



# Leadership in Health Information Technology Certificate



A 16-credit online graduate certificate for health professionals who wish to be able to lead the successful deployment and use of health information technology to improve the quality, safety, outcomes and value of health services.

## Eligibility

Health care and public health professionals with a baccalaureate or advanced degree from an accredited institution with a minimum GPA of 3.0 are eligible. Examples of prior education include nursing, pharmacy, dentistry, physical therapy, medicine or other health related degrees. Clinical or public health experience required.

## Application deadlines

April 1 for Fall admission

November 1 for Spring admission

## For more information:

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<http://z.umn.edu/CPHLI>

*See reverse side for course listings and descriptions.*





**Students may petition out of 40% of the program's coursework for courses taken previously or for relevant work experience.**

**HINF 5510 Applied Health Care Databases: Database Principals and Data Evaluation (Credits: 3)**

Study and learn to utilize concepts, conceptual data models, case studies, common data manipulation languages, logical data models, database design, facilities for database security/integrity and applications.

**NURS 5115 Interdisciplinary Health Care Informatics (Credits: 3)**

Examine the implications of informatics for practice, including nursing, public health and health care in general. Describe the role of standards to build a national electronic health record, including vocabularies and classification systems and health record architecture. Discuss issues associated with implementing an electronic health record/ management information system. Apply functional requirements and ethical, legislative and political issues to a use case. Explore global and future informatics issues. Alternative service learning projects available such as analyzing workflow in an agency and recommending changes or analyzing EHR training needs.

**NURS 5116 Consumer Health Informatics (Credits: 1)**

Examine consumer preferences, information needs and information use for self. Analyze consumer quality, credibility of consumer health information and consumer on-line strategies for improving health. Examine personal health record applications to support individual, family, and community information needs. Relate the power-shift, ethical and legal issues affecting or resulting from consumer health informatics.

**NURS 6105 System Analysis and Design (Credits: 3)**

Examine the role of the informatician in an interprofessional team for analysis and design of information systems. Integrates concepts and theories of systems analysis, system life cycle, project management, system requirements, human factors and evaluation of effective use of health information systems. Examples of assignments: working with a clinical agency to analyze workflow for a use case in preparation for implementing an EHR.

**NURS 7105 Knowledge Representation & Interoperability (Credits: 2)**

Examines conceptual and operational aspects of knowledge representation structures in nursing and health care, including standards and interoperability. Students relate representation of data and information in the electronic health record and critically analyze issues for interoperability. Stakeholder values and ethical issues of knowledge representation are explored. Assignments include looking at specific populations, data sources and data mapping.

**NURS 7108 Population Health Informatics (Credits: 2)**

Examine standards, interoperability and integration of information systems for population health. Analyze population health use cases for potential benefits and legal, ethical and practical issues related to the development of population health information systems. Students select a use case and analyze multiple data sources and how these can be integrated to example factors influencing a population health condition.

**NURS 7113 Clinical Decision Support (Credits: 2)**

Examine principles and concepts of knowledge management and decision making for support of clinical practice. Design a clinical decision support intervention and examine the legal, ethical and practical issues related to its implementation and maintenance of CDS interventions. Students partner with clinical, public health, or industry partners to evaluate specific types of clinical decision, the data structure and recommend specific types of CDS tools for improving decision making.