Software Engineering Options Continued

Department of Electrical and Computer Engineering

Option F: Health Informatics Option

Health Informatics is the discipline that addresses all aspects of health information: nature and structure of health information, capture, organization, processing, integration, storage, management, visualization, communication, use of health information, and the technologies and methods to support these activities. Thus, it is a discipline at the intersection of information science and health care. Therefore, there is a growing demand for software engineers with knowledge of the best practices in the software engineering field combined with in-depth training in health informatics.

This interdisciplinary option prepares software engineers to work in the health care and medical domains, particularly in the development of electronic medical records, health information systems, large-scale health data management, and medical imaging.

The Department of Electrical and Computer Engineering offers a comprehensive degree in Software Engineering. This option expands the choices for students interested in health informatics by allowing them in their fourth year to take two courses related to health informatics offered by the Schulich School of Medicine & Dentistry, plus one course on medical physics delivered by the Department of Physics and Astronomy. These courses give students the needed expertise in health informatics, health information management, and medical imaging. Students in Software Engineering (Health Informatics Option) graduating in this option increase their employability with many opportunities in the health-care industry and hospitals.

Students entering the Software Engineering - Health Informatics Option follow the first three years as other students in the Software Engineering program. A student who wishes to enrol in the Health Informatics option must have completed third year of the Software Engineering Program.

Fourth-Year Program
SE 4450*, Business 2299, Physics 2600, SE 4452a, SE 4472a Pathology 4100F, SE 4453b, Pathology 4110G, Eng Sci 4498G, 0.5 non-technical elective from the approved list.

*Note: The topic of the SE 4450 capstone project must be in the Health Informatics field.