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Engineering - Information Systems Engineering, Bachelor of  
Honours Degree

Program Code: IS411

Campus: North

Length: 8 semesters

Humber's Bachelor of Engineering program begins with a common platform of first year courses which provides foundational engineering knowledge.

The Bachelor of Engineering - Information Systems Engineering discipline prepares you for an interdisciplinary field of study that equips you with the skills and knowledge to succeed in the engineering profession.

The program also provides project-based learning, experiential learning with hands-on and practical training, applied research opportunities and a co-operative education placement.

A co-operative education placement (three consecutive work terms, 420 hours each) ensures that work-integrated learning experience is a key component of the program.

Courses

Semester 1

ALGB 1100: Linear Algebra

CALC 1100: Calculus 1

ENGI 1000: Physics 1

ENGI 1010: Introduction to Engineering

ENGI 1020: Engineering in Society

ENGI 1021: Technical Communication and Critical Thinking for Engineers

Semester 2

CALC 1500: Calculus 2

ENGI 1500: Physics 2

ENGI 1510: Engineering Design

ENGI 1511: Engineering Materials

ENGI 1512: Teamwork and Leadership for Engineers

ENGI 1515: Introduction to Programming

Semester 3

DISC 2100: Discrete Mathematics

ENGI 2000: Engineering Project Management

IENG 2000: Operating Systems

IENG 2010: Electronic Circuits

IENG 2020: Object-Oriented Programming

IENG 2030: Digital Systems

Semester 4

IENG 2500: Embedded Systems

IENG 2510: Data Structures and Algorithms

IENG 2520: Databases

IENG 2530: Communication Engineering

STAT 2100: Statistics & Probability

Select 1 from the following courses

DEGE: Degree Breadth Elective

Semester 5

ENGI 3000: Engineering Economics and Entrepreneurship

IENG 3000: Introduction to Artificial Intelligence

IENG 3010: Computer Architecture

IENG 3020: Virtual Platform Technologies

WORK 3590: Work Preparation

Select 2 courses from one of the following groupings

Semester 6

ENGI 3500: Law, Ethics and Professional Practice

IENG 3500: Software Engineering

IENG 3510: Wireless Systems

IENG 3520: Mobile Applications and Systems

Select 2 courses from one of the following groupings

Work Experience - SEM 6A

ENGI 3591: Co-operative Education 1 - Faculty of Applied Science & Technology

Work Experience - SEM 6B

ENGI 3592: Co-operative Education 2 - Faculty of Applied Science & Technology

Work Experience - SEM 6C