

# Master of Science in Health Informatics

Professionals in **Applied Health Informatics** have skills in analysis, design, implementation, and evaluation of information systems that support a full range of clinical and patient care functions. Graduates will be prepared for entry and mid-level positions with hospital or clinic informatics departments, electronic health record (EHR) vendors, public health organizations, and as consultants and/or staff in organizations that specialize in knowledge management. Graduates also have the skills to enter the growing field of health information exchange, which includes regional health information organizations and the emerging personal health records. In addition to a foundation in applied health informatics, special skills will be acquired in organizational change, project management and impact evaluation.

This is an interprofessional degree offered through the Office of Graduate Studies (<http://www.kumc.edu/academic-affairs/graduate-studies.html>), with oversight by the University of Kansas Center for Health Informatics (<http://www.kumc.edu/health-informatics.html>) through its advisory council. The program is designed for health professionals who want a specialty focus in health informatics. The advisory council of this program reflects this commitment to interprofessional collaboration. Faculty with foundations in nursing, health policy and management, and public health partner to offer courses for this master's degree in health informatics.

The M.S. in Health Informatics program (MSHI) endeavors to fulfill its responsibilities to the changing needs of society by selecting applicants who, in the judgment of the admissions committee, demonstrate the academic achievement, maturity, integrity, and motivation necessary for successful advancement. In addition, the committee looks for applicants who will contribute academic, nonacademic, and socioeconomic diversity to the class. The committee is interested in evidence of capacity for mature and independent scholarship.

The application process is an online process. Detailed instructions on how to apply and the application deadlines are posted on the Master of Science in Health Informatics (<http://www.kumc.edu/health-informatics/master-in-health-informatics/prospective-students.html>) website.

## Admission requirements:

- A bachelor's degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (<http://www.kumc.edu/Documents/graduate%20studies/Min%20Eng%20Prof%2016-Oct.pdf>).
- A current resume or curriculum vitae.
- A personal essay outlining the applicant's reasons for wanting to pursue graduate education in health informatics, career objectives, and any other information that would help the admissions committee get to know the applicant.

- Three letters of recommendation preferably from employers, instructors, or other persons who can assess the applicant's academic and professional potential. Letters are submitted per instructions provided for the online application process.
- An informational interview with a Center for Health Informatics representative.
- A background check (<http://www.kumc.edu/Documents/graduate%20studies/Background%20Check%2016-Oct.pdf>) is required during the admission process; it may affect the student's eligibility to enter the program.
- A graduate level statistics course (may be completed prior to admission or during the first semester of enrollment.)

Applicants not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

## International Students

Due to the number of required online courses for this degree, the Health Informatics Program at KUMC does not meet the U.S. student visa requirements at this time. Therefore, we are unable to accept individuals who are on student visas. If you received your university education outside of the U.S. or are in the U.S. on another type of visa, please contact [HealthInformatics@kumc.edu](mailto:HealthInformatics@kumc.edu) for additional application requirements.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. *Other years' catalogs*.

The Master's in Health Informatics curriculum is divided into three cores: informatics, leadership, and a discipline focus along with a research component. A strength of the program is the close relationship between the students and their informatics advisers. The student and advisor will develop a plan of study that meets the career goals of the student.

## Degree requirements:

- Degree requirements can be completed within 2 years of admission to the program although a maximum of 7 years is allowed. Part-time students normally complete requirements within 4 years of admission to the program.
- Completion of a minimum of 40 credit hours.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of a general examination (<http://www.kumc.edu/Documents/graduate%20studies/Masters%20Exam-Defense%2016-Oct.pdf>) the semester the student will graduate.
- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.
- Successful completion of the **Health Informatics Core** (minimum 17 credit hours.) These courses provide the core knowledge and skills essential to the practice of health informatics.

IPHI 850	Introduction to Health Informatics	2
IPHI 851	Transforming Health Care through Use of Information Systems and Technology	3
IPHI 852	Health Data: Theory and Practice	3
IPHI 853	Abstraction and Modeling of Healthcare Information	3

IPHI 854	Knowledge Management in Healthcare	3
IPHI 856	Health Informatics Practicum	3

- Successful completion of the **Leadership Core** (minimum 9 credit hours.) This includes a minimum of one health policy (HP&M) course. Choose from:

IPHI 820	Program, Project, and Communication Planning	2
NRSRG 808	The Social Context for Health Care Policy	2
NRSRG 880	Organizational Foundations for Leading Change	3
NRSRG 885	Evaluation and Analysis for Healthcare Effectiveness	2
HP&M 832	Governance and Health Law	2
HP&M 833	Ethics	2
HP&M 837	Health Policy	3
HP&M 840	Organizational Foundations for Leading Change	3

- Successful completion of the **Research Component** (minimum 5 credit hours.) This component includes a research project that involves applying aspects of the research process to the student's area of health informatics practice.

NRSRG 754	Health Care Research	3
	or HP&M 819 Research for Health Care Leaders	
IPHI 860	Research Project	2

- Successful completion of the **Discipline-Specific Core** (minimum 9 credit hours.) The Discipline-Specific Core (Clinical, Health Policy or Preventive Medicine) and the courses within the core are selected in consultation with the student's advisor based on the student's background and career goals.

- **Clinical Core** (minimum 9 credit hours.) Choose from:

NRSRG 748	Theories for Practice and Research	3
NRSRG 755	Professionalism in Advanced Nursing Practice	3
NRSRG 826	Global Perspective and Diversity in Healthcare	2
NRSRG 883	Complexity Science Approaches to Improve Organizational Effectiveness	3
NRSRG 891	Human Resources and Workforce Development	3

- **Health Policy and Management Core** (minimum 9 credit hours). Choose from:

HP&M 810	The Health Care System	3
HP&M 822	Health Care Economics	3
HP&M 825	Financial Concepts in Healthcare Management	3
HP&M 846	Health Information Technology Management	3
HP&M 850	Introduction to Operations	3
HP&M 854	Human Resources and Workforce Development	3

- **Public Health Core** (minimum 9 credit hours). Choose from:

PRVM 800	Principles of Epidemiology	3
PRVM 809	Introduction to Public Health	3
PRVM 815	Infectious Disease Epidemiology	3

PRVM 818	Social and Behavioral Aspects of Public Health	3
PRVM 845	Cultural Competency in Public Health	3
PRVM 875	Management of Public Health Data	3
PRVM 877	Health Communication	3

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. *Other years' catalogs*».

## Typical Plan of Study for Part-Time Students

### Year 1

Fall	Hours Spring	Hours Summer	Hours
IPHI 851	3 IPHI 850 (Spring only)	2 IPHI 854	3
Leadership Core course	2 Discipline-Specific course	3	
	Leadership Core course	2	
	5	7	3

### Year 2

Fall	Hours Spring	Hours Summer	Hours
IPHI 853	3 IPHI 852	3 NRSRG 754	3
Discipline-specific course	3 Discipline-Specific Core course	3	
	6	6	3

### Year 3

Fall	Hours Spring	Hours Summer	Hours
IPHI 860	2 IPHI 856	2 IPHI 856	1
Leadership Core course	3 Leadership Core course	2 Oral Comprehensive Examination	
	5	4	1

Total Hours: 40

The Master of Science in Health Informatics degree and Post-Master Certificate signify that the holder is prepared for entry into the practice of applied health informatics. Therefore, it follows that graduates must have the knowledge and skills necessary to function in a broad range of situations. The following abilities and expectations must be met by all students **with or without accommodations** admitted to the program.

1. **Observation:** Students must be able to observe: lectures, demonstrations, online written and recorded audio/visual material, online meetings, and research and practice situations. Observation necessitates the functional use of the senses of vision and hearing.
2. **Communication:** Applicants also must be able to communicate effectively and efficiently in English with other students, faculty, staff and mentors/preceptors. Communication includes not only speech, but also listening, reading, and writing. Effective communication includes the ability to comprehend conversation, presentations, assigned readings, and the ability to present information verbally and in writing.

3. **Motor:** A student must have sufficient motor function to attend classes, prepare assignments, use a computer keyboard, and make public presentations if required. Course requirements will also include field work in a variety of health organizations.
4. **Intellectual, conceptual, integrative, quantitative, and problem solving abilities:** An applicant must be able to understand and learn factual information from readings and didactic presentations, gather information independently, analyze and synthesize learned material, and apply that information. In addition, an applicant must possess the ability to understand and work with measurements, carry out calculations and engage in reasoning, analysis and synthesis based on the calculations. An applicant must be able to draw on all these abilities to be an effective problem solver.
5. **Behavioral and social attributes:** Integrity, reliability, self-direction, motivation, and the ability to work with diverse groups are qualities necessary for effective preparation for and practice in this field. A student must have the emotional health required for the full use of his or her intellectual ability, exercise of sound judgment, and timely completion of all responsibilities attendant to the completion of academic responsibilities.

NOTE: Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide the appropriate documentation of disability and submit a request for accommodation to the University's Office for Academic Accommodations.