HEALTH INFORMATICS, GRADUATE CERTIFICATE

Phone: 216.368.5957
Lauren Mazzagatti, MS
informatics@case.edu

Credential: Graduate Certificate
Field of Study: Health Informatics

Program Overview

Students who want to explore Biomedical and Health Informatics without – or before – committing to a Master's program, can take a series of four or five courses that provide an overview and grounding in the fundamentals with practical applications in research, clinical care and population health. If a student chooses to continue to a Master's program within our department, all courses are transferable. This program can take from one year up to two and a half years to complete, depending on the student's chosen pace.

This 15 credit hour Graduate Certificate is issued through the School of Graduate Studies and will show on an official Case Western Reserve transcript. The department also offers a Departmental Graduate Certificate that does not show on an official Case Western Reserve University transcript. Please review the School of Medicine Program page for additional information.

Graduate Policies

For graduate policies and procedures, please review the School of Graduate Studies section of the General Bulletin.

Program Requirements

Code	Title	Credit Hours
Required Courses:		**6**
PQHS 413	Introduction to Data Structures and Algorithms in Python	
PQHS 416	AI in medicine: knowledge representation and deep learning	

Electives can be selected to tailor a concentration that resonates with a student's interests.

Code	Title	Credit Hours
Health Informatics Management Concentration		**9**
Choose two of the following:		
EBME 473	Fundamentals of Clinical Information Systems	
HSMC 412	Lean Services Operations	
HSMC 456	Health Policy and Management Decisions	
HSMC 420	Health Finance	
PQHS 471	Machine Learning & Data Mining	
Choose one of the following:		
PQHS 431	Statistical Methods I	
CRSP 401	Introduction to Clinical Research Summer Series	

Code	Title	Credit Hours
Clinical Informatics Concentration		**9**
Choose two of the following:		
EBME 473	Fundamentals of Clinical Information Systems	
MPHP 467	Comparative and Cost Effectiveness Research	
MPHP 468	The Continual Improvement of Healthcare: An Interdisciplinary Course	
PQHS 471	Machine Learning & Data Mining	
PQHS 515	Secondary Analysis of Large Health Care Databases	
Choose one of the following:		
CRSP 401	Introduction to Clinical Research Summer Series	
MPHP 405	Statistical Methods in Public Health	
PQHS 431	Statistical Methods I	

Code	Title	Credit Hours
Bioinformatics Concentration		**9**
CSDS 459	Bioinformatics for Systems Biology	
PQHS 451	A Data-Driven Introduction to Genomics and Human Health	
PQHS 471	Machine Learning & Data Mining	