

## SUMMARY OF THE SECOND MENTORTRAIN WORKSHOP

GROUP MECHANICAL ENGINEERING, 23. April 2021

Location: TTK UAS, TALLINN ESTONIA, ON-LINE

### **Introduction:**

TTK UAS offers a full study programme in Mechanical engineering. As it is university of applied sciences the programme puts a lot of effort on practical works in workshops and apprenticeships in companies. During 240 EAP curricula each student has to participate in apprenticeship activities worth 39 credits. The placements are in various companies that need mechanical engineers and thus offer slightly different environments.

To generate learning outcomes that are consistent and have some power to generalise, the workshop was organised for teachers teaching and organising apprenticeships in the curricula. The workshop was organised on-line.

The most relevant occupations or jobs are the following:

- Constructor in the field of mechanical engineering
- Mechanical engineer
- Production manager

**Level of the diploma** (national or international)

- NATIONAL: Bachelor's degree
- INTERNATIONAL: Level 6 of the European Qualifications Framework (EQF5)

**Departing point: ALL STUDENTS MUST PERFORM PART OF THEIR COMPULSORY TRAINING IN A COMPANY.**

### **REVIEWING COMPETENCE FRAMEWORKS & LEARNING OUTCOMES**

- Getting to know companies' structure, machinery and job management
- Understanding relations between software and practical work
- Compiling CNC work bench programs and applying them
- Teamwork
- Using CAD software and making plans

## **PROPOSING APPRENTICESHIP ACTIVITIES**

- Getting a thorough overview of used machinery and end used technologies
- Extensive training about materials being used, their properties, and production methodologies used from scratch to final product
- Solving real work taske with methods use in the company
- Working with different work stations used in the manufacturing
- Working with documentation management system
- Working with different work stations used in the manufacturing
- Solving real work taske with methods use in the company
- Working as CNC work bench operator
- Preparing CAD plans
- Working as a quality specialist
- Working as a production manager
- Preparing CAD plans

### **Learning outcomes and learning activities**

#### **LO1: Getting to know companies' structure, machinery and job management**

Activities: Getting a thorough overview of used machinery and end used technologies.  
Extensive training about materials being used, their properties, and production methodologies used from scratch to final product.

#### **LO2: Understanding relations between software and practical work**

Activities Solving real work taske with methods use in the company.  
Working with different work stations used in the manufacturing.  
Working with documentation management system.

#### **LO3: Compiling CNC work bench programs and applying them**

Activities Working with different work stations used in the manufacturing.  
Solving real work taske with methods use in the company.  
Working as CNC work bench operator.  
Preparing CAD plans.

#### **LO4: Teamwork**

Activities Working as a quality specialist.  
Working as a production manager.

#### **LO5: Using CAD software and making plans**

Activities: Preparing CAD plans.