**Teaching activities and project contribution**

MISCE project

Mechatronics for Improving and Standardizing Competences in Engineering



Competence: Mechanical systems

Workgroup: RzuT, UNICA, UCLM, UNICAS

This document describes the teaching activities developed during MISCE project related to the competence ‘Mechanical systems’.

Version: 3.0

Date: June 15th, 2025

Visit <https://misceproject.eu/> for more information.

Index of contents

[1 Teaching activities 1](#_Toc201156282)

[2 Summary of teaching interventions 2](#_Toc201156283)

[3 Contribution to the project KPIs 3](#_Toc201156284)

Index of figures

-

Index of tables

[Table I. Summary of teaching activities 2](#_Toc201155735)

[Table II. Summary of the contribution to the project KPI 3](#_Toc201155736)

# Teaching activities

The teaching activities undertaken are described below:

* Activity A: Static Burnishing Analysis
* Activity B: Dynamic Burnishing Analysis

# Summary of teaching interventions

Table I summarizes the teaching interventions undertaken using the Servo-Driven Crank Burnisher for contributing to Mechanical systems competences.

Table I. Summary of teaching activities

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| University | Degree | Subject | Course | Semester | Activity/Interventions | Number of students | Number of professors |
| Rzeszow University of Technology (Poland ) | Mechatronics | Machine Dynamics | 24/25 | 3 | A/1, B/1 | 13 | 1 |
| Rzeszow University of Technology (Poland ) | Mechatronics | Machine Dynamics | 24/25 | 3 | A/1, B/1 | 12 | 1 |
| Rzeszow University of Technology (Poland ) | Mechatronics | Machine Dynamics | 24/25 | 3 | A/1, B/1 | 13 | 1 |
| Rzeszow University of Technology (Poland ) | Mechatronics/ Computer Science and Robotics | Robot Control | 24/25 | 5 | A/1, B/1 | 10 | 1 |
| Rzeszow University of Technology (Poland ) | Mechatronics/ Computer Science and Robotics | Advanced Robot Control | 24/25 | 4 | A/1, B/1 | 10 | 1 |
| Rzeszow University of Technology (Poland ) | Mechatronics/ Computer Science and Robotics | Diagnostics of Mechanical Devices | 24/25 | 2 | A/1, B/1 | 8 | 1 |

# Contribution to the project KPIs

Table II summarises the contribution of ‘control engineering’ case of study to the project KPI.

Table II. Summary of the contribution to the project KPI

|  |  |
| --- | --- |
| KPI | No. |
| Number of devices | 1 |
| Number of competencies covered for these devices | 1 |
| Functionality of the digital repository | 1 |
| Number of degrees | 2 |
| Number of subjects | 4 |
| Number of teaching interventions over the students | 12 |
| Number of competences covered in these experiences | 1 |
| Number of students involved | 66 |
| Number of HEIs teacher involved | 2 |
| Number of Professionals involved | 2 |