



Strojarska i prometna škola

Mechanical Engineering and Traffic School, Varaždin

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Our school



School's buildings



School



Numbers

- 627 students in 31 classes
- Students: from 15 to 19 years old
- 104 employees (85 teachers)
- 2 departments
- 11 vocations
- 5 workshops
- 5 practicums

Mechanical Engineering Department

3-year vocational programs

- Automotive technician
- Installer of home installation (central heating, plumbing, gas service installer)
- Machinist
- Tinsmith
- Auto body technician
- CNC operator

Completion of 3-year vocational programs leads to the **vocational career.**

Mechanical Engineering Department

4-year vocational programs

- Mechanical computer technician
- Heavy vehicle and mobile equipment service technician

Completing 4-year vocational programs enables students to either **enter the labour market** or **pursue to higher education**.

Department
of Transport
and Logistics

3 vocations

3-year vocational programs

- Motor vehicle driver

4-year vocational programs

- Road traffic technician
- Freight logistics technician

3-year vocational programs = vocational career

4-year vocational programs = labour market or higher education

Workshop for manual processing and measurement

- gas welding (TIG, MIG, MAG)
- REL welding
- surface protection
- drilling



Workshop for machine processing and CNC

- turning
- milling
- grinding
- filing



Car service

- vehicle diagnostics
- vehicle service



CAD CAM Practicum

- 3D printer
- 3D scanner
- an interactive whiteboard

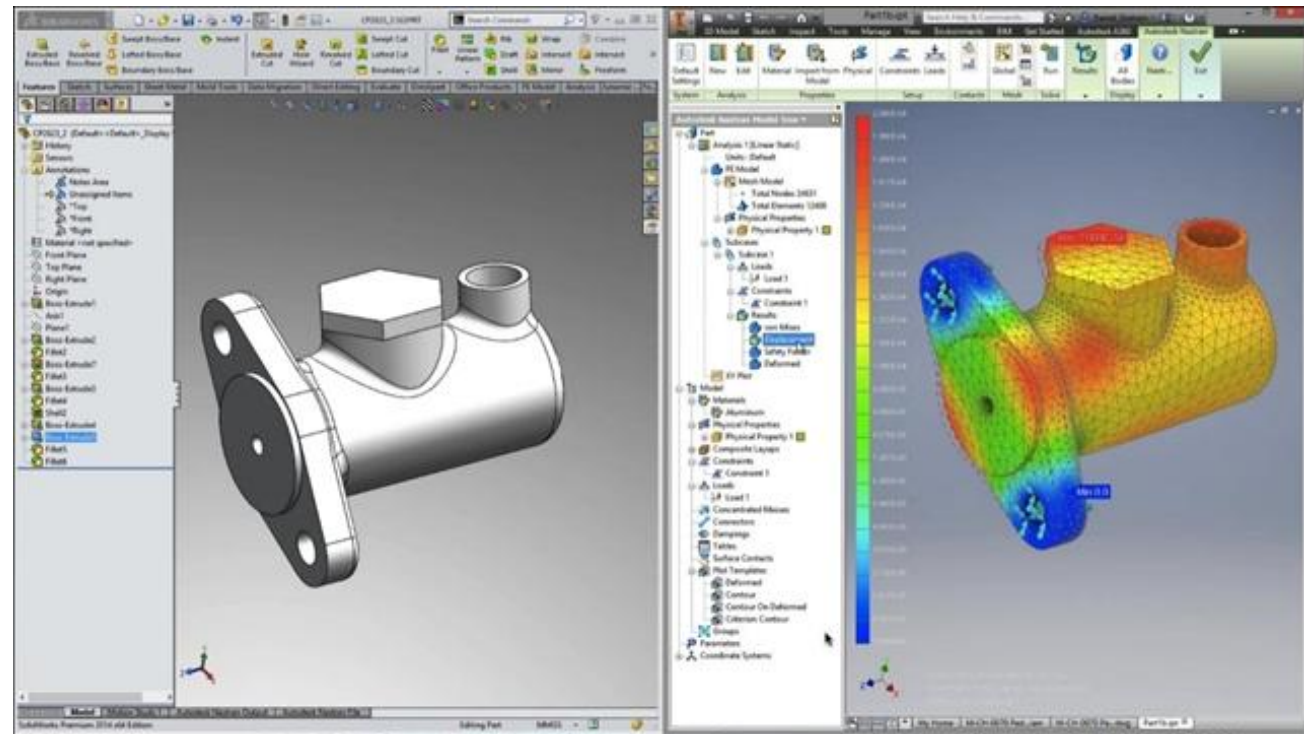
Modelling of machine elements and parts of a machine



INVENTOR

- computer-aided design (CAD) software used for **3D mechanical design, simulation, and visualization**

CAD/CAM Practicum



Practicum for Measurement

- Students use different measuring instruments to measure: length, width, diameter, thread, hardness



Practicum for Measurement

- the quality control
- verification of measures according to technical documentation



Practicum for Welding

- students practise the welding technique using different procedures – WELDING SIMULATOR
- their progress is monitored as results are recorded



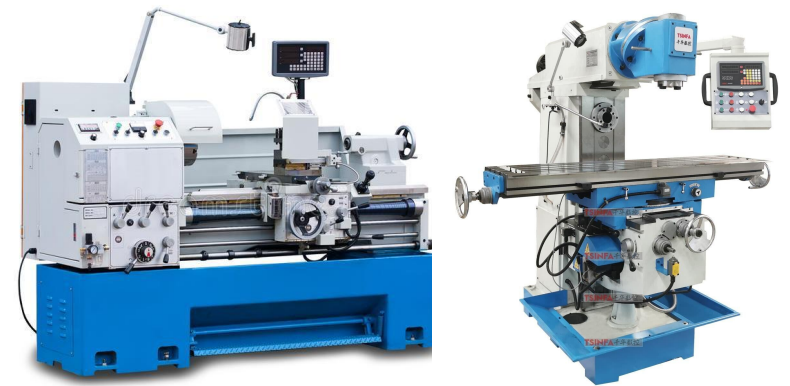
Practicum for Automation

- PNEUMATICS
design of simple pneumatic systems
- AUTOMATION
using PLC



CNC Practicum

- a milling machine & a lathe



Virtual traffic training firm

EU project

- Innovative Methods in Practical Training by Introducing Transport and Freight-Forwarding Training Firm

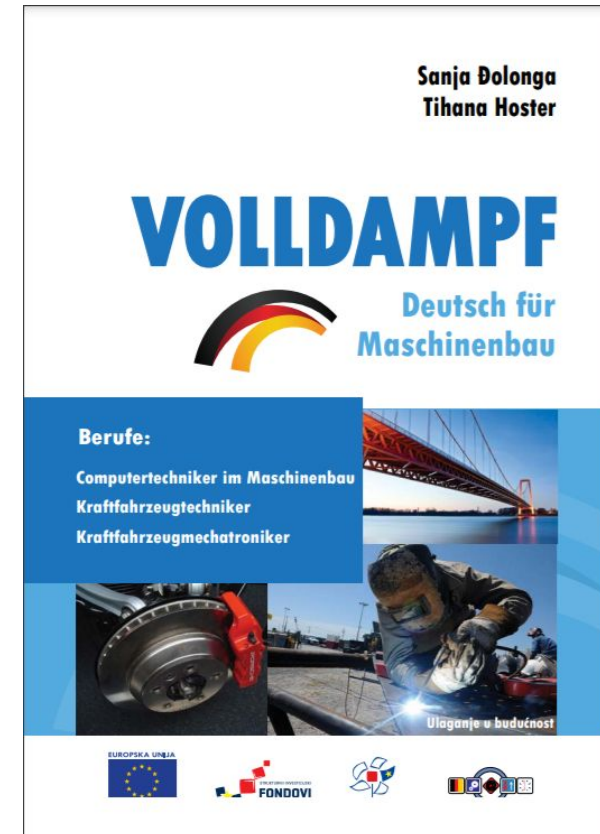
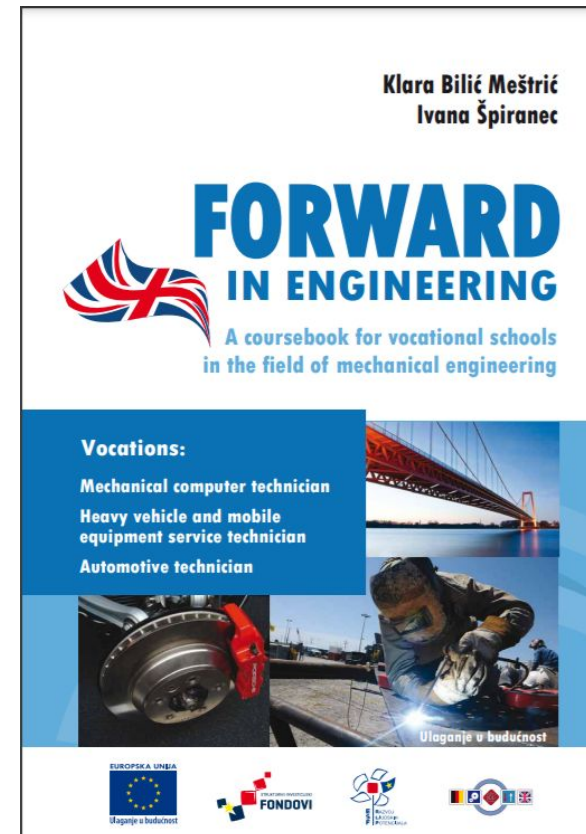
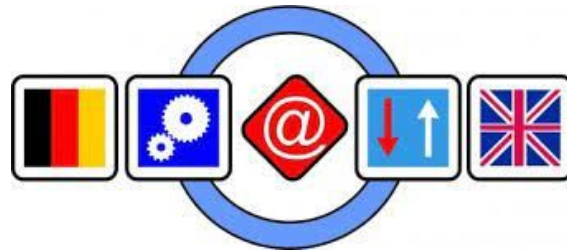


EDSIPI@

EU project

- English and German language in Mechanical engineering and Transport&Logistics Interactive

www.edsipi.eu



- Perpetuum mobile, 2014
- Perpetuum mobile 2, 2015
- Perpetuum mobile 3, 2016

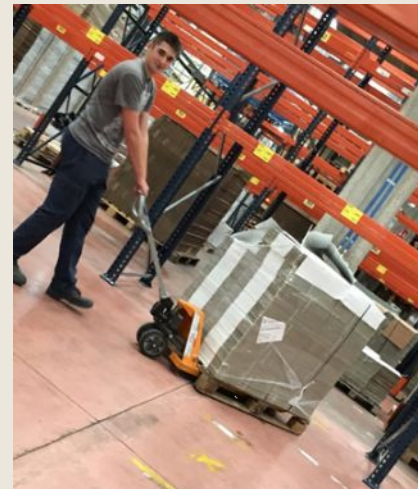
Erasmus+ KA1 projects



Erasmus+ KA1 projects

MOBILITY PROJECTS

- SIPS mobility, 2017
- SIPS mobility 2, 2018
- SIPS mobility 3, 2019
- SIPS mobility 4, 2020
- SIPS mobility 5, 2021
- SIPS mobility 6, 2022

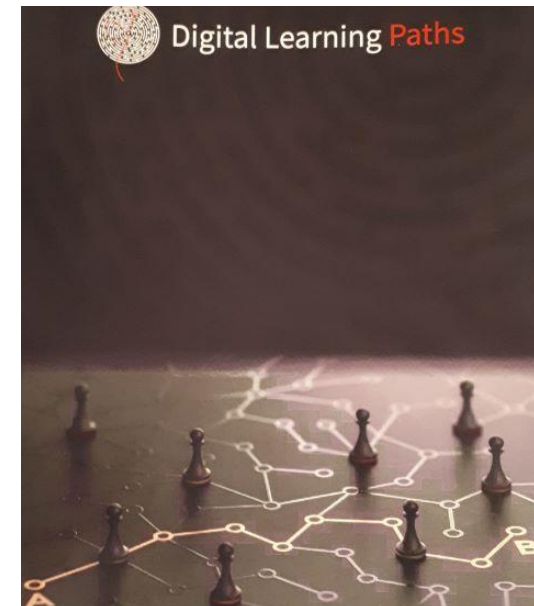


Digital Learning Paths

November 2021 – May 2024

Project results:

- an online platform for VET
- didactic materials and learning paths in the field of mechanics, automation and robotics, construction, marine technics and central heating



Erasmus
accreditation
in the field of
VET

Erasmus+ Vocational Education and Training Charter (VET)

2021 – 2027



European Language Label

European Language Label 2021 Project: SIPS mobility 3



Erasmus+ eTwinning projects

- National Quality Label
- European Quality Label
- eTwinning School Label
- eTwinning Ambassador



Partners in different EU projects

- Eko vožnja je zakon (Eco driving rules)
- Learning by Doing
- Duo Pack



The Centre of Excellence in Mathematics

- Varaždin County established the centre in 2007
- gifted and talented students (primary & secondary school students)
- students from Varaždin County, but also from Međimurje County, Koprivnica-Križevci County and Krapina-Zagorje County



The Centre of Excellence in Mathematics

NUMBERS in the school year 2021/2022

- 180 students
- 14 groups (8 groups: primary school, 6 groups secondary)
- 23 mentors



The Centre of Excellence in Mathematics

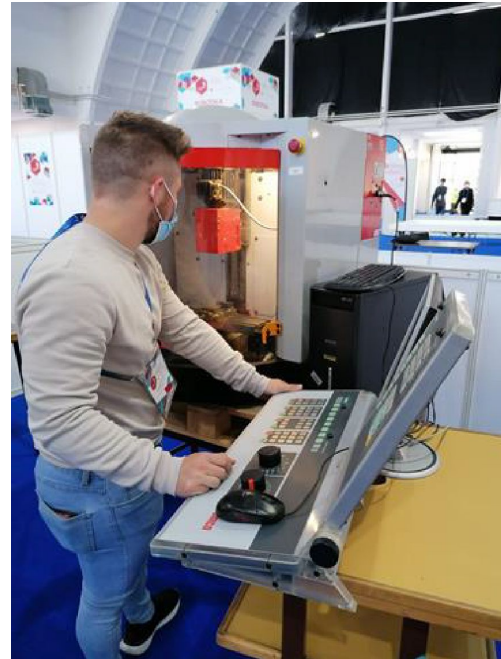
Excellence in state and international competitions

- in 2021: 22 students were awarded
- 5 students participated in Croatian Mathematical Olympiad
- bronze medal - Middle European Mathematical Olympiad



Competitions

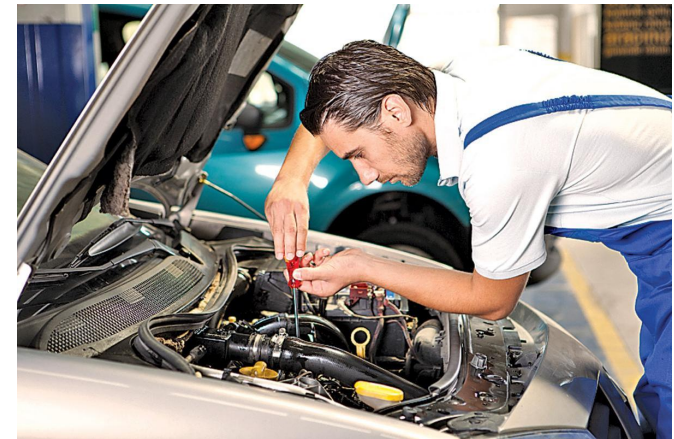
- General subjects
- Vocational subjects: WorldSkills Croatia



Adult Education

15 different
vocations

- in the field of Mechanical Engineering:
a machinist, a heating installer, a plumber, a gas fitter, a tinsmith, an autobody mechanic, a locksmith, an automotive technician, an agricultural machinery mechanic, a mechanical engineering technician & a computer mechanical technician



Adult Education

- Adult education in Transport and Logistics
 - a motor vehicle driver, road traffic technician & freight logistics technician



Adult Education

- Training centre for transportation of dangerous cargoes (ADR)
- Code 95
- Driving school





CONSTANTLY
MONITORING THE
LABOUR MARKET &
INCREASING THE
NUMBER OF
VOCATIONS



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THANK YOU