

## **MAKERSPACE February 2023 Workshops**

*Most of our workshops last 1 hour and are by demonstration only except for sewing. Our workshops are limited to 10 people. NO EXPERIENCE necessary for our workshops*

*Signup for Our Workshops at... <https://iweb.langara.ca/makerspace/workshop-sign-up/>*

### **3D Printers Intro - Tinkerine Ditto 3D Printer**

**Fri – February 3rd - 10:30am to 11:30am or 2:30pm to 3:30pm**

We show you how to process the file for the Ditto Pro 3D printers using the Tinkerine software. We will go over best practices and tips when preparing your file. We then demo how to operate the 3D printers.

### **Special Laser Engrave & Cut Workshop**

**Fri – February 3rd - 1:30pm to 2:30pm**

Intro for our Trotec Speedy 300 laser. The Trotec can engrave and cut: wood, Plexiglas, cardboard, paper, ABS and leather. We start with how to create a file in Adobe Illustrator. We then go to the laser and show you how to engrave and cut wood.

### **Laser Engrave & Cut Workshop**

**Fri – February 10th - 10:30am to 11:30am or 2:30pm to 3:30pm**

Intro for our Trotec Speedy 300 laser. The Trotec can engrave and cut: wood, Plexiglas, cardboard, paper, ABS and leather. We start with how to create a file in Adobe Illustrator. We then go to the laser and show you how to engrave and cut wood.

### **How To Sew on Our Industrial Sewing Machines**

**Fri – February 17th - 10:30am to 11:30am or 2:30pm to 3:30pm**

We show you how to use our Techsew 0302 and our Techsew 2750 industrial sewing machines. Each sewing workshop is limited to 4 people as you will be hands on one of the machines.

### **Pattern Making / Design A Handbag**

**Fri – February 24th - 10:30am to 11:30am**

We will design a handbag, make a pattern, and then make a cardboard prototype. You will learn everything you need to create your own handbag design.

### **Metal Machining For Everyone Workshop - PM class**

**Fri – February 24th - 2:30pm to 3:30pm**

We will demonstrate what sort of objects and sizes can be machined on the NC10. We will then get into how to prepare your file to deliver to Makerspace. After Makerspace creates the final machining file, you will then oversee all of the machining on the NC10.

## **Other Workshops**

### **Laser Round Engrave Workshop**

Intro to the Epilog Mini. The mini can engrave round objects such as a rolling pin or a glass. We start with how to create a file in Adobe Illustrator. We then go to the laser and show you how to engrave a glass.

### **Advanced 3D Printing**

We show you how to setup your 3d object in Cura to create a file ready for our Ultimaker S5 multi-filament 3d printer. We cover: the different filament materials, how to create objects with dissolving supports, 2 colour printing and variable density printing.

### **3D Resin Printers**

Using Anycubic's Photon Studio, we will show you how to format your file and prepare it for our Anycubic resin printers. We will then demonstrate how to use the Anycubic printer and how to clean it.

### **CNC Wood Router Workshop**

We start with importing a file into Vcarve software and creating the tool paths. We then take the G-code file to the CNC and load it into the Mach3 router software. We then run the file on a piece of MDF wood.

### **Box Making Workshop**

We start with how to create a file with a box making software. Then in Adobe Illustrator we load the file and prep it for the laser. We then go to the laser and show you how to cut the file. We then glue the parts together to create a finger joint box.

### **How To Make An Up-Cycled Tote Bag**

We will go through the steps of making a tote bag from the patterns available at the Makerspace. We will be using our **up-cycled billboard vinyl** for the tote.

### **Saddle Stitching Workshop**

Learn how to do a traditional saddle stitch. This is using 2 needles, and pre-punching holes or slots in your leather or material.

### **Upholstery Workshop**

Taking a Schwinn bike seat, we first remove the cover and pattern it. We then create the new parts, sew it together and upholster it onto the seat.

### **How To Make The RW LED Lamp**

We will go over everything that you need to know to make your own Real World LED Lamp. Including the parts list, the 3d objects you will need to print and the laser cut parts you will need to make. All of the files are already created and ready for you.

### **Intro to Household Sewing Machine**

We will go over the basics of using a household sewing machine. We will also show you the different stitches and settings. No experience is necessary.