



Carleton
UNIVERSITY

Department of
**Systems and
Computer Engineering**

SYSC 3101 Programming Languages

Calendar description

Principles underlying different kinds of programming languages (procedural, functional, logic programming) and their semantics. Overview of machinery needed for language support (compilers, interpreters and run-time systems).

Includes: Experiential Learning Activity.

Lectures three hours a week, laboratory three hours alternate weeks.

<http://calendar.carleton.ca/undergrad/courses/SYSC/>

Prerequisites

SYSC 2004.

Precludes additional credit for COMP 3007.

Prior knowledge

Students should:

- Have knowledge of programming skills (in C and Java).

Course objectives

Principles underlying different kinds of programming languages (procedural, functional, logic programming) and their semantics.

Learning outcomes

By the end of this course, students should be able to:

- Understand different programming paradigms.
- Code and compare implementations in different programming paradigms.
- Differentiate between interpreters and compilers.

Graduate Attributes (GAs)

The Canadian Engineering Accreditation Board requires graduates of engineering programs to possess 12 attributes at the time of graduation. Activities related to the learning outcomes listed above are measured throughout the course and are part of the department's continual improvement process. Graduate attribute measurements will not

be taken into consideration in determining a student's grade in the course. For more information, please visit: <https://engineerscanada.ca/>.

Graduate Attribute	Learning outcome(s)
4.5: Design: Developed: Design implementation / task(s) definition	1, 2, 3

Accreditation Units (AUs)

For more information about Accreditation Units, please visit: <https://engineerscanada.ca/>.

The course has a total of 46 AUs, divided into:

- Engineering Science: 100%

Instructor and TA contact

Specific to course offering (tbd)

Textbook (or other resources)

Specific to course offering (tbd)

Evaluation and grading scheme

Specific to course offering (tbd)

Breakdown of course requirements

Specific to course offering (tbd)

Tentative week-by-week breakdown

Specific to course offering (tbd)

General regulations

Specific to course offering (tbd)