# HEALTH INFORMATICS, MS

The Master of Science degree in Health Informatics is an interdisciplinary degree optimizing technology to effectively capture and manage health information. Health Informatics connects people, technology, and biomedical data to better improve human health. Health Informatics professionals work with the processes and tools used to implement, maintain, and evaluate health informatics systems and applications. With the rise in big data, there is a growing need to organize and analyze health information. There are a variety of career paths in the health informatics field, ranging from health informatics specialists to informatics manager and director roles. This 45-credit hour Master of Science degree is appropriate for applicants holding bachelor's degrees in any science, health, computer science or related field who wish to enter this growing field.

**Admission**

Applicants should consult the graduate admission resources (https://www.roosevelt.edu/admission/graduate/) on the Roosevelt University website for information on the application process. The graduate program director and department faculty members will evaluate each applicant's individual record of academic achievement, professional experience, and self-assessment. Weakness in one or more areas of preparation will not preclude a positive admission decision. Admissions decisions are at the discretion of the graduate program director or department chair.

**APPLICATION MATERIALS**

**REQUIRED DOCUMENTS**

- **Graduate application:** Application (https://www.roosevelt.edu/admission/apply/) to the College of Science, Health and Pharmacy at Roosevelt University.
- **Transcript(s):** Unofficial transcripts from all undergraduate and graduate institutions attended. International applicants must submit official transcripts, and all applicants must have official transcripts on file before starting graduate studies.
- **Proof of English language proficiency (for international students):** See the University English Language Proficiency requirement (https://www.roosevelt.edu/admission/international/english-language-proficiency/) for details. Applicants can receive an admissions decision if this requirement is not met, but may need to complete ELP coursework before they begin graduate studies.

**OPTIONAL DOCUMENTS**

- **Resume/Curriculum vita:** A detailed account of academic and extracurricular experiences. Include employment, teaching, leadership, and research experiences as appropriate.
- **Letter of intent:** A brief (one-page) personal statement which outlines personal and professional goals.
- **Letter of recommendation:** Referees may include professors, academic advisors, employment supervisors, or others familiar with the applicant's preparation for graduate study.

**Prerequisites**

Applicants to the MS Health Informatics program must hold a bachelor's degree with a minimum cumulative GPA of 2.75 (4.0 scale) in a science, health, computer science or related field and demonstrate computer literacy.

Students lacking prerequisite coursework may be admitted provisionally until outstanding courses have been completed satisfactorily (grade of B- or better). None of the prerequisite courses may be used toward fulfillment of the requirements for the master's degree.

**Credit Policies**

Graduate transfer credit (up to 9 credit hours) may be applied to the MS Health Informatics degree within one semester of admission. *Credits from a previously earned degree are not transferable.* Exceptions to specific course requirements may be granted to students who have previously completed graduate coursework in a related area and maintain good academic standing after one semester of study at Roosevelt. All transfer credits and exceptions must be approved by the graduate program director or department chair.

**Advising**

New students must consult with a graduate faculty advisor upon admission to the program. Each graduate student must meet with a faculty advisor at least once each semester to select appropriate courses for the following semester. Continuing students who have completed at least one semester of graduate study (or 6 credit hours) with a grade average of 3.0 or higher should consult with their advisors to discuss research, internship, independent study and other experiential learning opportunities.

The Master of Science degree in health Informatics requires a minimum of 45 credit hours. This degree is cohort based and full-time students will follow the degree map starting with the fall semester. Part-time students should work with an advisor to determine the appropriate courses each semester.

## INTERNSHP AND RESEARCH OPPORTUNITIES

All students in the Health Informatics program must complete at least three credit hours of internship or research training by enrolling in either HIN 490 HEALTH INFORMATICS INTERNSHIP INTERNSHIP IN HEALTH INFORMATICS orHIN 495 HEALTH INFORMATICS RESEARCH PROJECT.

| Code | Title | Credit Hours |
|---|---|---|
| BIOL 463 | INTRODUCTION TO GENOME ANALYSIS | 3 |
| CSIA 411 | CYBER ETHICS, PRIVACY, & LEGAL | 3 |
| CST 406 | BIG DATA | 3 |
| CST 421 | DATA MINING | 3 |
| HEAL 460 | CRIMINOLOGY & HEALTH CARE LAW | 3 |
| HSAD 453 | | |
| HEAL 470 | HEALTH CARE ANALYTICS | 3 |
| HSAD 451 | INTRODUCTION TO HEALTH SERVICES | 3 |
| HIN 410 | PRINCIPLES IN HEALTH INFORMATICS | 3 |
| HIN 420 | CLINICAL & ADMINISTRATIVE SYSTEMS | 3 |
| HIN 430 | ANALYSIS & DESIGN OF HEALTH INFORMATICS SYSTEMS | 3 |
| HIN 440 | ADVANCED DATA MANAGEMENT & ANALYTICS IN HEALTHCARE | 3 |
| HIN 450 | ADVANCED QUANTITATIVE METHODS IN HEALTH INFORMATICS | 3 |
| HIN 490 | HEALTH INFORMATICS INTERNSHIP | 3 |

| | | |
|---|---|---|
| HIN 495 | HEALTH INFORMATICS RESEARCH PROJECT | 3 |
| INFS 412 | DATABASE SYSTEMS | 3 |
| INFS 413 | DATA ANALYTICS AND MANAGEMENT | 3 |
| OLED 425 | | |
| Total Credit Hours | | 48 |

The degree map is a *general* guide to each term on the academic pathway to the MS Biology degree. It is based on the most current scheduling information and assumes full-time study (although part-time study is allowed in this program). This degree map is reviewed annually and updated as schedules change. Students retain the same course requirements as when they first enroll, as long as they are continuously enrolled in the program. No more than two grades of C (not C-) may be applied toward the 36 hours used for the degree. A graduate course can only be repeated once; no more than two courses can be repeated.

*Please note: always work closely with your academic advisor to understand curriculum requirements and scheduling, as each student's academic plan will look different.*

**Year 1**

| Fall | Credit Hours | Spring | Credit Hours | Summer | Credit Hours |
|---|---|---|---|---|---|
| HSAD 451 | | 3 CSIA 411 | | 3 BIOL 463 | 3 |
| HEAL 480 or 453 | | 3 HIN 420 | | 3 INFS 412 | 3 |
| HIN 410 | | 3 HIN 430 | | 3 HEAL 470 | 3 |
| | | 9 | | 9 | 9 |

**Year 2**

| Fall | Credit Hours | Spring | Credit Hours | |
|---|---|---|---|---|
| CST 406 or 421 | | 3 HIN 440 | | 3 |
| OLED 425 | | HIN 450 | | 3 |
| INFS 413 | | 3 HIN 490 or 495 | | 3 |
| | | 6 | | 9 |

Total Credit Hours 42