Glowforge Overview

The Glowforge is a laser cutter that produces 2D designs using a laser. You can do precise designs using a vector graphics program. We provide Inkscape, which is a free downloadable program. You can import JPG, PNG, SVG, or PDF files to print, or even put your own pen and ink drawing into the Glowforge to be scanned and replicated. Glowforge also has a catalog of preset designs, and design kits for purchase.

Materials
Tualatin Makerspace will only allow Glowforge Proofgrade materials to be used in the Glowforge Plus. We will provide 1/8" draftboard for learning purposes.

You may bring in your materials to use in the Glowforge, but they must be

Proofgrade branded with an intact QR code.

Types of materials available as Proofgrade materials:
Acrylic
Hardwood (Finished)
Plywood
Veneer
Draftboard (Unfinished)
Natural Leather

Using the Glowforge
▶ Your First Glowforge Print | How To Get Started With Nick

- Use a computer to log in: https://accounts.glowforge.com/users/sign_in Login is tualatinmakerspace@gmail.com and the password Make@TUL01.
- Choose your design from the Design Library or click the Upload link and import an outside design. We recommend using a SVG file format.
- Turn on the Glowforge using the switch on the back
- Place your material inside the machine, QR code facing upwards
- Double-check the correct material has been selected for your project by checking the materials button in the top left corner
- Drag your design to your preferred space on the material (Keep in mind that the more consolidated your design, the more usable material you have leftover).
- Turn on the exhaust fan beside the Glowforge (to the right of the printer on the wall)
- Press Print
- Follow all prompts
- Stay beside the machine while it completes your project
- Open the lid and remove your project once it has completed (the light on the print button will go out) and smoke has cleared
- Peel off protective paper on both sides of your project (this may be easier using Gorilla tape).

Overviews and How-Tos

▶️ Glowforge Software - Introduction

▶️ Designing in the Glowforge App

(Note: the Makerspace only uses Proofgrade materials which have default settings. We do not have a freestanding air filter. Please make sure the exhaust fans are on instead.)

▶️ Glowforge User Interface: Trace Feature Walk-thru

▶️ Inkscape Lesson 1 - Interface and Basic Drawing

Safety

Glowforge's official safety information

- Do not put anything inside the Glowforge that is not laser compatible.
- Do not stack materials.

- Do not leave things on, or around the Glowforge.
- Allow prints to cool before handling them.
- Do not leave the Glowforge unattended.
- Some amount of smoke and odor is normal when the Glowforge is operating, and shouldn't be a concern unless it is so strong that it causes irritation.
- Look inside frequently; the flame should move with the laser. If the flame remains after the laser has passed:
    - Pull the plug on the back of the unit
    - If it is safe to do so, extinguish the flame with a wet towel or sponge-Locate either near the sink before beginning the print job.
    - If that is not an option, then, if it is safe to do so, extinguish the fire with a fire extinguisher. Locate the fire extinguisher before beginning the print job.
    - If the fire cannot be extinguished, or if it spreads outside the Glowforge, call emergency services and evacuate the building.

Certification

Certification is required before independent use of the machine. Certification entails watching ▶ Your First Glowforge Print | How To Get Started With Nick , reading Glowforge's official safety information and answering a few questions. You must be 15 or older to get certified.

Once you have read the information and answered the questions, **a demonstration of the material to a staff member is required by doing a basic print following all of the correct steps.**