

GRADUATE

Healthcare Informatics

SIUE



siue.edu/healthcare-informatics

Healthcare Informatics at SIUE

This premier graduate program combines the specific information technology needs of healthcare professionals with the professional expertise of SIUE faculty and is designed for clinical employees who have technology-based responsibilities or who are interested in moving their careers in that direction. Healthcare informatics at SIUE will provide you with skills and perspective in planning, designing, implementing and using information technologies.

Our mission is to prepare students to be innovative leaders in health informatics with the ability to use technology and manage information to achieve industry objectives and improve outcomes.

Degrees Available at SIUE

- Master of Science in Healthcare Informatics

Program Format

The program coursework is offered fully online. Please note that international students are ineligible to receive a student visa for this program.

What is healthcare informatics?

Healthcare informatics brings together computer technology and clinical expertise to effectively organize, analyze, manage and use clinical knowledge and data for problem solving and decision making. As hospitals and healthcare organizations convert to electronic medical records, the need for healthcare informatics has increased significantly.

Healthcare informatics enables healthcare providers to use computerized systems to:

- Develop standards and clinical guidelines
- Guide their diagnoses and treatment recommendations
- Facilitate communication and manage the flow of information
- Evaluate quality of care

What can I do with a degree in healthcare informatics?

There has never been a better time to pursue a degree in healthcare informatics. Patient privacy regulations, combined with the rapid growth of both medical knowledge and technology, have increased demand for electronic health records (EHR) and professionals qualified to lead industry change.

Healthcare informatics professionals:

- Integrate the worlds of medicine and technology
- Combine their expertise in medical data management, patient care and information technology systems
- Analyze and interpret clinical data
- Work with staff to plan, implement and optimize healthcare information systems
- Provide training, project management and leadership within their organization

Accreditation

The health informatics accreditor of Southern Illinois University Edwardsville is the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). The College's accreditation for the Master of Science in healthcare informatics has been reaffirmed through 2027-2028.

SOUTHERN ILLINOIS UNIVERSITY
EDWARDSVILLE
GRADUATE SCHOOL

Capstone Experience

This program emphasizes the application of state-of-the-art computing technologies to healthcare. The capstone experience is an opportunity for students to apply knowledge to a health informatics issue. Participants will choose a topic that complements their interests and demonstrates what they have learned by creating a comprehensive project with practical significance, or a strong research base. The capstone experience allows for ongoing reflection of learning outcomes, and provides an opportunity to share the project findings.

BJC HealthCare Partnership with SIUE

In collaboration with the BJC Institute for Learning and Development (BILD), SIUE offers the following programs:

- Medical Technology Bachelor of Liberal Studies
- Master of Science (MS) in Healthcare Informatics for baccalaureate-prepared students with a healthcare background
- Accelerated online RN to BS program for nurses seeking the baccalaureate degree
- Master of Science (MS) Nurse Educator for nurses seeking a master's-level degree with an emphasis on education
- Master of Science (MS) Health Care and Nursing Administration for nurses seeking a master's-level degree with an emphasis on administration
- Post-Master's Doctor of Nursing Practice for master's-prepared nurses

These programs offer fully online courses and the opportunity to work on authentic projects at BJC. BJC pays tuition charges so students don't incur up-front costs for taking the courses.

Interested students are encouraged to contact Tracy Gerber, program student advisor, at tgerbe@siue.edu.

Admission Requirements

- Graduate School application and \$40 fee
- Submission of all academic transcripts
- Completion of a baccalaureate degree with a minimum GPA of 2.75/4.0
- Evidence of completion of an undergraduate or graduate statistics course with a grade of C or better
- Statement of Purpose: A written statement describing their background in healthcare and/or information technology and their reasons for pursuing a graduate degree in healthcare informatics
- International Applicants: This is a fully online program. International students cannot receive a visa to study in the U.S. for this program. Students are not eligible to enroll in this program from outside of the U.S. Individuals residing in the U.S. on a non-student visa, and citizens and permanent residents who completed their undergraduate degree outside of the U.S., must provide proof of English proficiency. Minimum requirements are TOEFL (79), IELTS (6.5) or equivalent.

Program application materials may be uploaded during the application process, but official transcripts must be sent directly from the school attended, and test scores must be verifiable with the appropriate testing service. Please contact the Graduate Admissions office with questions regarding the application submission process at graduateadmissions@siue.edu.

Application Deadlines

Students are admitted in fall and spring semesters only.

Graduation Requirements

Completion of required courses with a GPA of at least 3.0 (A=4.0), and a final presentation.

Time to degree completion

The majority of students complete the program in 24 months. Of the 23 students starting the program in fall 2020, a total of 17 (74%) completed the degree within 24 months. Two students dropped out and five are scheduled to graduate within 32 months.

Required Credit Hours/Tuition and Fees

- 36
- Visit siue.edu/graduate-tuition for detailed tuition information

Program of Study

NURS 509 (3 credit hours): Interdisciplinary Healthcare Informatics:

Introduces informatics terminology and theory, including searching, managing, and evaluating data, analyzing information systems, and integrating technology into practice.

NURS 511 (3 credit hours): Social, Ethical and Legal Issues in an Informative Age:

Explores social, ethical and legal issues related to searching, storing and using healthcare information and the ethical and legal formation of informatics professionals.

NURS 512 (3 credit hours): Managing Quality and Safety in Healthcare:

Examination of processes and integration of concepts used to measure and improve quality and effectiveness of health care. Examination and analysis of research statistics.

CMIS 515 (3 credit hours): Project Management Standard Process:

Is a framework of standard processes based on the Project Management Body of Knowledge and other resources. It includes processes for managing scope, time, quality, cost, human resources, communications, risk and procurement.

CMIS 517 (3 credit hours): Enterprise Resource Planning:

The role of Enterprise Resource Planning (ERP) software in the business environment will be explored using SAP. A risk management approach will be emphasized.

CMIS 518 (3 credit hours): Seminar in CMIS: Information Security:

An introduction to the technical and administrative aspects of information security and assurance. It provides an understanding of the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, and designing an effective information security system.

PBHE 537 (3 credit hours): Healthcare Informatics - Introduction to Epidemiology:

Causes, prevention, control of communicable, chronic, and degenerative diseases in various community settings. Examination of statistical measures and methods of organizing vital statistics.

IT 508 (3 credit hours): Seminar in IT: Instructional Design and Media Selection for Healthcare Informatics:

Provides healthcare informatics professionals with foundation in the skills of planning, designing, developing, implementing, and evaluating employee trainings.

PSYCH 576 (3 credit hours): Graduate Seminar in Organizational Development: Introduces early history, assumptions, concepts and various change strategies and human process approaches to planned change within a systems framework.

CS 430 (3 credit hours): Information Storage and Retrieval: Database system concepts, models, languages. Database design using entity/relationship, and relational models; querying using SQL.

CS 560 (3 credit hours): Information Discovery in Electronic Healthcare Records:

Analytical techniques for discovering information in electronic healthcare record systems through data mining, text mining, and visual analytics techniques.

HCIM 596a (1 credit hour): Capstone I: During Capstone I, the student will initiate their capstone project. The student will use their approved project proposal to do the background work and literature review. An outline of the final paper is required at the end of the course.

HCIM 596b (1 credit hour): Capstone II: During Capstone II, the student will continue their capstone project and submit a rough draft of their capstone project paper. The student will analyze the current system being replaced (or in need of replacement) and research viable IT solutions (potential solutions). The student will then identify and make an IT solution recommendation. A literature review concerning the background of the problem and technology based solution will be submitted along with the remainder of the initial (rough) draft of the capstone project paper.

HCIM 596c (1 credit hour): Capstone III: During Capstone III, the student will complete their capstone project and submit their final capstone project paper and deliver a presentation.

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Contact Information

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