

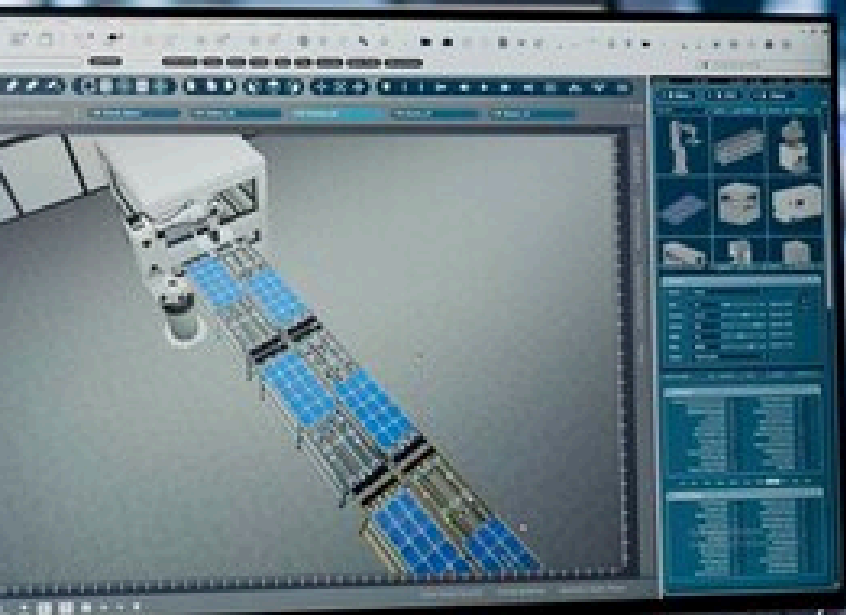


Here's to your Futures.

www.futurescollege.ca

SOLIDWORKS – LEVEL 1

CERTIFICATE COURSE



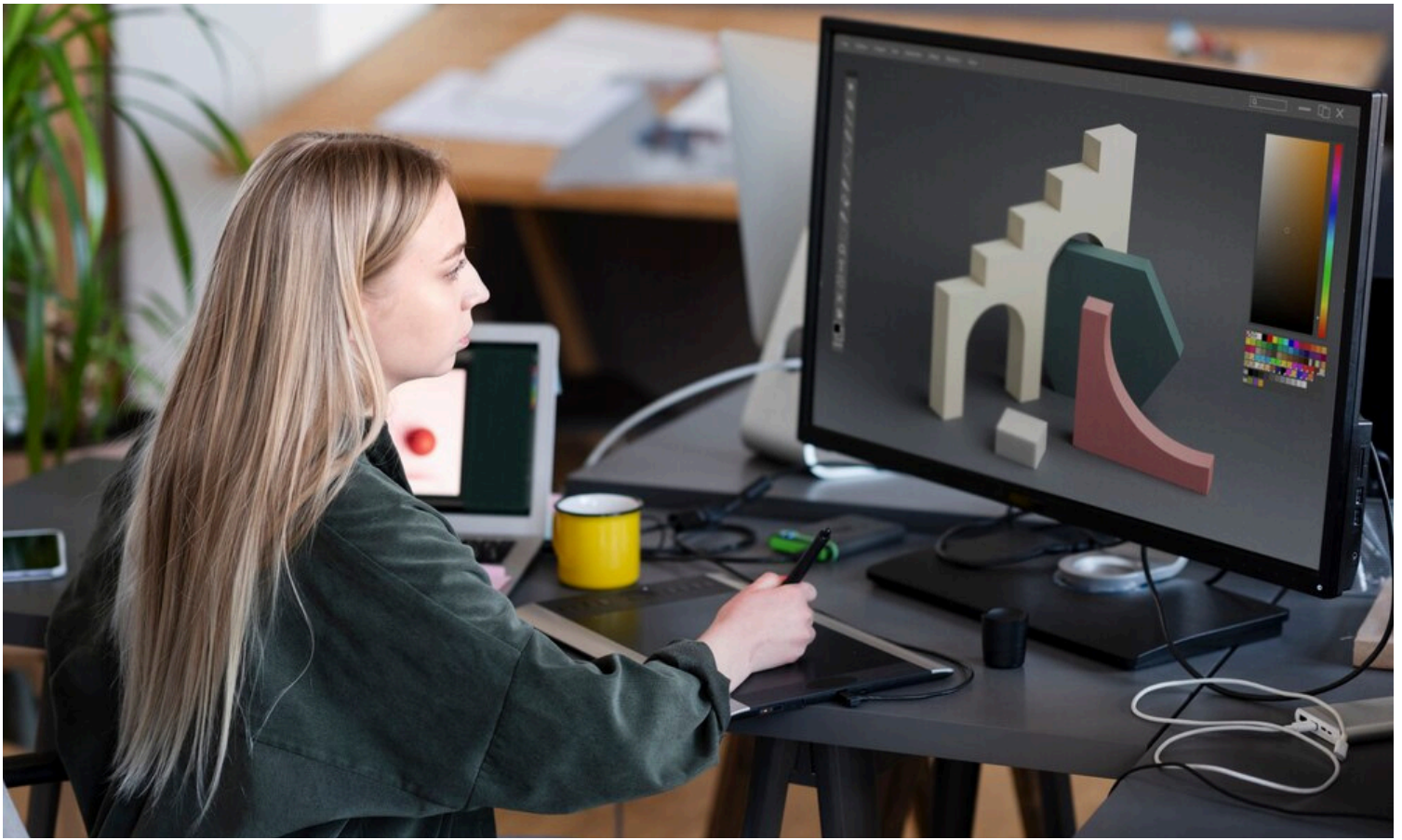
Program Length:

Mode of Learning: Online

Students: Domestic / International

Credential: Certificate

NOC



SOLIDWORKS – LEVEL 1

CERTIFICATE COURSE

Program Overview

The *SolidWorks – Level 1 Program* is a hands-on, modular training course designed to introduce students to the fundamentals of 3D computer-aided design (CAD) using SolidWorks. Ideal for aspiring designers, engineers, and technicians, this course builds a strong foundation in digital modeling for manufacturing, product development, and mechanical design.

Students begin with the interface and core 2D sketching tools, then progress to creating 3D parts using extrude, cut, loft, and pattern features. The program also introduces advanced capabilities including assemblies, sheet metal design, weldments, and basic surface modeling. Through guided exercises, major assignments, and a final project, learners will gain practical experience and technical confidence.

This course also prepares students to pursue industry-recognized SolidWorks certifications and apply 3D modeling skills across a variety of fields including engineering, product design, and industrial fabrication.

SOLIDWORKS – LEVEL 1

CERTIFICATE COURSE



Modules:

Module 1: SolidWorks Interface & 2D Sketching (39.5 hours)

- Navigating the interface and design tree
- Creating and dimensioning basic sketches
- File management and sketch editing
- Introductory part modeling exercises

Module 2: 3D Features and Part Design

- Using extrude, revolve, sweep, loft, fillet, and chamfer features
- Working with multiple planes and reference geometry
- Flex features and detailed modifications
- Major Assignment 1: Create and submit a 3D part

Module 3: Assemblies, Sheet Metal, and Weldments

- Creating assemblies, applying mates, and using subassemblies
- Working with exploded views and constraints
- Introduction to sheet metal tools and weldment features
- Major Assignment 2: Build and submit a complete assembly

Module 4: Surface Modeling, Drawings & Final Project

- Creating and manipulating surface models
- Generating 2D drawings from 3D parts
- Adding dimensions, annotations, and bills of materials (BOM)
- Final exam and Major Assignment 3: Drawing file submission

Admission Requirements

- No formal prerequisites required
- Interest in design, engineering, or 3D modeling
- Basic computer proficiency
- English language proficiency (CLB Level 6 or IELTS 5.5 or equivalent)



3465 Semenyk Ct. Mississauga, ON L5C 4P9
(905)-412-3007 | www.futurescollege.ca

Futures Canadian College of Business, Health, and Technology formerly Futures Academy of Health was founded in 2009 in Toronto, Ontario. Approved and accepted in November 2018 by the International Student Program, Futures Canadian College is now a Designated Learning Institution.

At FCC, we strive to provide the world-class education every student deserves. With well-crafted lesson plans, that are both informative and practical, we ensure that you learn all you need to know to jumpstart your career. Our co-op programs are relevant and supportive of your desire to land that dream job!

We are committed to providing you with a learning environment that is well-equipped to motivate you to pursue your studies and ultimately, achieve your long-term goals.