

Graduate Certificate: Health Informatics

COLLEGE OF PUBLIC HEALTH (<http://cph.temple.edu>)

About the Certificate

The Health Informatics (HI) certificate is a 12-credit graduate certificate designed to provide students with the skills and competencies needed to embark on or advance a career in health informatics. The certificate program provides hands-on skills taught by industry leaders. The program is designed to expand students' understanding of privacy and security requirements, the role of standards and data exchange, and fundamentals associated with managing health IT. In addition, approximately 50 hours of training and assignments are conducted in an educational EHR setting, providing the student with hands-on skills. All courses are taught at the graduate level and certificate courses count toward the M.S. in Health Informatics if the student continues in the program.

Time Limit for Certificate Completion: 2 years

Campus Location: Online

Full-Time/Part-Time Status: The graduate certificate may be completed on a part-time basis.

Non-Matriculated Student Policy: The certificate program is not open to non-matriculated graduate students. Courses taken in the certificate program count toward the M.S. in Health Informatics if the student continues in the program.

Admission Requirements and Deadlines

Application Deadline:

Fall and Spring admissions are on a rolling basis. Apply at <https://sophasexpress.liaisoncas.com/>.

Bachelor's Degree in Discipline/Related Discipline: Applicants must hold a baccalaureate degree, having earned a cumulative GPA of 3.0 on a 4.0 scale, from an accredited college or university. Transcripts from all postsecondary institutions attended must be uploaded at SOPHAS Express (<https://sophasexpress.liaisoncas.com>).

Standardized Test Scores:

TOEFL/IELTS: Required for applicants whose native language is not English.

TOEFL: 79 iBT minimum

IELTS: 6.5 minimum on the academic version

Certificate Requirements

Number of Credits Required to Complete the Certificate: 12

Required Courses:

Code	Title	Credit Hours
HIM 5101	Fundamentals of Health Informatics	3
HIM 5112	Health Information Systems: Design and Decision Making	3
HIM 5127	Privacy and Security: Protecting Healthcare Data	3
HIM 5128	Health Data: Standards and Interoperability	3
Total Credit Hours		12

Contacts

Certificate Program Web Address:

<https://cph.temple.edu/healthadminpolicy/programs-offered/health-informatics-certificate>

Department Information:

Dept. of Health Services Administration and Policy
524 Ritter Hall Annex
1301 Cecil B. Moore Avenue
Philadelphia, PA 19122-6005

hlthinfo@temple.edu
215-204-5899

Submission Address for Application Materials:

<https://sophasexpress.liasoncas.com/>

Department Contacts:

Admissions:

CPH Office of Admissions
cph@temple.edu
215-204-5200

Graduate Program Director:

Thomas Martin, Ph.D.
trmartin@temple.edu
215-204-1892

Courses

HIM 5101. Fundamentals of Health Informatics. 3 Credit Hours.

This course provides an introduction to the history, reasoning, and development of systems focused on the generation, aggregation, and analysis of health data. Students will gain exposure to usability requirements - elements of design which impact selection - in addition to the issues impacting data liquidity in the healthcare system. The course will also consider the various types of health information systems that exist in organizations and serve as feeders to clinical repositories of information.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

HIM 5106. Technology for Population Health. 3 Credit Hours.

Individuals and organizations are increasingly dependent on technology for the creation of information relevant to health status. Technology is being utilized to monitor health or social behavior or provide interventions in the form of information, alerts, or the provision of information to advanced health practitioners. This course is intended to provide students an opportunity to assess existing and emerging technologies as they relate to the delivery of healthcare or the maintenance of health status.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

HIM 5111. Technology for Healthcare Financial Management. 3 Credit Hours.

This course examines the nexus of value based care, financial management, and healthcare payment. Students examine complex financial systems and explore the principles of payment as they apply to various types of health care settings. This course focuses on payment policy and reporting requirements, and the students become familiar with topics such as fraud and abuse, revenue cycle management, integration of clinical and financial systems, charge master data, and managerial implications of alternative payment models.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

HIM 5112. Health Information Systems: Design and Decision Making. 3 Credit Hours.

This course provides an introduction to the effective management of health informatics systems. Students will gain an understanding of the technical foundations required for the successful management of health informatics systems and the impact of adopting initiatives relative to an organization's operational and strategic goals. Students gain an exposure to industry benchmarking and appropriately valuing technology in healthcare. Topics related to the use of IT as a strategic resource, forming strategic health IT plans, the importance of stakeholders in health IT programs, and emerging healthcare technologies are explored.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

HIM 5113. Database Administration for Health Informatics Professionals. 3 Credit Hours.

Modern life science organizations rely on databases for transaction management, data analysis, outcomes assessment, and to satisfy the internal needs of the organization as well as to satisfy regulatory, legal, and accrediting bodies. The goal of the course is to provide hands-on use of database management tools promoting a strong understanding of database design, data modeling and structured query language for data definition and data manipulation, and data analysis tools including pivot tables. In addition, the course will explore operational database systems versus analytic systems, the importance of database design on data integrity, data warehousing, and data mining at modern health science organizations. Data formats, collection, and integrity as they relate to continual performance improvement, with specific attention to practitioner performance, are also stressed.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

HIM 5114. Health Informatics Project Management. 3 Credit Hours.

The development of interoperable electronic health record systems has resulted in increased systems integration, convergence, and complexity. Nearly half of all IT projects fail to meet budget, schedule, and functionality. The course provides a hands-on approach to systems analysis and management of health informatics (HI) projects. Students will be introduced to the concepts of managing HI projects by focusing on initiating, planning, executing, controlling, and closing projects in the context of topics such as integration, scope, timing, cost, quality, human resource, technology, communications, and risk and procurement. Students will also be provided an opportunity to analyze functional requirements for HI projects using a variety of process modeling approaches.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

HIM 5127. Privacy and Security: Protecting Healthcare Data. 3 Credit Hours.

This course focuses on privacy and confidentiality and current legislative and health policy issues for electronic health record systems (EHRs). Ethical issues related to EHRs and advocacy of patients' and consumers' needs are explored. The course provides students with an understanding of regulatory requirements related to the protection of health information and introduces technical approaches to ensure compliance.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

HIM 5128. Health Data: Standards and Interoperability. 3 Credit Hours.

This course provides an introduction to the principles of healthcare interoperability and provides foundation in healthcare standardization related to: privacy, security, clinical vocabularies, data messaging, architectural framework, data content, and the meaningful use of electronic health record systems (EHRs). The course explores the role of healthcare standards in supporting interoperability, patient care, research, and the practice of evidence-based medicine. National and international standards development efforts are also discussed.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

HIM 5129. Health Data Analysis. 3 Credit Hours.

Healthcare delivery systems require capabilities to effectively generate, aggregate, and analyze data relevant to the optimal delivery of healthcare and maintenance of health. This course is intended to build on the competencies gained in previous courses surrounding the creation, structure and maintenance of clinical datasets, patient generated health data, and elements of the digital medical record. The course is designed to embrace team based approaches to solving complex issues in the healthcare delivery system. Students will use data visualization tools paired with quantitative data driven techniques which aid in addressing the challenges in the Triple Aim in healthcare. This course will enable the student to build a basic working knowledge of data analysis, dash boarding, and clinical intelligence platforms using appropriate methodologies.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

HIM 8013|Minimum Grade of B-|May not be taken concurrently.

HIM 9082. Independent Study in Health Informatics. 1 to 3 Credit Hour.

This course provides students the opportunity to work independently under the direction of a faculty advisor to gain a deeper understanding of an area in Health Informatics.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

HIM 9995. Capstone Project. 3 Credit Hours.

The capstone course is the culminating class for students in the Health Informatics program. Students will create strategies and approaches that focus on various disciplines of health informatics such as topics relating to the Electronic Health Record, Health Information Exchange, Meaningful Use, and Ethical/Legal issues. In addition, students will analyze systems and evaluate potential decisions from the persona of senior level healthcare executives.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Health Serv Admin & Policy.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Health Informatics.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Degree Restrictions: Must be enrolled in one of the following Degrees: Master of Science.

College Restrictions: Must be enrolled in one of the following Colleges: College of Public Health.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

(HIM 8001|Minimum Grade of B-|May not be taken concurrently)
OR HIM 5101|Minimum Grade of B-|May not be taken concurrently)
AND (HIM 8013|Minimum Grade of B-|May not be taken concurrently)
OR HIM 5113|Minimum Grade of B-|May not be taken concurrently)
AND (HIM 8030|Minimum Grade of B-|May be taken concurrently)
OR HIM 5130|Minimum Grade of B-|May be taken concurrently)
AND (HIM 8027|Minimum Grade of B-|May be taken concurrently)
OR HIM 5127|Minimum Grade of B-|May be taken concurrently)
AND (HIM 8028|Minimum Grade of B-|May be taken concurrently)
OR HIM 5128|Minimum Grade of B-|May be taken concurrently)
AND (HIM 5006|Minimum Grade of B-|May not be taken concurrently)