

Learning area 1 - 3D data generating

Module B: CAD with Fusion 360

Content Overview

In this workshop you will learn the most important basics of 3D design and the subsequent export for 3D printing or CNC milling. You will learn how to navigate the user interface of the Fusion CAD software. Using a practical example, you will create 2D drawings and 3D models that are suitable as production data for the Maker's Factory. The following topics are covered within the course.

- What computer aided design is and what you can use it for
- How Fusion 360 is structured and what are the main functions of the user interface.
- How to create 2D sketches and what to consider when dealing with dimensions and dependencies.
- What different commands are available in the 3D model area and how to convert 2D outlines into solid parts.
- How to design more complex parts and edit existing parts.
- How to prepare parts for 3D printing and how to export vectors for laser cutting.

Modules

1. General introduction to the CAD software.
2. User interface and navigation in 2D and 3D model space
3. Sketches and 3D models
4. Data export for rapid prototyping

Objectives

- After successful participation in this workshop, you will be one giant step closer to transferring the idea from your head to the computer.
- You will have a better understanding of what CAD is and what it can be used for.
- You will be able to navigate the Fusion 360 software with confidence and master the basics of 2D sketching and 3D modelling.
- You will also know what to consider when exporting 2D or 3D files for rapid prototyping.

What should be brought

- If you already have an idea of what you would like to realise with 3D printing, you are welcome to bring sketches, prototypes and 3D files.

Duration: 2 hours

Minimum age: 18 years

Number of participants: 3

language: Course languages are German or English (depending on demand)

Costs: Free within active membership, otherwise you need a day pass.