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

To complete the associate's degree requirements, students combine certificate program coursework (chosen from the certificates listed in the curriculum) 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.

Students must meet with an advisor before deciding on their areas of study.

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.

To apply for this program at Cincinnati State, visit the Admissions (http://www.cincinnatistate.edu/academics/admission/) section of the College website.

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Semester 1		Lec	Lab	Credits
MCH 100	Healthcare Informatics (**T**)	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 (**G**)	2	2	3
FYE 1XX First Year Experience Elective (**B**)		1	0	1
MCH 10X Medical Terminology Elective (**T**)		3	0	3
Semester 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:		**55**	**17**	**63**

Electives

Medical Terminology Elective		
MCH 101 & MCH 102	Medical Terminology 1 and Medical Terminology 2	4
MCH 104	Comprehensive Medical Terminology	3
First Year Experience Elective		
FYE 100	College Success Strategies: Overview	1
FYE 105	College Success Strategies: Overview and Application	2
FYE 110	College Success Strategies: Practice and Application	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.

Coding Specialist Certificate

BIO 240	Pathophysiology	3
HIM 100	Introduction to Health Information Management	3
HIM 115	Clinical Abstracting of Health Data	1
HIM 130	International Classification of Diseases (ICD) Coding	4
HIM 135	Pharmacology for Health Information Management	1
HIM 210	Healthcare Reimbursement Methodologies	3
HIM 215	Advanced Medical Coding	4
HIM 225	Current Procedural Terminology (CPT) Coding	3

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 110	Emergency Medical Technician Theory and Practice	7
EMS 120	Paramedic Anatomy and Physiology	3
EMS 211	Paramedic 1	7
EMS 212	Paramedic 2	6
EMS 213	Paramedic 3	6
EMS 221	Paramedic 1 Lab	1
EMS 231	Paramedic 1 Practicum	2
EMS 222	Paramedic 2 Lab	1
EMS 232	Paramedic 2 Practicum	3
EMS 223	Paramedic 3 Lab	1
EMS 233	Paramedic 3 Practicum	3

Group Fitness Instructor Certificate

EXS 122	Group Fitness Instructor	4

Health and Fitness Special Populations Certificate

EXS 130	Foundations of Health and Wellness Programs	3
EXS 164	Health and Fitness Across the Life Span 1	3
EXS 168	Health and Fitness Across the Life Span 2	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 109	Administrative Procedures, Coding, and Billing for Medical Assisting	2
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

Nurse Aide Training Certificate

MCH 130	Nurse Aide Training	4

Patient Care Assistant Certificate

MCH 132	Patient Care Assistant Training	3

Personal Fitness Trainer Certificate

EXS 151	Principles of Exercise Assessment and Prescription	3
EXS 152	Exercise Programming	3
EXS 156	Establishing a Personal Training Business	3
EXS 182	Personal Fitness Trainer Practicum	2

Phlebotomy Cetificate

PBT 100	Phlebotomy Principles and Techniques	3
PBT 180	Phlebotomy Practicum	2

Practical Nursing Certificate

PN 101	Practical Nursing Concepts 1	8
PN 102	Practical Nursing Concepts 2	10
PN 103	Practical Nursing Concepts 3	6
PN 185	Practical Nursing Role Transition	2

Some courses are offered in alternative versions identified with a letter after the course number-- for example, ENG 101 and ENG 101A.

- This curriculum displays only course numbers without the added letter.
- The alternative version, when available, meets the requirements of the course version without the added letter.

The letters G, B, and T (displayed after course titles or elective descriptions) identify types of courses required by the Ohio Department of Higher Education as part of an associate's degree curriculum.

G = General Education course in this curriculum

B = Basic Skills course in this curriculum

T = Technical course in this curriculum

Faculty

Advisor

Lisa Lucas, MA
lisa.lucas@cincinnatistate.edu

Health and Public Safety Division Advising

Call (513) 569-1670 or Text (513) 569-1600

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: None

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. This course is delivered through online instruction only.
Prerequisites: FYE 120 or placement into ENG 101
Ohio Transfer Assurance Guide Approved

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. This course is delivered through online instruction only.
Prerequisites: MCH 101 (minimum grade C)
Ohio Transfer Assurance Guide Approved

Ohio Career-Technical Assurance Guide Approved

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. This course is delivered through online instruction only.
Prerequisites: FYE 120 or placement into ENG 101
Ohio Transfer 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. This course is delivered through online instruction only.
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. This course is delivered through online instruction only.
Prerequisites: FYE 120 or placement into ENG 101

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. This course is delivered through online instruction only.
Prerequisites: FYE 120 or placement into ENG 101

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. This course is delivered through online instruction only.
Prerequisites: FYE 120 or placement into ENG 101

MCH 120 Health Unit Coordinator Training
3 Credits. 3 Lecture Hours. 0 Lab Hour.
A course on skills required for entry-level medical clerical workers. The curriculum follows the National Association of Health Unit Coordinators (NAHUC) standards. Topics include: orientation to health care facilities; personal and professional skills; electronic health records; and admission, transfers, and discharge procedures. This course is delivered through online instruction only.
Prerequisites: MCH 102 or MCH 104 (minimum grade C for either)

MCH 130 Nurse Aide Training
4 Credits. 3 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, activities of daily living, safety, and restorative services. Students who complete the course at 80% or above are qualified to take the Ohio Department of Health Competency Evaluation Test for a State Tested Nurse Aide (STNA).
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: FYE 120 or placement into ENG 101, 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: communication, infection control including wound care, workplace safety, basic emergency care, body mechanics, obtaining vital signs including pain assessment, bedmaking, assisting with oxygen therapy, IV therapy, and urinary elimination.
Prerequisites: None

MCH 141 Electrocardiography 1
3 Credits. 2 Lecture Hours. 2 Lab Hours.
A course on the basic principles of electrocardiography. Topics include: cardiac anatomy and physiology, electrical conduction system of the heart, steps for recognizing basic cardiac dysrhythmias, ECG techniques, and patient preparation for an electrocardiogram. This course is delivered through online instruction only.
Prerequisites: BIO 100 or BIO 111 or BIO 151 (minimum grade C for all)

MCH 142 Electrocardiography 2
4 Credits. 3 Lecture Hours. 2 Lab Hours.
A continuation of MCH 141, including review of basic electrocardiography rhythm interpretations and the 12 lead ECG tracing, and focus on recognizing changes in the ECG tracing due to various cardiac conditions. Topics include: cardiac electrophysiology, recognizing common dysrhythmia and advanced cardiac dysrhythmias, chamber enlargement, pacemakers, myocardial ischemia, injury, infarct, and recognizing effects of drugs and electrolytes on the ECG tracing. This course is delivered through online instruction only.
Prerequisites: MCH 141 (minimum grade C), or certification in EMT, Paramedic, Nursing, or Practical Nursing