

Print Friendly Version - Humber College

[Skip to content](#)

[Back to Program Page](#)

[Print](#)

[Print/PDF Help](#)

[Share](#)

Computer Programming and Analysis

Advanced Diploma

Program Code: CP311

Campus: North, Online

Length: 6 semesters

Humber's Computer Programming and Analysis advanced diploma program is designed to prepare you for a wide variety of employment opportunities.

In addition to learning programming skills in a variety of languages, from Java and ASP.NET to PHP, JavaScript, Python and mobile development.

Students also learn about the standards of planning, developing, testing and deploying integrated software solutions. In addition, students learn about the business aspects of software development.

Graduates of this program are prepared to analyze business requirements and justify solutions for the improvement or automation of business processes.

This program offers an optional co-operative education placement. Optional co-operative education placement enables you to apply your learning in a real-world setting.

For students who are accepted into the program, three optional co-operative education placements will take place. The first four-month placement occurs during the second semester, the second during the fourth semester, and the third during the sixth semester.

Courses

Semester 1

CPAN 111: Database Concepts and Design

CPAN 113: Fundamentals of JavaScript

CPAN 116: Algorithms and Problem Solving

CPAN 133: Operating Systems

CPAN 134: Web Programming and Design

WRIT 120: Technical Reading and Writing Skills

Semester 2

CPAN 112: Fundamentals of Numeric Computing

CPAN 121: Database Programming

CPAN 131: Object-Oriented Programming

CPAN 144: Advanced Front-End Programming

GNED 101: An Introduction to Arts and Sciences

WRIT 220: Technical Workplace Writing Skills

Semester 3

CPAN 209: Systems Design

CPAN 211: Data Structures and Algorithms

CPAN 212: Modern Web Technologies

CPAN 213: Cross-Platform Mobile Application Development

CPAN 214: High-Level Programming Languages

Select 1 from the following courses

GNED: General Elective

Semester 4

CPAN 224: Application Testing

CPAN 225: Principles of Project Management

CPAN 226: Network Programming

CPAN 227: Advanced Database Programming

CPAN 228: Web Application Development

WORK 111: Career Path Development

Select 1 from the following courses

GNED: General Elective

Semester 5

CPAN 314: Project Development I

Select 5 from the following courses

CPG5: Computer Programming Sem - 5

Semester 6

CPAN 324: Project Development II

Select 5 from the following courses

CPG6: Computer Programming Sem - 6

Admission Requirements

Admission selection is based on the following 3 requirements:

. Academic

To be eligible for admission, you must possess the following:

Ontario Secondary School Diploma (OSSD) or equivalent including these required courses:

Grade 12 English (ENG4C or ENG4U or equivalent)