Bachelor of Science in Computer Science and Information Systems

Program Overview

Upon successful completion of the BSCO program students will:

- be able to evaluate, synthesize, and utilize information from a number of disciplines;
- effectively and professionally communicate technical information, in both oral and written forms, to both specialist and non-specialist audiences;
- apply the underlying knowledge and skills of the computer sciences to real-world challenges and situations;
- work effectively work both as individuals and as members and leaders of multi-disciplinary teams;
- analyze complex problems and use computer science tools and techniques to develop a hypothesis and created a potential solution;
- carry out ethical decision making within the field of computer science.

Requirements

Mathematics

MA 107	Precalculus Mathematics	4
MA 121	Calculus I	4
MA 122	Calculus II	4
MA 380	Theory of Computation	3
MA 306	Discrete Mathematics	3
MATH 232	Elementary Statistics	3

Electrical/Computer Engineering

EE 215	Fundamentals of Digital Design	4
EE 321	Embedded Systems	4

Computer Science

CYBR 110	Introduction to Computer Programming	3
CS 228	Introduction to Data Structures	3
CS 301	Software Engineering	3
CS 270	Operating Systems & Parallelism	3
CSIS 370	Computer Architecture and Reverse Engineering	4
*CSXXX	(Capstone)	6
CYBR 201	Fundamentals of Computer Networking	3
CYBR 210	Computer Programming with a High Level Language	3
CYBR 215	Computer Programming with a Low Level Language	3
CYBR 230	Relational Databases with SQL	3

* courses in development but not yet approved by the University Curriculum Committee

Total Cr.	**63**

Faculty

Faculty Member	Institution at which highest degree was earned
Henry Collier (Program Manager)	Champlain College