

# HEALTH INFORMATION (HI)

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**HI501: Health Informatics**

Health informatics deals with the resources, devices, and methods required to optimize the acquisition, storage, retrieval, and use of information in health and biomedicine. This course introduces the history and development of health informatics. It focuses on such issues as the structure, function, and transfer of information, application of Health IT theories, and human-computer interaction. Students will also explore medical decision-making and knowledge discovery in the clinical setting. Quarter Credit Hours: 4 | Prerequisite: None

**HI510: Health Information Applications and Systems**

In this course you will learn how to evaluate health information systems and clinical data workflow, and integrate selected applications into a health information system. You will utilize health information systems technologies to assess the importance of consumer engagement within health care, and how to advocate for the use of health information systems for population health management. Quarter Credit Hours: 4 | Prerequisite: None

**HI520: Database Design and SQL**

This course covers fundamental database design topics in a health care context, including data modeling, entity-relationship diagrams, the top-down database design methodology, the bottom-up database design methodology, functional dependencies, and the normalization process. You will learn about Structured Query Language (SQL), which is used to retrieve and modify health care-related data in relational databases. This course emphasizes designing queries for optimum performance and using query execution plans as a tool for creating appropriate indexes to improve query performance. Quarter Credit Hours: 4 | Prerequisite: None

**HI530: Clinical Terminologies, Vocabularies, and Information Standards**

This course provides a focus on the in-depth understanding of information standards as they apply to clinical terminologies, vocabularies, and ontologies. You will examine the structure, application, and integration of standardized terminology systems such as ICD, SNOMED CT, LOINC, and HL7. Emphasis will be placed on understanding the role these systems play in enhancing clinical documentation, ensuring accurate data exchange, and promoting interoperability across health information systems. Quarter Credit Hours: 4 | Prerequisite: None

**HI540: Project Management of Health Information Systems**

In this course, you will build on industry standard concepts, techniques, and processes to develop a comprehensive foundation for project management activities. During a project's life cycle, you will develop the critical skills necessary to provide guidance for the behavior of people involved in projects as they influence and shape the performance domains to produce the intended outcomes. You will apply best practices in areas such as scope management, resource allocation, project planning, project scheduling, quality control, risk management, performance measurement, and project reporting. Quarter Credit Hours: 4 | Prerequisite: None

**HI545: Health Care Compliance**

This course provides a working knowledge of the various components of health information governance programs, compliance policy and plan development, along with practical applications necessary to maintain compliance in health care. You will explore the components of data governance including metadata management, data quality management, and the role they serve in health informatics across the information lifecycle. You will also explore topics related to the significance of data integration, interoperability, data sharing, and risk management. Quarter Credit Hours: 4 | Prerequisite: None

**HI550: Organizational Development and Management for Health Information**

This course presents the fundamental elements that comprise health information management and strategic information systems planning to align IT programs and projects with organizational goals. Throughout this course you will be able to identify the organizational needs identified as technology management, health care information management, organizational management, and asset and application management. Quarter Credit Hours: 4 | Prerequisite: None

**HI555: Revenue Cycle Management**

This course provides a working knowledge of payment policies and reimbursement methodologies used in health care and how they vary by payment source (governmental, private, and capitated insurance). Methodologies used by facilities and practitioners are applied and compared. Factors affecting payment, costing methodologies, revenue cycle management, purchasing strategies, budgeting, and variance analysis applied to health care are examined. You will engage in case studies, simulations, and real-world projects to apply theoretical knowledge and develop practical expertise in revenue cycle management. Quarter Credit Hours: 4 | Prerequisite: None

**HI560: Health Care Data Analytics**

This course provides foundational skills and knowledge in health care data analytics that will equip you to contribute more effectively to local data analytics and performance improvement efforts. Quarter Credit Hours: 4 | Prerequisite: None

**HI570: Legal and Ethical Issues in Health Information**

This course covers data security and confidentiality of health information as it relates to information technology and management. Topics include risk management, information security, and data validity and integrity. You will also examine disaster recovery plans for data and service delivery. Quarter Credit Hours: 4 | Prerequisite: None

**HI575: Protection of Health Information**

This course covers privacy protections, and regulations as it relates to ensuring the confidentiality and safeguard of health information and technology. Topics include consent and authorization, health data de-identification and anonymization, defense measures, and protection of individual rights and disclosure of personal health information (PHI). You will also examine policies and notification requirements in the event of a breach of PHI. Quarter Credit Hours: 4 | Prerequisite: None

**HI580: Information Systems Design and Implementation**

This course will provide a working knowledge of the planning, design, implementation, and evaluation of information technology as related to health care systems. You will be introduced to the infrastructure of information systems including computer networking, applications and storage, security of information systems, and integration of that knowledge to the design and implementation of a new system. The course will explore health systems trends and emerging technologies.

Quarter Credit Hours: 4 | Prerequisite: None

**HI595: Master's Capstone in Health Informatics**

The capstone course is the culminating experience for the Master of Health Informatics. This course builds on the concepts of all the courses you have taken within the program of study. The capstone course provides you with the opportunity to integrate and synthesize the knowledge and skills acquired through your coursework in an original comprehensive project, and to assess your level of mastery of the stated outcomes of your degree program in health informatics.

Quarter Credit Hours: 4 | Prerequisite: Last term

**HI599: Master's Capstone in Health Information Management**

The capstone course is the culminating experience for the Master of Health Information Management. This course builds on the concepts of all the courses students have taken within the program of study. The capstone course provides students with the opportunity to integrate and synthesize the knowledge and skills acquired through their coursework in an original comprehensive project, and to assess their level of mastery of the stated outcomes of their degree program in health information management.

Quarter Credit Hours: 4 | Prerequisite: Last term