HEALTH INFORMATION MANAGEMENT AND TECHNOLOGY
UW-PARKSIDE 2015-17 CATALOG

College:
Natural and Health Sciences

Degree and Program Offered:
Bachelor of Science

Major - Health Information Management and Technology

Website:
http://himt.wisconsin.edu

Program Overview

The bachelor of science in health information management and technology (HIMT) is a collaborative, online program designed to provide students with the knowledge and competencies required to meet the growing need for professionals to work in this rapidly expanding and evolving area of healthcare. The degree program focuses on the information sector of the healthcare industry because it is one of the fastest growing and evolving segments of the industry. The new advances in health-related technologies, patient records, etc., bring with them new regulations and new concerns for privacy and security. Highly skilled professionals are needed to manage this area, and graduates of the HIMT degree program will be very well positioned to meet that need. The online program is designed to meet the needs of adult learners.

The HIMT degree program will prepare knowledgeable and skillful professionals to assume leadership positions within the public and private sectors. Within organizations, a HIMT professional will be able to manage and administer health-information technologies that span across divisions, departments, and businesses.

Program-Level Outcomes

Graduates of the HIMT degree program will be able to:

1. Demonstrate knowledge of healthcare billing, coding and reimbursement policies
2. Demonstrate knowledge of healthcare terminology and medical conditions
3. Demonstrate knowledge of dynamic healthcare delivery systems and regulatory environments
4. Apply principles of healthcare privacy, confidentiality, legal, ethical issues and data security
5. Apply critical and creative thinking, problem solving, and effective inter-professional communication skills related to health information management
6. Evaluate, use, and integrate information technology to support medical decision making and processes
7. Apply quantitative methodologies to process healthcare information
8. Demonstrate through the healthcare management track the principles of leadership and management in the HIMT environment OR
   Demonstrate through the healthcare technology track the application of information technology in the HIMT environment

This program offers courses in conjunction with three partner campuses – UW-Green Bay, UW-La Crosse and UW-Stevens Point.

Requirements for Admission to the Health Information Management and Technology Major

Students are eligible for admission to this program once they have earned 60 credits of college work through an associate’s degree from an accredited institution or 60 equivalent credits of course work. Students must also have completed the following prerequisite courses: college algebra, introductory biology and introductory communications with grades of C or better.

Requirements for the Health Information Management and Technology Major (60 credits)

To complete the degree program, students must successfully complete all of UW-Parkside’s graduation requirements including the general education, ethnic diversity and foreign language requirements. Students admitted to the program will take 48 credits of core courses and 12 credits in either management or healthcare technology designed to prepare them for the HIMT field and further focus their knowledge in one of these areas of specialization. Course work will culminate in a capstone course, where students will complete an HIMT project in a field setting.
A. Required Core Courses (48 credits)

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>HIMT 300</td>
<td>Survey of Contemporary Computing</td>
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<tr>
<td>HIMT 310</td>
<td>Healthcare Systems and Organizations</td>
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<tr>
<td>HIMT 320</td>
<td>Survey of Information Technology in Healthcare</td>
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<tr>
<td>HIMT 330</td>
<td>Healthcare I: Terminology and Body Systems</td>
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<td>HIMT 340</td>
<td>Ethical Issues, Security Management and Compliance</td>
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<td>HIMT 350</td>
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<td>Healthcare II: Survey of Disease and Treatments</td>
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<td>HIMT 370</td>
<td>Healthcare Systems: Analysis and Design</td>
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<td>HIMT 380</td>
<td>Healthcare Billing, Coding and Reimbursement</td>
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<td>HIMT 400</td>
<td>Healthcare Information and Technology – Data</td>
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<td>HIMT 410</td>
<td>Healthcare Systems: Implementation and Integration</td>
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<td>HIMT 420</td>
<td>Healthcare Systems: Project Management</td>
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<td>HIMT 430</td>
<td>Quality Assessment and Improvement</td>
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<td>HIMT 440</td>
<td>Group Processes, Team Building and Leadership</td>
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<td>HIMT 450</td>
<td>Healthcare Information and Technology – Standards</td>
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<td>HIMT 490</td>
<td>Capstone Project</td>
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B. Major Elective Courses (12 credits)

Choose one group of courses.

1. Healthcare Management Track (12 credits)

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<tbody>
<tr>
<td>HIMT 355</td>
<td>Principles of Management for HIMT Professionals</td>
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<tr>
<td>HIMT 365</td>
<td>Healthcare Economics</td>
</tr>
<tr>
<td>HIMT 415</td>
<td>Human Resource Management in Healthcare</td>
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<tr>
<td>HIMT 445</td>
<td>Application of Leadership and Management in Healthcare Technology</td>
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OR

2. Healthcare Technology Track (12 credits)

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<tr>
<td>HIMT 345</td>
<td>Programming and Software Development</td>
</tr>
<tr>
<td>HIMT 375</td>
<td>Database Structures and Management Systems</td>
</tr>
<tr>
<td>HIMT 425</td>
<td>Data Warehousing and Mining</td>
</tr>
<tr>
<td>HIMT 435</td>
<td>Data Communications and Networks in Healthcare</td>
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To complete the major, students are required to complete the core 16 courses and 4 courses in one of the tracks available for a total of 20 courses (60 credits). Because these courses are designed specifically for this degree, are online, and include a focus on health information management and technology, these courses do not duplicate courses already available at the partner campuses.

Students who are completing the HIMT degree and who have entered the program with more than 60 credits do not have to fulfill the Foreign Language Requirement at UW-Parkside.

Courses in Health Information Management and Technology (HIMT)

300 Survey of Contemporary Computing

Prereq: None. Freq: Fall, Spring, Summer.

Provides a basic overview of contemporary information technology and computers. Topics include computer concepts (e.g., hardware, system architectures, operating systems), communication technologies, Internet technologies, and data organization/structures. Special emphasis placed on database management systems and data warehousing.

310 Healthcare Systems and Organizations

Prereq: None. Freq: Fall, Spring, Summer.

Provides an overview of how healthcare and public health are organized and how their services are delivered in the United States. Topics to be covered include public policy (including U.S. health reform initiatives); organization of healthcare systems; components and operation of healthcare organizations including e-health delivery; professional roles and accreditation; legal and regulatory issues including licensure requirements.

320 Survey of Information Technology in Healthcare

Prereq: None. Freq: Fall, Spring, Summer.

Surveys essential healthcare information technologies that are used for healthcare information systems. Popular healthcare information systems include electronic medical record systems that keep record of patients’ history; the computerized provider order entry systems that record the history of the procurement of medicine and other medical necessities; telemedicine, which keeps information for medical doctors in the computers; telehealth e-prescribing, which prescribes the medicine electronically; medication administration, which keeps the information for medical doctors and other hospital staff members; and nursing and ancillary service systems.

330 Healthcare I: Terminology and Body Systems

Prereq: UW Colleges BIO 101 or equivalent. Freq: Fall, Spring, Summer.

Examines specific terminology and vocabulary used by workers in healthcare and public health. The focus of this course is on medical terminology that broadly relates to human anatomy and physiology, body systems and diagnosis. The bases of medical terms will be examined – such as prefixes, suffixes, roots, and combined forms. Topics will also include healthcare taxonomies and nomenclatures (ICD-9-CM, ICD-10, etc.).

340 Ethical Issues, Security Management and Compliance

Prereq: None. Freq: Fall, Spring, Summer.

Introduces three broad subjects: (1) evidence-based medical ethics pertaining to healthcare information management; (2) framework of healthcare information security management, including security principles, policies and procedures, security management models, risk assessment, and protection mechanisms; (3) healthcare regulations and compliance with focuses on the legislative systems, policies, and legal environment of healthcare in the U.S. and the existing health information laws, regulations, and standards. Also addressed are the elements and development of compliance programs.

345 Programming and Software Development

Prereq: HIMT 300 or concurrent enrollment. Freq: Fall, Spring, Summer.

Introduction to object-oriented programming paradigm, object-oriented systems analysis and design, fundamental data structures, and n-tier software design. Examination of the role of each in the software development process.

350 Statistics for Healthcare

Prereq: UW Colleges MAT 105 or equivalent (at UW-Parkside: MATH 102 or MATH 111). Freq: Fall, Spring, Summer.

This is an introductory course in statistical methods for the health sciences. The course will emphasize the principles of statistical reasoning, underlying assumptions, hypothesis testing, and careful interpretation of results. Some topics covered: major study designs, descriptive statistics, graphical displays of data, probability, confidence intervals and tests for means, differences of means, sample size and power, differences of proportions, chi-square tests for categorical variables, regression, multiple regression, and non-parametric statistics.
355 Principles of Management for HIMT Professionals 3 cr
Prereq: None. Freq: Fall, Spring, Summer.
Provides an overview of basic principles involved in management and communication. Topics include basic management principles, communication skills, interpersonal communication competence, negotiation technique, team consensus building, professional development, and problem solving/decision-making processes.

360 Healthcare II: Survey of Disease and Treatments 3 cr
Prereq: HIMT 330. Freq: Fall, Spring, Summer.
This course further investigates the topics covered in HIMT 330. On the basis of each body system, the course will further expand into the topics of human disease, human health issues, and classification of disease/health issues. Diagnostics, treatment and clinical procedures that are currently in practice. In addition, the course will incorporate pharmacotherapeutic concepts (drugs and therapies to treat/prevent/control human diseases/health issues), investigating the variety of drugs used for disease treatment for each body system. This will include the current biologicals that are used for treatment. Topics will include how the drugs and biologicals work, their limitations, and the current diversity of available drugs and biologicals.

365 Healthcare Economics 3 cr
Prereq: None. Freq: Fall, Spring, Summer.
Applications of microeconomic theory to analyze the behavior of health and health care markets. Topics will include: supply and demand of health care services, private health insurance markets, government provision of health care services and health insurance, and health care policy.

370 Healthcare Systems: Analysis and Design 3 cr
Prereq: HIMT 300. Freq: Fall, Spring, Summer.
This is the first course in a two-course sequence that addresses methods and techniques of healthcare information system analysis and design as performed within the system development life cycle. Included will be techniques for problem definition, requirements gathering, analysis, logical design, and selection and evaluation of alternative healthcare information systems solutions from the point of view of the health provider and user. An emphasis is placed on analysis, selection, and evaluation of information systems as they relate to healthcare.

375 Database Structures and Management Systems 3 cr
Prereq: HIMT 345. Freq: Fall, Spring, Summer.
Analyze and design databases to support computer-based information systems. Develop and implement relational database management systems using SQL. Topics include: data modeling techniques such as entity-relationship modeling, extended entity-relationship modeling, database constraints, database normalization techniques, and basic and advanced features of database query language SQL, etc.

380 Healthcare Billing, Coding, and Reimbursement 3 cr
Prereq: HIMT 330, 360. Freq: Fall, Spring, Summer.
Examines the coding and reimbursement connection; topics include managed care plans, prospective payment systems, Medicare-Medicaid reimbursement, Resource-Based Relative Value Scale, case mix management, and revenue cycle management.

400 Healthcare Information and Technology--Data 3 cr
Prereq: HIMT 360. Freq: Fall, Spring, Summer.
Explores the sources and data contents of healthcare information as well as the proper presentation of it for different usage levels. Topics addressed include: (1) data structure and use of health information (individual, comparative, and aggregate), (2) type and content of health record, (3) data quality assessment, (4) secondary data sources, (5) healthcare data sets, (6) health information archival systems, and (7) National Healthcare Information Infrastructure (NHII). The course will also cover topics in bioinformatics.

410 Healthcare Systems: Implementation and Integration 3 cr
Prereq: HIMT 300, 370. Freq: Fall, Spring, Summer.
Covers the back-end stages of healthcare systems development lifecycle through the procurement route: development of technical design specifications, procurement procedures (RFP, RFQ, vendor evaluation and selection, and contracting), systems configuration and integration, installation, conversion, operation, and maintenance. Pre-installation testing and post-conversion auditing and monitoring will be emphasized to address the upcoming requirements of federal certification of EHR systems.

415 Human Resource Management in Healthcare 3 cr
Prereq: None. Freq: Fall, Spring, Summer.
Examines the role of HIM staff in managing human resources to facilitate staff recruitment, retention and supervision.

420 Healthcare Systems: Project Management 3 cr
Prereq: None. Freq: Fall, Spring, Summer.
Addresses the phenomenal impact information system (IS) projects have had on healthcare delivery. Students learn how healthcare IS projects affect organizations, doctors, patients, and chronic-illness treatments, as well as individuals interested in managing their own healthcare. Concepts and tools for effective healthcare IS project management, process re-engineering and work redesign are introduced. The purpose of this course is to expose students to IS project management activities in healthcare settings. Topics covered include recent healthcare IS project trends, budgeting, scheduling, resource management, scope, risk analysis, and deployment controls. The genesis of healthcare project management is covered using specific cases and examples.

425 Data Warehousing and Mining 3 cr
Prereq: HIMT 375. Freq: Fall, Spring, Summer.
Examines the concept of the data warehouse and its effectiveness in supporting strategic decision making. Address the process of creating data warehouse/data-mart solutions from the identification of the enterprise informational and analytical needs to producing business intelligence by extracting information from the data warehouse by using data mining methods and models.

430 Quality Assessment and Improvement 3 cr
Prereq: HIMT 350. Freq: Fall, Spring, Summer.
Examines the quality assessment and quality improvement cycle (plan, do, check, act) and the role of the IT/HIM in the process. Tools used in quality and risk management processes will be examined.

435 Data Communications and Networks in Healthcare 3 cr
Prereq: HIMT 300. Freq: Fall, Spring, Summer.
Provides fundamentals of data communications and networking techniques, and examines the linkage of information technology strategies and technological solutions enabling effective communication within and between healthcare organizations. Major topics include fundamental concepts of data communications and applications, network communication devices, basic technologies of the local area network, wireless local area network, wide area network, internet and the Web, the OSI stack, healthcare information systems standards, and the HIE, RHIN, and NHIN.

440 Group Processes, Team Building and Leadership 3 cr
Prereq: HIMT 355. Freq: Fall, Spring, Summer.
Introduces students to the necessary group/team processes that are at the root of building, developing, and maintaining medical/healthcare work teams and the effective functioning of such teams. The course also provides an overview of leadership development techniques. Also included is a focus on the uses of various communication technologies in the team building and functioning processes.

445 Application of Leadership and Management in Healthcare Technology 3 cr
Prereq: HIMT 355, 365, 415. Freq: Fall, Spring, Summer.
Assimilates and integrates concepts and applications of management and leadership in healthcare, advancing on the topics covered in HIMT 355, 365, and 415. Topics will include strategic leadership concepts, exploring key factors that impact management and planning, change management, and critical organizational behaviors for leadership and management, focusing on best practices, organizational accountability, and assessment models.

450 Healthcare Information and Technology – Standards 3 cr
Prereq: HIMT 400. Freq: Fall, Spring, Summer.
Introduces healthcare information technology standards, including standards and regulations for documentation, and will cover health information standards. The course will also investigate software applications and enterprise architecture in healthcare and public health organizations.
This course is the capstone course for both tracks of the degree program. Students are required to find an internship site that is related to healthcare and set up a semester-long project from which they can gain hands-on experience in the areas of their concentration. Project setup will be jointly done by the student, site sponsor, and the faculty of this course, whereas internship supervision will be performed by the project supervisor and the course instructor.