# Teaching activities and project contribution

## MISCE project

Mechatronics for Improving and Standardizing Competences in Engineering



Competence:  Automation Technology

Workgroup:    University of Cagliari

University of Cassino and Southern Lazio

This document describes the teaching activities developed during MISCE project related to the competence "Automation Technology"

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

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# 1 Teaching activities

The teaching activities undertaken are described below:

- Activity A: Using the "Test-Bed" to identify the correct procedure to connect the PC and the PLC.
- Activity B: Using the "Test-Bed" to upload the software on the PLC.
- Activity C: Using the "Test-Bed" to change the recipe via HMI.

# 2 Summary of teaching interventions

Table I summarizes the teaching interventions undertaken using the Test-Bed for contributing to Automation Technology competences.

Table I. Summary of teaching activities

| University | Degree | Subject | Course | Semester | Activity/Interventions | Number of students | Number of professors |
|---|---|---|---|---|---|---|---|
| University of Cagliari (Cagliari, Italy) | Mechanical Engineering | Mechatronics | 24/25 | 2 | A/1; B/1; C/1 | 22 | 1 |
| University of Cagliari (Cagliari, Italy) | Mechanical Engineering | Industrial Robotics | 24/25 | 2 | A/2; B/1; C/1 | 6 | 2 |
| University of Cagliari (Cagliari, Italy) | Mechanical Engineering | Applied Mechanics | 24/25 | 1 | A/1; B/1; C/1 | 20 | 2 |

# 3  Contribution to the project KPIs

Table II summarises the contribution of "Automation Technology" 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 | 1 |
| Number of subjects | 3 |
| Number of teaching interventions over the students | 30 |
| Number of competences covered in these experiences | 1 |
| Number of students involved | 48 |
| Number of HEIs teacher involved | 2 |
| Number of Professionals involved | 1 |