# **Health Informatics MS**

COLLEGE OF PUBLIC HEALTH

Learn more about the Master of Science in Health Informatics.

### **About the Program**

Health Informatics is the intersection of healthcare, information science and computer science. The MS in Health Informatics (MSHI) is an innovative, interdisciplinary, applied graduate degree program that addresses the intersection of healthcare and information technology to develop efficient systems, processes and uses of health data across the continuum of healthcare delivery to improve patient care and advance individual and population health outcomes. The MSHI is focused on the resources, devices and methods to optimize healthcare delivery. The program helps students develop the competencies and acquire the practical tools to succeed in today's digital healthcare environment. Current students include physicians, nurses, therapists, data analysts, and information technology and allied health professionals. The degree is also well suited for individuals with no prior healthcare or information technology experience.

The MSHI is available in both in-person and online formats that are designed for professionals and individuals located both within and outside the metropolitan Philadelphia region or who travel extensively for professional reasons. Course formats include in-person and hybrid courses for the in-person format, and a mix of asynchronous and synchronous courses with online synchronous sessions meeting via online conferencing for the online format. The program is offered across traditional semesters as well as some limited seven-week terms (six weeks in two summer sessions).

For those interested in studying health informatics who cannot commit to pursuing a master's degree, a graduate certificate in Health Informatics is also offered by the College of Public Health. Coursework completed for the certificate may later be applied to the MSHI.

Time Limit for Degree Completion: 5 years

Campus Location: Main and Online

Full-Time/Part-Time Status: The degree can be completed on a full- or part-time basis.

Interdisciplinary Study: The degree program is interdisciplinary in nature with a focus on inquiry, insight and innovation. The program builds an awareness of both clinical and technical challenges in the field.

Accreditation: The curriculum meets the curricular requirements of the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM®), which is the accrediting body of the American Medical Informatics Association (AMIA).

Areas of Specialization: For the MSHI program, students choose between two tracks:

- 1. The Project Track requires completion of HIM 5114 and HIM 9995.
- 2. The Thesis Track requires completion of HIM 8016 and HIM 9996.

Job Prospects: Graduates of the program obtain positions in a variety of healthcare institutions or vendor settings in a wide range of positions such as electronic health record system implementation specialist, health data analyst and project manager. A number of external organizations, including AHIMA®, the American Medical Informatics Association (AMIA®), and the Healthcare Information and Management Systems Society (HIMSS), conduct annual surveys of job prospects.

Non-Matriculated Student Policy: Non-matriculated students may take a maximum of 9 graduate-level credits. Upon completion of the credits, a student's academic performance is reviewed.

**Transfer Credit:** Graduate-level credits earned at another accredited institution may be evaluated during the application process. The maximum number of graduate credits a student may transfer is 6.

**Financing Opportunities:** Students in the online MSHI program are generally working professionals. Therefore, funding for assistantships and academic internships is limited. There are limited opportunities for assistantships for full-time in-person students.

## **Admission Requirements and Deadlines**

#### **Application Deadline:**

Fall: March 1

The application process requires submission through the Centralized Application Service for Public Health (SOPHAS). The system can be accessed at https://sophas.liaisoncas.com/.

Letters of Reference:

#### Number Required: 3

From Whom: Recommendations should be obtained from faculty and/or professionals familiar with the applicant's academic competence and/or professional work experience.

Bachelor's Degree in Discipline/Related Discipline: All applicants must present credentials that are the equivalent of an accredited baccalaureate degree. The minimum acceptable undergraduate GPA is 3.0.

A WES evaluation is required for applicants who completed their bachelor's degree outside of the United States. This can be requested at https://www.wes.org/ and submitted through SOPHAS.

Statement of Goals: Demonstrate your professional writing ability as you describe your interest in obtaining the MSHI degree. Your statement should address the impact of informatics on health and healthcare as well as the effect a graduate degree can have on one's career.

#### **Standardized Test Scores:**

GRE optional. Applicants who believe GRE scores would complement their application are encouraged to submit scores. If submitted, quantitative and verbal scores are expected to be in the 50th percentile or above. Official GRE scores should be sent to SOPHAS using code 0151.

Applicants who earned their baccalaureate degree from an institution where the language of instruction was other than English, with the exception of those who subsequently earned a master's degree at a U.S. institution, must report scores for a standardized test of English that meet these minimums:

• TOEFL iBT: 79 (send officially to SOPHAS using the SOPHAS-specific TOEFL code 5688)

IELTS Academic: 6.5PTE Academic: 53Duolingo: 110

Resume: Current resume required.

Laptop: All incoming students in the College of Public Health are required to have a laptop. Academic programs in the college are technology intensive. They incorporate statistical and database analyses; utilize specialized tools for athletic training, kinesiology and physical therapy; stream audio and video for communication sciences; facilitate online interactive counseling for social work; and foster clinical experiences and online assessments. The laptop requirement enables the College of Public Health to improve opportunities for active learning and provide greater access to specialized software and required tools in and out of the classroom, better preparing students for the workforce. Learn more about device specifications and suggested vendors. Students can use excess financial aid (i.e., funds that are reimbursed after all tuition and fees are paid) to meet student needs, including the purchase of a laptop. Scholarships may also provide funding.

## **Program Requirements**

### **General Program Requirements:**

Number of Credits Required Beyond the Baccalaureate: 36

#### Required Courses:

Code	Title	Credit Hours
Core Courses		
HIM 5101	Fundamentals of Health Informatics	3
HIM 5102	Applications of Computer Programming in Health Informatics	3
HIM 5113	Database Administration for Health Informatics Professionals	3
HIM 5128	Health Data: Standards and Interoperability	3
HIM 5129	Health Data Analysis	3
HRPR 5001	Current and Emerging Issues in Public Health and Health Professions <sup>1</sup>	0
Advanced Electives		
Select five from the following: <sup>2</sup>		15
HIM 5106	Technology for Population Health	
HIM 5111	Technology for Healthcare Financial Management	
HIM 5112	Health Information Systems: Design and Decision Making	
HIM 5127	Privacy and Security: Protecting Healthcare Data	
HIM 5212	Application Development in Public Health	
HIM 5213	Informatics Solution Design and Development for Health Data and Its Applications	
HIM 5256	Global Health Informatics	

<b>Total Credit Hours</b>		36
HIM 9996	Health Informatics Thesis	
HIM 8016	Principles and Practices of Health Informatics Research <sup>3</sup>	
Thesis Track		
HIM 9995	Capstone Project	
HIM 5114	Health Informatics Project Management <sup>3</sup>	
Project Track		
Select a track and comple	ete its requirements:	6
Track-Specific Research	h Courses	
HPM 5122	Healthcare Quality and Safety	
HPM 5006	Political and Economic Aspects of Health	
HIM 8216	Applications of Machine Learning for Health Informatics	
HIM 5299	Introduction to Language Processing and Text Mining for Health Professionals	

This common College Core course is required of all incoming graduate students in the College of Public Health. It is available completely online and designed such that students can complete the modules at their own pace over the course of their degree program.

Five electives are taken from the list of Advanced Electives. With approval from the Program Director, other graduate courses, with the exception of HIM 5114 and HIM 8016, may be substituted as an advanced elective.

3 HIM 5114 and HIM 8016 can only count once. These courses may not be substituted as an advanced elective.

## **Full-Time On-Campus or Online MSHI**

Year 1		
Fall		Credit Hours
HIM 5101	Fundamentals of Health Informatics	3
HIM 5102	Applications of Computer Programming in Health Informatics	3
HIM 5113	Database Administration for Health Informatics Professionals	3
HRPR 5001	Current and Emerging Issues in Public Health and Health Professions <sup>1</sup>	0
	Credit Hours	9
Spring		
HIM 5128	Health Data: Standards and Interoperability	3
HIM 5129	Health Data Analysis	3
Advanced Elective		3
	Credit Hours	9
Year 2		
Fall		
Three Advanced Electives		9
	Credit Hours	9
Spring		
Both Track-Specific Courses		6
Advanced Elective <sup>2</sup>		3
	Credit Hours	9
	Total Credit Hours	36

<sup>&</sup>lt;sup>1</sup> This common College Core course is required of all incoming graduate students in the College of Public Health. It is available completely online and designed such that students can complete the modules at their own pace over the course of their degree program.

Students may elect to complete this Advanced Elective in the Summer term of Year 1.

### Part-Time On-Campus or Online MSHI

Year 1		
Fall		Credit Hours
HIM 5101	Fundamentals of Health Informatics	3
HIM 5113	Database Administration for Health Informatics Professionals	3
	Credit Hours	6
Spring		
HIM 5128	Health Data: Standards and Interoperability	3
HIM 5129	Health Data Analysis	3
HRPR 5001	Current and Emerging Issues in Public Health and Health Professions <sup>1</sup>	0
	Credit Hours	6
Summer		
Advanced Elective		3
	Credit Hours	3
Year 2		
Fall		
HIM 5102	Applications of Computer Programming in Health Informatics	3
Two Advanced Electives		6
	Credit Hours	9
Spring		
Both Track-Specific Courses		6
	Credit Hours	6
Summer		
Two Advanced Electives		6
	Credit Hours	6
	Total Credit Hours	36

This common College Core course is required of all incoming graduate students in the College of Public Health. It is available completely online and designed such that students can complete the modules at their own pace over the course of their degree program.

Minimum Grade to be Earned for All Required Courses: B-

Culminating Event: Successful completion of coursework is required to earn the MSHI.

## **Accelerated Programs**

Undergraduate students may opt to pursue an accelerated +1 program, enabling them to complete both a bachelor's degree and master's degree in less time than the traditional route.

The accelerated pathway for the Health Informatics MS is available to students pursuing the following:

• Public Health BS

· Health Professions BS

Cohort Code: XMSHIHP

Minimum Cumulative GPA: 3.00

### **Graduate Courses Approved to Count for Both Undergraduate and Graduate Degrees**

Code	Title	Credit Hours
HPM 5006	Political and Economic Aspects of Health <sup>1</sup>	3
HIM 5101	Fundamentals of Health Informatics <sup>2, 3</sup>	3
HIM 5102	Applications of Computer Programming in Health Informatics 2,4	3
HIM 5128	Health Data: Standards and Interoperability <sup>2.3</sup>	3

- For Public Health and Health Professions majors: HPM 5006 can be used to replace the requirement of HPM 2214 in the undergraduate degree. If HPM 2214 has already been completed, the student must still take HPM 5006.
- For Health Professions majors: HIM 5101, HIM 5102, and HIM 5128 can be used to fulfill undergraduate major electives.
- For Public Health majors: HIM 5101 and HIM 5128 can be used to fulfill Public Health elective requirements.
- <sup>4</sup> For Public Health majors: HIM 5102 can fulfill a Cognate Elective requirement in the undergraduate major.

### **Suggested Academic Plan**

Course	Title	Credit Hours
Year 3		
Spring		
HIM 5102	Applications of Computer Programming in Health Informatics	3
	Credit Hours	3
Year 4		
Fall		
HIM 5101	Fundamentals of Health Informatics	3
	Credit Hours	3
Spring		
HIM 5128	Health Data: Standards and Interoperability	3
HPM 5006	Political and Economic Aspects of Health	3
	Credit Hours	6
	Total Credit Hours	12

### **Admissions Criteria**

Candidates for the +1 program must:

- be a declared Public Health or Health Professions major.
- take 12 graduate credits.
- earn a B or better in graduate courses.
- take no more than 18 credits per term once starting the +1 program.
- if a junior status entrant, be able to complete their undergraduate degree within two years of program entry; if a senior status entrant, be able to complete their undergraduate degree within one year of program entry.
- complete the graduate degree in one additional year including one summer term.

### **Contact Information**

For Public Health BS Students: Caite Wolak, MPH caite.wolak@temple.edu

For Health Professions BS Students: Wendy Cheesman wendy.cheesman@temple.edu

#### **Contacts**

## **Program Web Address:**

https://www.temple.edu/academics/degree-programs/health-informatics-ms-hp-hlti-ms

### **Department Information:**

Dept. of Health Services Administration and Policy Ritter Hall Annex, 9th Floor 1301 Cecil B. Moore Avenue Philadelphia, PA 19122-6005 hlthinfo@temple.edu 215-204-8726

## **Submission Address for Application Materials:**

https://sophas.liaisoncas.com/

## **Department Contacts:**

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

Program Director: Bari Dzomba, MS, PhD bari.dzomba@temple.edu 215-204-1892

Chairperson: Huanmei Wu, PhD huanmei.wu@temple.edu 215-204-8163