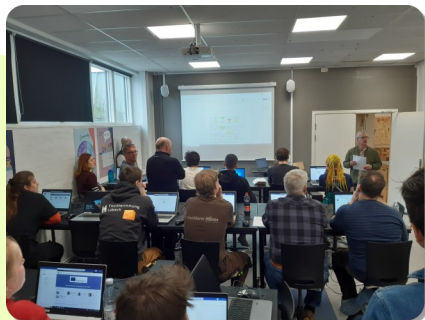
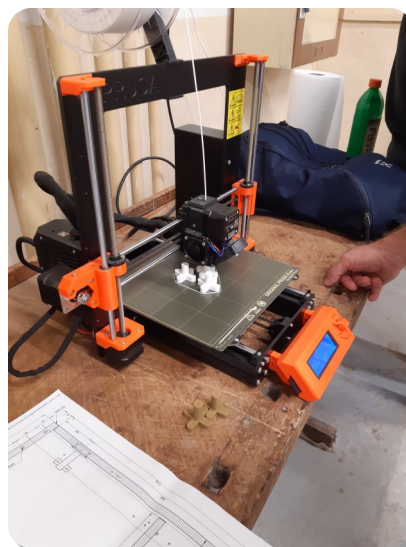


## Workshops - Programming



## CNC # Shaper 3D Printer



Erasmus+

## Digital Joiner 4.0

2023-1-DE02-KA220-VET000154860



Digital tools have found their way into various forms in wood-processing companies and in vocational schools. The skills of the trainees and teachers to introduce and use existing and new innovative digital tools will be tested in this project and the willingness to do so will be strengthened. Corresponding key competencies are evaluated and further developed.

September 2023— Juli 2025



Info <https://www.digitaljoiner.com>  
Insta: Erasmus.joiner.4.0

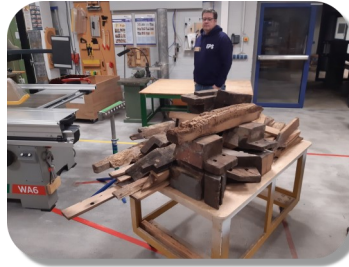


## About the Erasmus+ project 2023-1-DE02-KA220- VET000154860

Students and teacher work in international teams on joiner projects. They work on 3D CAD and realize the programming of CNC machines, 3D printer, robots and other digital tools. They work with VP, solid wood and with upcycled oak wood to produce products like small bench seats, cabinets, systainer, standing desks, ward- robes and different wooden lamps. Online meetings on MS Teams are used to prepare the working weeks.

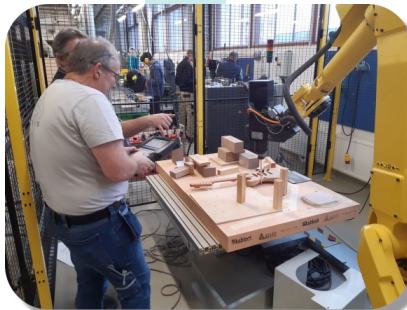
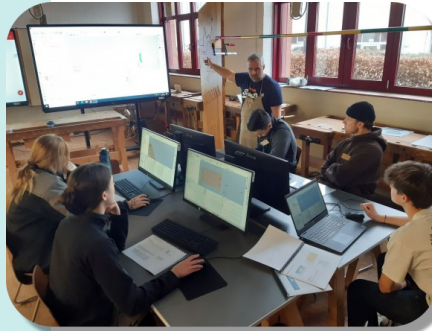
- \* Students organize Online-meetings and discuss the drawings and details of machinery work
- \* Students get the drawings and learn how to program the CNC machines and robots
- \* They work with Laser cutting and with Shaper machines
- \* Participants learn how to work with different 3D drawing systems like Pytha, Solidworks and Fusion
- \* Materials, connections, CNC processing and the fittings are determined
- \* The production of individual parts in the workshop and the production of CNC parts
- \* Assembly of all parts of the furniture - evaluation

## CAD / CNC



**300 year old oak wood was recycled to produce systainerboxes**

**Workshop  
Woodwop  
Shaper  
Pytha**



**Robot  
programming**

3D CAD drawing systems / Shaper / Laser cutting / VR glasses / Robots / Flexijet

