



Twin Cities Campus

Health Informatics Minor

Health Informatics, AHC Inst

Graduate School

Link to a [list of faculty](#) for this program.

Contact Information:

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- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2019
- Length of program in credits (Masters): 6
- Length of program in credits (Doctorate): 12
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

Health informatics (also known as biomedical informatics) is an interdisciplinary field of scholarship that applies computer, information, statistical, management, and related scientific methods to enable biomedical discovery and support the effective and efficient use and analysis of data, management of information, and application of knowledge across the spectrum from basic science to clinical care. The ultimate goal of the field is to improve the health, well-being, and economic functioning of society. The minor provides an opportunity for students to supplement their primary training with additional knowledge and skills in health informatics.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)
- primarily online (at least 80% of the instruction for the program is online with short, intensive periods of face-to-face coursework)
- partially online (between 50% to 80% of instruction is online)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Required prerequisites

Health or Biological Sciences

Applicants must have taken 6 semester-credits or 9 quarter-credits at the undergraduate or graduate level in medical, life, or biological sciences from a regionally accredited institution of higher learning or equivalent. This broadly defined requirement includes most courses with a health or biology emphasis, including biostatistics, health services research, and public health, as well as more traditional biology or life science courses.

Programming language

Documented work or educational experience working with a programming language such as C, C++, Java, Python, R, Visual Basic, etc.

or [HINF 5502](#) - Python Programming Essentials for the Health Sciences (1.0 cr)

or Department Consent

Special Application Requirements:

Applicants must be earning a graduate-level degree from the University of Minnesota.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses towards program requirements is not permitted.

Required Coursework



All students pursuing the Health Informatics minor must complete the following course:
[HINF 5430](#) - Foundations of Health Informatics I (3.0 cr)

Program Sub-plans

Students are required to complete one of the following sub-plans.
Students may not complete the program with more than one sub-plan.

Masters

Required Course

Take the following course to complete the 6-credit minimum for the master's minor:
[HINF 5431](#) - Foundations of Health Informatics II (3.0 cr)

Doctoral

Required courses

[HINF 5440](#) - Foundations of Translational Bioinformatics (3.0 cr)

Foundations Lab

Students must take at least one lab concurrently with the associated course (i.e. take 8430 concurrently with 5430 or 8440 concurrently with 5440).

Take 1 - 2 course(s) from the following:

- [HINF 8430](#) - Foundations of Health Informatics I Lab (2.0 cr)
- [HINF 8440](#) - Foundations of Translational Bioinformatics Lab (2.0 cr)

Electives

Take HINF electives to meet the 12-credit minimum for the doctoral minor.

- [HINF 5431](#) - Foundations of Health Informatics II (3.0 cr)
- [HINF 5436](#) - AHC Informatics Grand Rounds (1.0 cr)
- [HINF 5450](#) - Foundations of Precision Medicine Informatics (3.0 cr)
- [HINF 5494](#) - Topics in Health Informatics (1.0 - 3.0 cr)
- [HINF 5510](#) - Applied Health Care Databases: Database Principles and Data Evaluation (3.0 cr)
- [HINF 5520](#) - Informatics Methods for Health Care Quality, Outcomes, and Patient Safety (2.0 cr)
- [HINF 5531](#) - Health Data Analytics and Data Science (3.0 cr)
- [HINF 5610](#) - Foundations of Biomedical Natural Language Processing (3.0 cr)
- [HINF 5620](#) - Data Visualization for the Health Sciences (3.0 cr)
- [HINF 5630](#) - Clinical Data Mining (3.0 cr)
- [HINF 5640](#) - Advanced Translational Bioinformatics Methods (3.0 cr)
- [HINF 5650](#) - Integrative Genomics and Computational Methods (3.0 cr)
- [HINF 8220](#) - Computational Causal Analytics (3.0 cr)
- [HINF 8405](#) - Advanced Topics in Health Informatics I (1.0 - 4.0 cr)
- [HINF 8406](#) - Advanced Topics in Health Informatics II (1.0 - 4.0 cr)
- [HINF 8492](#) - Advanced Readings or Research in Health Informatics (1.0 - 6.0 cr)