

Metal work/ Design Module

Content:

During the two weeks in school the students will develop a unique piece (for example a bowl)

Field trip to Italy on a workshop for founding a copper bar

Crafts based, experimental access to design processes and production possibilities

Four weeks of practical exercises in extern companies on real customer products

Duration:
6 weeks

Level:
Intermediate

Assessment:
skills demonstration with technical discussion

Participants:
2 European students + 4 German students

Responsible teachers:
Stefanie Heringer
Korbinian Angermeier



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Modules:

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Electric Drives Engineering
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RAISE VET
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Metall – Design - Mechatronik

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Metal – Design – Mechatronics*

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Automation/ Electrics

Metal Construction Modules



Cobots Module

Content:

Analyzing the basic functions of collaborative robots and safety issues

Understanding the program sequences of robots

Programming different tasks with increasing difficulties using the Universal Robots PolyScope software

Integration of several robots into one production unit

Interaction between the robots and human beings

Duration:

2 weeks at college

Level:

Advanced

Assessment:

paper & pencil test
skills demonstration with technical discussion

Participants:

8 European students + 8 German students

Responsible teachers:

Philipp Schott
Moritz Sedlmeier
Manfred Schauhuber



Electric Drives Engineering Module

Content:

Programming an asynchronous motor including frequency converter

Setting up a gate control with a star-delta start-up on a test stand

Optional the gate control with reversing contactor can be replaced by the produced PCB - printed circuit board (soldered at partner school **Technická akadémia** - Spišská Nová Ves/ Slovakia)

Discussing operating characteristics and characteristics of drives limits operation

Machine testing according to the European standard EN 60204 is explained and carried out

Duration:

2 weeks at college

Level:

Advanced

Assessment:

paper & pencil test,
skills demonstration with technical discussion

Participants:

6 European students + 6 German students

Responsible teachers:

BS MDM:

Hans-Jürgen Daurer, Anke Plöckl, Gerhard Seemüller



RAISE VET (Sustainability/ Solar technology)

Content:

Raising awareness of sustainable behavior towards our environment

Identifying renewable energy sources, such as wind, water and mainly solar technology.

Carry out current and voltage measurements with a solar energy kit to create a characteristic curve with its maximum power point and compare provided examples.

Diagnosis and troubleshooting, bringing the automatic system into service

Duration:

1 week virtual module
2 weeks at college

Level:

Beginner

Assessment :

paper & pencil test,
skills demonstration with technical discussion

Participants:

8 European students + 8 German students

Responsible teachers:

Peter Schreyer
Cornelia Lotter
Elke Höhnberg

