LASSONDE PD
PROFESSIONAL DEVELOPMENT

Computer Science for Non-Technical Professionals

LASSONDE | SCHOOL OF ENGINEERING | YORK U

Overview

This course aims to provide students with an understanding of the role computational thinking can play in problem solving. It also aims to help students, regardless of their professional background, to feel justifiably confident of their ability to write small programs that allow them to accomplish useful goals.

Key Takeaways

- Pseudocode
- Variables
- Conditionals
- Iteration
- Arrays
- Objects
- Functions
- Sorting
- Searching
- Simulation

Participants

This program is tailored for people with little to no programming experience. However, anyone is welcome to participate in Lassonde Professional Development's experiential learning!

Prerequisites

Very basic knowledge of computer networks and concepts of programming
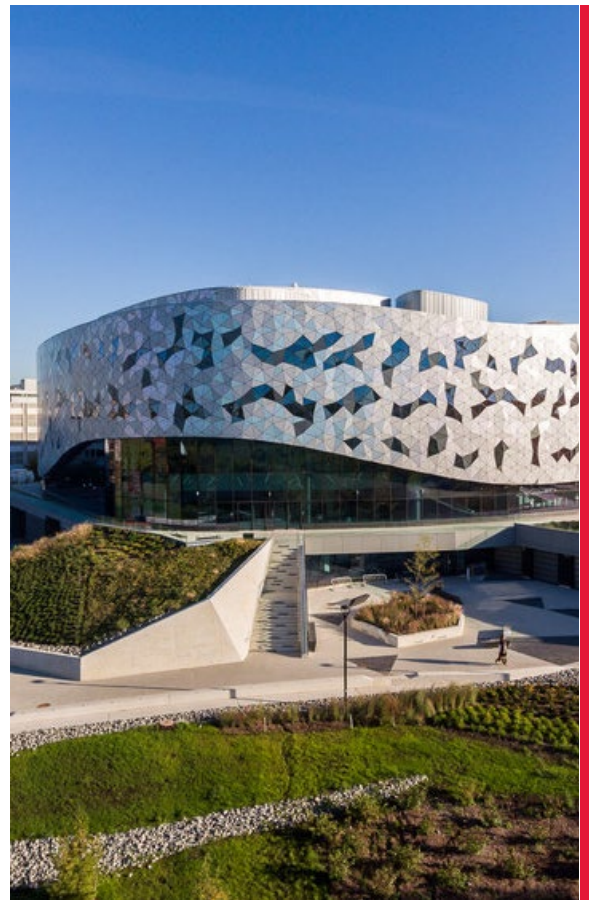
Program Highlights

Program Length
12 Weeks

Tuition Fee
$495.00 CAD

Program Format
Self-paced, Weekly
Coaching Sessions

<u>Why Us?</u>

- **Learn from Shopify and Lassonde Mentors**

- **Receive digital badge, which provides online recognition of successfully completing the course**

- **Participants will be organized into guilds of 4-5, giving you an enhanced learning experience**

- **Certificate from Lassonde School Engineering, York University**

Course Outline

1. Introduction- computer science and computational thinking

2. Drawing Pictures with processing- Data and Variables

3. Interactive Painting- functions, switch statement

4. Jukebox- Booleans, conditionals

5. Sheep Al- while loops, arrays

6. Foreign Student Visualization- parallel arrays, stings, algorithms, objects, recursion

7. Set Cover Problem- for loops, object copying, shared data

8. Image processing (bonus topic)

Certificate of Completion & Badging

- Participants must attend all program modules and successfully complete the take-home assignment/exam to receive a certificate.
- Once the certificate is granted, you will receive a digital badge that you can share on your social media platforms.
- Participants, prospective employers and professional governing bodies can access and reference the digital badge whenever verification is requested.

LASSONDE PD
PROFESSIONAL DEVELOPMENT

Contact Us

Lassonde Professional Development

Bergeron Centre For Engineering Excellence

11 Arboretum Lane, Room 215

4700 Keele Street

Toronto, Ontario

Canada M3J 1P3

Connect with us
asklpd@lassonde.yorku.ca

Visit us online
lassonde.yorku.ca/lassondepd

LASSONDE | YORK U
SCHOOL OF ENGINEERING