethics for Healthcare (T)	2	0	2
MCH 116	Cultural Competency for Health and Public Safety Professions (T)	3	0	3
BIO 152	Anatomy and Physiology 2 (B)	3	2	4
XXX XXX Certificate Electives 4 (T)		4	2	5

PSY XXX Psychology Elective (B)	3	0	3
Total Credits:	56	17	64

Electives

First Year Experience Elective

FYE 100	College Survival Skills	1
FYE 105	College Success Strategies	2
FYE 110	Community College Experience	3

English Composition Elective

ENG 102	English Composition 2: Contemporary Issues	3
ENG 103	English Composition 2: Writing about Literature	3
ENG 104	English Composition 2: Technical Communication	3

Psychology Elective

PSY 200	Abnormal Psychology	3
PSY 210	Adolescent Development	3
PSY 225	Lifespan Development	3

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. Other healthcare certificates (not listed below) may be used with the prior permission of the Health Sciences Technology Program Chair.

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

Group Fitness Instructor Certificate

HFT 122	Group Fitness Instructor	4
---------	--------------------------	---

Health and Fitness Special Populations Certificate

HFT 164	Health and Fitness Across the Life Span I	3
HFT 168	Health and Fitness Across the Life Span II	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
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

Faculty

Program Chair/Advisor

Professor Daphne Robinson, BS, RHIT
daphne.robinson@cincinnatiastate.edu

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

Ohio Transfer Assurance Guide Approved

Ohio Career-Technical Assurance Guide Approved

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

Instructor Consent Required

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

Instructor Consent Required

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

Instructor Consent Required

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

Instructor Consent Required

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