# Information Technology (ITEC)

# Information Technology (ITEC) Courses ITEC 1005 [0.5 credit]

# Web Development

Introduction to Web development. Combining graphics, text, audio, and video to create Web sites; developing different, major working Web sites on an individual basis and in groups, using valid HTML5, cascading style sheets (CSS3), JavaScript and XML structures. Precludes additional credit for IMD 1005. Lectures and tutorials five hours a week.

# ITEC 1100 [0.5 credit]

# Introduction to Interactive Media Design

Overview of interactive multimedia design: usercentred and web design, mark-up languages, project management, design processes for video games, visual effects in movies, ethics, current trends in the field. Precludes additional credit for IMD 1000. Prerequisite(s): For students not enrolled in CSIT programs.

Lectures three hours a week.

#### ITEC 1400 [0.5 credit]

# Introduction to Programming and Problem Solving

Introduction to systematic problem solving including defining and modelling problems, testing, debugging and results analysis, numeric methods, data presentations and abstraction, class relationships and program style and documentation.

Precludes additional credit for BIT 1400, IMD 1003 (no longer offered), NET 1000 (no longer offered), PLT 1000 (no longer offered).

Lectures/tutorials six hours a week.

# ITEC 2000 [0.5 credit]

#### **Multimedia Data Management**

Issues involving the back-end organization of information focusing on databases and database design, server-side scripting, the structured query language (SQL), digital rights management, and watermarking.

Precludes additional credit for BIT 2008, COMP 2006 (no longer offered), IRM 2000 (no longer offered), IMD 2000 (no longer offered).

Lectures and tutorials five hours a week.

#### ITEC 2100 [0.5 credit] Data Visualization

Web-based data visualization techniques and systems. Good design practices for visualization, tools for visualization of data from a variety of fields, and programming of interactive web-based visualizations focusing on JavaScript, CSS, SVG and the D3 library. Includes: Experiential Learning Activity Lectures/labs five hours a week.

# ITEC 2400 [0.5 credit] Intermediate Programming

Introduction to object oriented programming using C++ language. Topics include detailed study of pointers and structures, inheritance, polymorphism, object-oriented program design, class libraries, user interface objects. Precludes additional credit for BIT 2400, IMD 2004 (no longer offered), PLT 2004 (no longer offered). Lectures three hours a week, tutorial three hours a week.

#### ITEC 3100 [0.5 credit] Immersive Storytelling

The craft of digital storytelling, creating compelling online and game-engine packages. Using a variety of narrative formats, interactive tools, and digital content, including blogs and RSS feeds, developing an in-depth story using leading edge technologies and techniques. Includes: Experiential Learning Activity Workshop three hours a week.