

2b. System design and integration/interfacing between electronic and mechanical components

Functional Area: R&D

Assessment criteria

Assessment criteria

LO2B.1. Designs prototypes and mechanisms of mechatronic systems.

- Describe the main characteristics of a mechatronics assy and its potential use applications
- Propose solutions for the design of a simple product/process
- Design, on the basis of an outline design draft, a prototype of a product/process

LO2B.1. Designs prototypes and mechanisms of mechatronic systems.

- Describe the main characteristics of a mechatronics assy and its potential use applications
- Propose solutions for the design of a simple product/process
- Design, on the basis of an outline design draft, a prototype of a product/process

Skills

- Capability to properly read and understand technical specifications and material description
- Identify type of materials and components for machining/assembling or storing in appropriate environment
- Identify and propose adequate types of material for product/process
- Identify appropriate machining procedures
- Identify relevant parameters (eg temperature, humidity, RPM, clean room level...)
- Machine/construct components on the basis of relevant specification

Transferable skills

- Capability to communicate in English in a interdisciplinary / international team, in virtual and real modality
- Understand descriptions, specifications, technical data and other info typical of the profession in English and prepare them for next phase of project/Customer in understandable manner
- Be capable to interface/report with the R&D/Engineering/Maintenance departments in a logical and coherent manner