



NORTHWESTERN UNIVERSITY SCHOOL OF PROFESSIONAL STUDIES

# MASTER OF SCIENCE IN MEDICAL INFORMATICS

The burgeoning field of medical informatics unites information technology with health care to improve patient safety, maximize operational efficiency and reduce costs. The Master of Science in Medical Informatics (MMI) program prepares students for opportunities across the spectrum of healthcare delivery, from designing and implementing electronic medical record systems for hospitals and private entities, to consulting with physician practices.

The MMI program affords working professionals maximum flexibility through its online format. It draws on the strengths of Northwestern University's School of Professional Studies and Feinberg School of Medicine to offer an interdisciplinary approach that enables students to leverage their backgrounds in health care or IT into careers in this rapidly growing field. Whether the student has primarily a clinical or an IT background, the program provides specific course tracks to fill any skill gaps. The two-track approach allows those with backgrounds in health care or information technology to gain the knowledge they need to master the field and fosters a dynamic forum between these two critical disciplines.

MMI students learn from experts in medicine and health information technology who have been instrumental in driving innovative solutions and establishing national health care informatics standards. Students also benefit from a partnership with the Feinberg School of Medicine, a leader in the "wired" medical community. Graduates of Northwestern's MMI program take leadership roles in managing medical information to facilitate advances in clinical care, public health and medical research.



"Northwestern helped prepare me to reinvent myself and build a bridge from one career to another."

- Russell Hinz (MMI '08), Director, EHR Clinical Adoption and Transformation, Aurora Health Care

# CURRICULUM

A minimum of 11 units of credit are required for the MMI degree, with each course counting as one unit of credit. Students may be required to complete up to 13 courses in order to gain the necessary background in the field.

#### TRACK COURSES

(NUMBER DETERMINED UPON ADMISSION)

#### Clinician

The clinician track is for students with clinical backgrounds and consists of two courses covering basic concepts in computer databases and networking.

- CIS 413 Telecommunications and Computer Networks
- CIS 417 Database Systems Design and Implementation

#### Technologist

The technologist track is for students with a technical background and consists of two courses covering the American health care system and the clinical landscape.

- MED INF 401 American Health Care System
- MED INF 402 Introduction to Clinical Thinking

### CORE COURSES (7)

- MED INF 403 Introduction to Medical Informatics
- MED INF 404 Health Care Operations
- MED INF 405 Health Care Information Technology (HIT) Standards
- MED INF 406 Decision Support Systems
- MED INF 407 Legal, Ethical, and Social Issues
- MED INF 408 Medical Technology Acquisition and Assessment
- MED INF 409-DL Biostatistics

### LEADERSHIP COURSE (1)

SPS strives to equip its students with fundamental skills in effective leadership, communication, innovation and change management. To gain exposure to theories and best practices in these administrative areas, MMI students join other SPS graduate students in a 10-week leadership class. With these skills complementing the core curriculum, graduates are better prepared to face the challenges of the modern workplace.

#### **CAPSTONE PROJECT** (1)

MMI students may pursue their capstone experience independently or as part of a team. As their final course, students take either the individual research project in an independent study format (MED INF 590-DL) or the classroom capstone class in which students integrate the knowledge they have gained in the core curriculum in a project presented by the instructor (MED INF 498-DL). In both cases students are guided by MMI faculty in exploring the body of knowledge on medical informatics while contributing research of practical value to the field. The capstone independent project and capstone class project count as one unit of credit.

# **ADMISSION**

Applicants must hold a bachelor's degree from a regionally accredited institution or its foreign equivalent. A competitive undergraduate record that indicates strong academic ability is required. Work or research experience in clinical, computing or information technology fields is highly desirable but not a requirement for admission. The Graduate Record Examination (GRE) is not required, but strong scores bolster chances for admission. For more information visit sps.northwestern.edu/mmi.

## APPLICATION CHECKLIST

- Online application access from sps.northwestern
  .edu/mmi and then click "Begin Application Process."
- \$75 nonrefundable application fee
- One sealed copy of official transcripts from ALL attended colleges and universities.
- Official transcripts must arrive in our office in the original sealed envelope issued by the institution. Northwestern University School of Professional Studies accepts electronic transcripts from U.S. institutions via secure electronic transcript providers. Consult with your institution to see if they are part of a secure e-delivery network. All electronic transcripts should be sent to spsadmissions@northwestern.edu. Please note transcripts are not accepted by fax or personal email.
- Applicants with international transcripts must request an official course-by-course evaluation of transcripts from a NACES member such as WES or ECE. A course-by-course evaluation will translate courses, degrees and grades to U.S. equivalency.
- Two letters of recommendation focusing on academic and professional achievement and ability
- Statement of purpose (see following)
- Current resume or curriculum vitae

#### Statement of Purpose

Applicants must submit a 300 word statement of purpose explaining how the degree program will help them meet their academic and professional goals. Those without previous education or training in medical informatics or a related field should explain how other academic and nonacademic experiences have equipped them to undertake graduate study in the program.

## APPLICATION DEADLINES

Applications are accepted every quarter.

FALL: July 15	WINTER: October 15
SPRING: January 15	SUMMER: April 15

### APPLICATION TIPS

Your application will be evaluated by the MMI Admissions Committee. The following considerations will guide the Committee in their review:

- The statement of purpos demonstrates if a student's academic and professior I goals are appropriate for this degree. This statement also helps the committee to determine if the prospective student possesses the necessary writing skills and intellectual maturity for succeeding in the program.
- The letters of recommendation serve to underscore the applicant's commitment to graduate education and ability to succeed in graduate level work and the field after completing the degree.
- The resume is used to provide evidence of an applicant's continuing commitment to and/or understanding of the medical informatics field. While we prefer candidates to possess three to five years of work and/or research experience in a related area, recent college graduates and career changers are also encouraged to apply. These applicants must demonstrate to the committee their commitment to the MMI program by detailing previous internships, academic or volunteer work.
- Elements that will help bolster an application to the MMI program include clinical experience, IT experience and leadership experience. Integrating these qualities in your statement of purpose, resume and recommendations will only further support your candidacy.

TUITION For 2015-16 academic year

- Tuition per course: \$3,994
- Estimated cost for entire program (total with technology fee): \$45,254 - \$53,482

For detailed admission information visit sps.northwestern.edu/mmi. For application assistance call 312-503-2579. "There has never been a better time to be in health care technology than right now. It is about as dynamic as one can imagine."

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— Mike Morotti (MMI '11), vice president of sales, marketing and medical informatics, Medsphere Systems Corporation



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