COMPUTER SCIENCE

This study involves the scientific and mathematical study of algorithms used in designing and building computers and their application in the development of actual computing systems.

Employment Opportunities
Computer Scientist, Systems Analyst, Network / Systems Administrator and more

COMPUTER INFORMATION SYSTEMS

This study involves an overview of the design, development and operation of electronic data storage and processing systems, including hardware and software.

Employment opportunities
Analyst / Programmer, Software Developer, Systems Programmer, Network / Technical Support, Data Communications & Network Engineer, Control & Industrial Systems Developer

BUSINESS INFORMATION TECHNOLOGY

This study prepares individuals to apply software theory and programming methods to the solution of business data problems.

Employment opportunities
Business Analyst, Analyst Programmer, Consultant, Educator, Systems Analyst, Manager, Researcher, Database & Network Administrator

MULTIMEDIA DEVELOPMENT / SYSTEMS

This study provides students with the technical, creative, and business skills necessary to design, develop, market and manage digital media.

Employment opportunities
Broadcast Production, Animation, Corporate Communications, Marketing, Telecommunications, Advertising, Animation, Media Research & Production, Development of Learning & Teaching Materials or Desktop Publishing

COMPUTATIONAL BIOLOGY

Computational Biology concerns the development and application of data-analytical and theoretical methods, mathematical modeling and computational simulation techniques to study biological, behavioral and social systems. Solving biological and biomedical problems using mathematical and computational methods, Computational Biology is recognized as an essential element in modern biological and biomedical research.

Work in Computational Biology might range from analysis of genomic sequences to visualizing the activity of an animal’s nervous system or modeling the responses of plants to changing environmental conditions.

Employment opportunities
Pharmaceutical Companies, Scientific Software Companies, Biotechnology Companies, Health & Research Institutes, Medical Laboratories, Research & Testing Laboratories / Institutions

SOFTWARE DEVELOPMENT / PROGRAMMING

This study involves the application of mathematical and scientific principles to the design, implementation, validation, and management of computers for mainframe and personal computers.

Employment opportunities
Software Engineer, Systems Project Manager, Systems Programmer, Systems Analyst, Software Developer, Systems Administrator, Consultant, Computer Systems Manager

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Management Information Systems

This study involves the development and management of data systems and related facilities for processing and retrieving internal business information.

Employment opportunities
IT Analyst, IS Specialist, Applications Specialist, Web Solutions Specialist, Technical Consultant, Applications Consultant, IT / Management Consultant, Enterprise Systems Consultant, Solutions Architect / Applications Architect, IT Manager, MIS Manager, Project Manager or Data Analyst
CYBER SECURITY / INFORMATION ASSURANCE

Cyber Security or the Cyber Information Assurance major is designed to address the growing demand for expertise in defending critical infrastructure from threats and cyber-attacks.

The study includes risk and threat assessment for computer systems and data, development of prevention procedures and reaction to data and computer-related security breaches, computer system security plan documentation, configuration, testing and implementation of any security software and/or technologies and providing protection and disaster recovery to companies’ business systems.

Employment opportunities

Popular universities for Computer Science

**US Universities**
- Indiana University of Pennsylvania
- Iowa State University
- Kansas State University
- Michigan State University
- Ohio State University
- University at Buffalo
- University of Iowa
- University of Kansas, Lawrence
- University of Mississippi
- University of Missouri, Kansas City
- University of Nebraska, Lincoln
- University of Oklahoma, Norman
- University of Wisconsin, Madison
- Wichita State University
- Winona State University

**Canadian Universities**
- Acadia University
- Trent University
- University of Lethbridge
- University of Manitoba
- University of New Brunswick
- University of Saskatchewan
- University of Waterloo
- University of Windsor

Sample curriculum for Year 1 & 2

- Calculus with Analytic Geometry 1
- Calculus with Analytic Geometry 2
- Calculus with Analytic Geometry 3
- C-Language & Unix Operating System
- Computer Systems / Computer Organization & Assembly Language
- Database Systems
- English Composition 1
- English Composition 2
- Essentials of Public Speaking
- Fine Arts Electives
- General Chemistry 1, Lab
- General Chemistry 2, Lab
- General Physics 1, Lab
- General Physics 2, Lab
- Humanities Electives
- Introduction to Computers & Information Processing
- Introduction to Linear Algebra
- Information Structures
- Introduction to Discrete Structure
- Natural Sciences Electives
- Programming in Java
- Programming in C++
- Social Sciences Electives