# NATIONAL UNIVERSITY



# COLLEGE OF PROFESSIONAL STUDIES MASTER OF SCIENCE IN HEALTH INFORMATICS

# Where High Tech Meets Human Health

The field of health care is rapidly growing and modernizing, creating a tremendous demand for professionals with skills and knowledge in the application of health care information and technology. If you'd like to be one of those who apply digital information to advance health care and improve health, the Master of Science in Health Informatics will provide you with a sought-after graduate professional degree in the field. It will prepare you for mid-level and leadership positions within health care, technology, and consulting organizations, and ground you in the effective use of information technologies and systems to improve the health care ecosystem.

Coursework will encompass areas of information systems, information technology, and informatics, including decision support, care coordination, consumer empowerment, the structured language of health care, standards, health information exchange, usability, electronic health records, security, socio-technical aspects of health computing, human-computer interaction, evidence-based practice, and health outcomes.

## Program Highlights:

- Entire program can be completed online
- Explore health, innovation, technology, leadership, quality, best practices, telehealth, mobile health, and more as tools for high-quality, cost-effective care
- Engage with experientially- and academically- prepared faculty and fellow students in flexible, innovative, dynamic, and practice-based learning experiences
- Qualify for opportunities as a project manager, analyst, specialist, and for a variety of evolving leadership roles within health care delivery, consulting, health insurance, government, and the broader high-tech and health care industry sectors

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Accredited by the WASC Senior College and University Commission (WSCUC); the Commission on Collegiate Nursing Education (CCNE) for the Bachelor of Science in Nursing Program; the International Assembly for Collegiate Business Education (IACBE) for the School of Business and Management; and approved by the Commission on Teacher Credentialing (CTC). National University is nonprofit and does not discriminate in any of its policies or practices on the basis of race, ethnicity, religion, national origin, sex, disability, age, or veteran status.

### MASTER OF SCIENCE IN HEALTH INFORMATICS

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As health care makes dramatic strides to adopt new information and communication technologies, there is a growing demand for health informatics professionals. This rapidly developing field is only beginning to unlock the vast promise of using electronic-based information to advance health care and ultimately improve the health of individuals and populations. The MS in Health Informatics is a graduate professional degree designed to enhance the practice of health informatics by preparing students for career growth to mid-level and leadership positions within health care organizations, technology, and consulting firms. This program is intended for students interested in the effective use of information technologies and systems to improve the quality, safety, efficiency, and affordability of health care.

The MS Health Informatics program leverages the rich collective strengths, synergies, faculty, and resources of National University's Center for Technology and Health Sciences and the Schools of Health and Human Services, Engineering and Computing, and Business and Management.

Program study includes coursework related to:

- 1. Information Systems Leadership and management of health care applications; including analysis, design, adoption, and optimization.
- 2. Information Technology Effective use of database and systems administration, computer networks, security, programming, and wireless devices.
- Informatics The structured language of health care, standards, data structures, health information exchange, decision support, care coordination, consumer health, socio-technical aspects of health computing, human-computer interaction, and evidenced-based practice.

Along with a broad understanding of health and human services, technology, information systems, leadership, and the culture of health care, students apply health informatics knowledge through experiential learning opportunities with case studies, research, simulations, and a capstone project. Graduates are prepared for various roles related to leveraging technology to enhance the collection, communication, exchange, aggregation, analysis, and use of information across the health care ecosystem.

#### **Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Evaluate the health care delivery system in the U.S. and the impact of social, cultural, political, economic, and environmental factors affecting the management and operation of health care organizations.
- Evaluate health data management standards, technologies, and methods to improve the quality, efficiency, equity, and safety of health care practice and organization.
- Develop policies and technologies to protect data integrity and validity, including information privacy and security policies and procedures.
- Develop strategies for improving health care delivery and achieving institutional strategic initiatives using information systems and technologies.
- Evaluate leadership principles and practices in health information technology staff development, technology adoption, and change management in a health care organization.
- Evaluate a health care organization's processes and systems to ensure compliance with ethical, legal, and regulatory mandates and professional standards of health information technology.
- Apply statistical and research methodologies to implement evidence-based health information technology management practice and health care quality improvement.
- Communicate knowledge of health information systems and technology to stakeholders of the healthcare ecosystem.

#### **Degree Requirements**

To receive a MS in Health Informatics, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Refer to the section on graduate admissions requirements for specific information regarding application and evaluation.

#### **Core Requirements**

(11 courses; 49.5 quarter units)

HCA 600U.S. Health care SystemHTM 552EHR Meaningful UseCIS 601Information Systems Strategies

COH 602	Biostatistics
HCA 626	Health care Information Systems
	Prerequisite: HCA 620
HCA 622	Quality Appraisal & Evaluation
	Prerequisite: HCA 600, HCA 610, HCA 620, and COH 606
COH 611	Public Health Research Methods
HTM 660	System Management and Planning
HTM 520	Health Information Exchange
HTM 680	Health Informatics Case Study
	Prerequisite: HTM 520, HTM 552, and HTM 660
HTM 692	Health Informatics Capstone
	Prerequisite: HTM 680
HTM 692	Health Informatics Capstone

Please note that prerequisites for HCA and COH courses are not required for students in the MS Health Informatics program. HTM prerequisites are required.

#### **Program Elective**

(1 course; 4.5 quarter units)

LED 604	Leading Change and Adaptation
COH 613	Public Health Informatics
	Prerequisite: COH 606 and COH 612
HCA 663	Health care Accounting/Finance
	Prerequisite: HCA 628
CIS 604	Management and Security
	Prerequisite: CIS 601
CIS 606	End User Information Systems
	Prerequisite: CIS 601
HCA 670	Health care Leadership
	Prerequisite: HCA 624
HCA 691	Healthcare Internship
	Prerequisite: HCA 600, COH 602, HCA 610, HCA 620, HCA 622, COH
	606, HCA 624, HCA 626, HCA 628, HCA 630, HCA 660, HCA 663, COH
	611, HCA 670, and permission by instructor

Please note that prerequisites for HCA and COH courses are not required for students in the MS Health Informatics program. HTM prerequisites are required.