Health Informatics, Minor

The minor in health informatics prepares students to understand the expanding role of information technology in health care. Doctors, nurses, public health officials, and administrators all interact with information technology and, at times, are intimately involved in the design of information technology solutions to health care issues. Students in the minor learn about the possibilities and limitations of information technology, how its use is changing the health care profession, and how the design of information technology must be performed principally with the users and a range of domain considerations in mind.

The minor is ideally suited for students in programs such as nursing science, public health sciences, and pharmaceutical sciences, as well as students in Bren School majors who wish to gain strong exposure to the domain of health informatics.

The minor includes course work and fieldwork covering a variety of health care settings, including the hospital, doctor's office, and home care. Students completing the minor will gain practical experience in understanding the health care needs of communities and individuals, and in designing information technology solutions that serve them better.

The minor offers flexibility in the courses that students choose to take, and does not require prior programming experience. While it is possible to enroll in more technical classes, it is also possible to complete the minor without taking courses in programming.

A. Select three core courses from the following:	
IN4MATX 171	Introduction to Health Informatics
IN4MATX 172	Project in Health Informatics
IN4MATX 173	Consumer Health Informatics
or IN4MATX 174	Health Data Analytics
B. Select two Informatics, Technology, and Data Science courses from the following:	
I&C SCI 4	Human Factors for the Web
I&C SCI 10	How Computers Work
I&C SCI 20	Invitation to Computing
I&C SCI 31	Introduction to Programming
I&C SCI 32	Programming with Software Libraries
I&C SCI 32A	Python Programming and Libraries (Accelerated)
IN4MATX 121	Software Design: Applications
IN4MATX 131	Human Computer Interaction
IN4MATX 133	User Interaction Software
IN4MATX 173	Consumer Health Informatics
or IN4MATX 174	Health Data Analytics
IN4MATX 143	Information Visualization
COMPSCI 111	Digital Image Processing
COMPSCI 121/IN4MATX 141	Information Retrieval
COMPSCI 122A	Introduction to Data Management
COMPSCI 131	Parallel and Distributed Computing
COMPSCI 134	Computer and Network Security
COMPSCI 145	Embedded Software
COMPSCI 171	Introduction to Artificial Intelligence
COMPSCI 178	Machine Learning and Data-Mining
IN4MATX 151	Project Management
IN4MATX 161	Social Analysis of Computing
IN4MATX 162W	Organizational Information Systems
STATS 7	Basic Statistics
STATS 8	Introduction to Biological Statistics
STATS 67	Introduction to Probability and Statistics for Computer Science
C. Select two Health Sciences courses from the following:	
PUBHLTH 1	Principles of Public Health
PUBHLTH 2	Case Studies in Public Health Practice

PUBHLTH 91	Disparities in Health Care
PUBHLTH 101	Introduction to Epidemiology
PUBHLTH 122	Health Policy
PUBHLTH 127	Public Health Programs for the Corporate World
PUBHLTH 125	Foundations of Community Health

NOTES: A student must earn a grade of C or better in all courses used to satisfy the requirements of this minor. Students who take both IN4MATX 173 and IN4MATX 174 can count one of them toward either section B or C.

- Digital Information Systems, Minor
- Game Design and Interactive Media, B.S.
- Informatics, B.S.
- Informatics, M.S.
- Informatics, Minor
- Informatics, Ph.D.
- Master of Human Computer Interaction and Design
- Master of Software Engineering
- Software Engineering, M.S.
- Software Engineering, Ph.D.