

MS in Health Informatics and Bioinformatics

Degree Requirements

The residential MS in Health Informatics (MSHI) curriculum requires 36 credit hours of course work, which include foundational coursework in health information technology as well as health administration. Prior coursework in computer science is not required. Residential MSHI students have the option to complete a 12-week internship during the summer following their first year, although it is not required for the degree. HMI's executive-in-residence will work with HI students who wish to complete an internship to find an appropriate placement. For a list of recent internship placements, please see http://hmi.missouri.edu/prospective/educational_partners.html.

The MSHI curriculum integrates learning across computer science, health informatics, and health administration, and also develops students' research interests. Those with excellent academic records are encouraged to pursue a PhD degree in Informatics. Students must maintain a minimum 3.0 cumulative MU graduate grade point average to earn the Master's degree. Individuals with three or more years of professional experience are encouraged to apply for admission to the Executive MSHI cohort (please see information below).

Required Courses

HMI 7410	Introduction to the US Health Care System	3
HMI 7430	Introduction to Health Informatics	3
HMI 7440	Health Information Technology	3
HMI 8435	Information Security, Evaluation and Policy	3
HMI 8437	Data Warehousing and Data/Text Mining for Health Care	3
HMI 8441	Biomedical and Health Vocabularies and Ontologies	3
HMI 8443	Enterprise Information and Solutions Architecture for Strategic Healthcare Operations	3
HMI 8571	Decision Support in Health Care Systems	3
HMI 8550	Health Data Analytics	3
HMI 8610	Consumer Health Informatics	3
HMI 8870	Knowledge Representation in Biology and Medicine	3
HMI 8090	Thesis Research in Health Management and Informatics	3

* If a student chooses to complete an internship, s/he must register for HMI 8689 Field Experience in Health Management and Informatics and must abide by all internship program requirements.

Sample Plan of Study - Executive

First Year				
	CR Fall	CR	Summer	CR
HMI 7410	3 HMI 8550	3	HMI 8450	3
HMI 7430	3 HMI 8571	3		
	6	6		3

Second Year			
Fall	CR Spring	CR	
HMI 8435	3 HMI 8870	3	
HMI 8437	3 HMI 8090	1	
HMI 8610	3		
HMI 8090	1		
	10	4	

Total Credits: 29

Sample Plan of Study - Executive

First Year				
Fall	CR Spring	CR Summer	CR	
HMI 8550	3 HMI 7410	3 HMI 8450	3	
HMI 8571	3 HMI 7430	3 HMI 8580	3	
	6	6	6	
Second Year				
Fall	CR Spring	CR Summer	CR	
HMI 8437	3 HMI 8441	3 HMI 8451	3	
HMI 8443	3 HMI 8435	3		
	6	6	3	

Total Credits: 33

Thesis/Non-Thesis Requirement

Residential MSHI students have the option to complete a formal Master's thesis to be submitted to the Office of Graduate Studies. Students who choose not to complete a thesis must complete a substantial independent research project. All MSHI students must present their thesis or independent research during their oral comprehensive examination in their final semester.

Financial Aid

Further information about costs, financial aid, and external scholarship opportunities is available on the HMI Department's website at: http://hmi.missouri.edu/prospective/financial_aid.html.

Executive MSHI Program

In addition to the residential (on-campus) mode, the MSHI degree is offered in an alternative format for professionals who have significant experience in health informatics. HMI accepts an Executive MSHI cohort to begin in January of each year. The executive MSHI combines three on-campus weekend sessions per semester with independent study and online interaction in an innovative two-year course of study, and requires 33 credit hours of health informatics coursework. Students must complete a substantial independent research project, which they present during their oral comprehensive examination in their final semester.

For additional information about the Executive MSHI degree, please visit http://hmi.missouri.edu/prospective/emshi_description.html or call (573) 884-0698.

Informatics PhD Program

MU also offers a PhD in Informatics with emphasis in Health Informatics through the MU Informatics Institute (<http://muii.missouri.edu>).

Admissions Requirements

Applicants are required to meet two sets of minimum qualifications for admission: the requirements of the MSHI program (http://hmi.missouri.edu/prospective/admissions_criteria.html) and the minimum requirements of the Office of Graduate Studies (<https://gradstudies.missouri.edu/admissions/eligibility-process>). Because requirements vary, you *must* refer to a degree program's graduate admission page to learn about specific admission criteria, application deadlines, eligibility and application process. Before official admissions to the University of Missouri, your application materials will be reviewed by both the degree program to which you've applied and the Office of Graduate Studies.

HMI Admissions Information

Deadline for Fall entrance: Rolling; Priority deadline March 1

A minimum of a baccalaureate degree from an accredited institution

Undergraduate GPA: 3.0 during the last 60 hours of undergraduate course work and any subsequent graduate course work

Minimum TOEFL scores:

Internet-based test (iBT)	Paper-based test (PBT)
100	603

- Minimum Academic IELTS scores:

Item	Score
OVERALL	7.5

- Minimum GRE Scores:

When did you take the GRE?	Verbal + Quantitative
Prior to August 1, 2011	50th percentile
On or After August 1, 2011	50th percentile

- In lieu of GRE, minimum GMAT score: 50th percentile. HMI also accepts LSAT and MCAT scores. GRE scores are not required for applicants to the Executive cohort.

Required Application Materials

Master's program applicants should apply online through the **Office of Graduate Studies application system** (<http://gradschool.missouri.edu/admissions/apply>). When completing the online application, you will have an opportunity to upload/attach additional documents. Please include the following documents:

- an updated **résumé** or **curriculum vitae**;
- a **personal essay** that:
 - outlines your professional plans and career objectives;
 - explains how you became interested in health services management/health informatics and how your prior training and experience would help your career;
 - includes specific issues and problems in health care you consider challenging and why;

- indicates if you intend to apply to the traditional (residential) on-campus degree program or the distance education (executive) format

Other required documents:

- **Official transcripts** of all coursework from all colleges, technical schools and/or universities attended
- **Three letters of recommendation** (submitted through the Graduate School application system (<http://gradschool.missouri.edu/admissions/apply>))
- **Official GRE/GMAT score report** (Residential Students only)

You may also be required to submit other documentation and in some cases complete prerequisite courses. Below is a checklist to help make sure your application is complete:

- **Request to re-enroll form** (for previously admitted students only)
- **Application for Change of Degree form** (for students already enrolled in a Master's degree or Graduate Certificate program)
- **Letter of support** from your employer (Executive Students only)
- **Official TOEFL report** (for international applicants only - have official results sent to us: institution code is 6875, our department code is 25 - minimum score of 100 on the Internet-based exam required)
- **Prerequisites** - links to information about prerequisites for each degree program are available at http://hmi.missouri.edu/prospective/rmha_description.html

Admissions Contact

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