

YOUTH SKILLS CONNECTIONS PROGRAM



ADVANCED MATERIALS MANUFACTURING

COURSE OUTLINE

This course has been developed to be modular. Participants will complete a General Training module and then have the option to complete a 3D Printing module, an Extrusion & Compounding module or both. This course have been developed in partnership with the Bluewater Technology Access Centre.

Course delivery will be 50% in-class and 50% labs.

GENERAL TRAINING MODULE

The module will deliver the basic knowledge participants need to work within the Advanced Manufacturing industry.

Course Topics will include:

- Math – Fractions, Imperial to Metric Conversion, Trigonometry
- Forklift Training
- Basic WHMIS Training

3D PRINTING MODULE

Are you interested in 3D printing? Do you want to learn how to build a prototype? Would you like to use 3D printing to advance a manufacturing business or create your own? In this course, you will learn how to take a 3D design and manufacture it with 3D printing. You will gain hands-on experience with state of the art 3D printers and software, learning all about 3D printing materials, safety, standard practices, business aspects, and quality considerations.

Course Topics will include.

- Introduction to Lean Manufacturing
- Additive Manufacturing & 3D Printing
- Lean Manufacturing Pt.2
- Design Methods for Innovation and Problem Solving
- Introduction to Operations Management

EXTRUSION AND COMPOUNDING MODULE

In this module students will learn the basics of polymer production with a focus on extrusion and compounding. This is the final stage of converting polymers into a usable product form for use in the next manufacturing stage, production of useful consumer products ranging from plastic bags and pop bottles to medical devices. Extrusion and compounding is a crucial finishing stage for most polymers and the equipment employed is sophisticated and varied. Students will learn the various types of equipment used, their purpose and effects on polymers. Direct observation of a small extrusion and compounding operation is part of the program which also includes equipment and operating safety considerations, standard practises, and quality considerations.

FOR MORE INFORMATION

Email: SarniaYSC@lambtoncollege.ca
or register for this course at www.sarniaysc.ca

