



MICROVELLUM CERTIFICATE COURSE

Program Overview

The Microvellum Certification Program is a modular, hands-on training course designed to prepare students for careers in custom woodworking, cabinetry design, and manufacturing automation using Microvellum software. Built on the AutoCAD platform, Microvellum is a powerful industry-specific tool used to design, engineer, and manufacture custom millwork with precision and efficiency.

This program introduces students to the Microvellum environment, project setup, and library management, before progressing into product design, parametric editing, material optimization, and production reporting. Learners gain experience in creating custom cabinets, generating detailed shop drawings, and exporting part data for CNC machining and automated workflows.

Ideal for students with backgrounds in cabinetmaking, woodworking, or manufacturing, this course bridges the gap between design and fabrication, enabling learners to integrate digital tools into real-world production processes and contribute to streamlined operations in architectural millwork and interior fabrication.



Modules:

Module 1: Microvellum Interface & Project Setup (39.5 hours)

- Introduction to Microvellum and AutoCAD integration
- Navigating the interface, workspace, and libraries
- Setting up projects, materials, and hardware databases
- Importing and modifying standard product libraries

Module 2: Product Design & Parametric Editing (39.5 hours)

- Creating and customizing cabinets and assemblies
- Parametric product building and dimension editing
- Drawing elevations, sections, and 3D renderings
- Using the product builder and custom prompts

Module 3: Shop Drawings & CNC Output (39.5 hours)

- Generating production-ready shop drawings
- Nesting and part labeling
- CNC file generation and G-code export
- Configuring material optimization and cut lists

Module 4: Automation, Reporting & Final Project (39.5 hours)

- Generating reports (cut lists, material usage, hardware reports)
- Configuring work orders and batch processing
- Final project: Complete cabinet set with shop drawings and CNC output
- Portfolio preparation and project presentation

Admission Requirements

- Ontario Secondary School Diploma (OSSD) or equivalent
- Minimum age: 18 years
- English language proficiency (CLB Level 6 or IELTS 5.5 or equivalent)
- Background in cabinetmaking, woodworking, or CAD is recommended
- Proficiency with computers and AutoCAD is an asset



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.