



STORYTELLING SHOWCASE EVENTS

Learning Journey

Winter School Posters

Marcel Martynus (Student)



My story!

Winter School

Leoben, February 2026

ENVH EI

My background

I am a 22-year-old Mechanical Engineering student at the Silesian University of Technology, majoring in Automation and Robotics with a specialization in Automation.



Marcel Martynus

Problem-Solving and Soft Skills



I conceptualized and prototyped an integrated modular hybrid LED system for forks or handlebars. I developed the full electronic schematics and transitioned the project from a digital model to a functional, real-world prototype.



I moved from high-level concepts to a detailed design approach. I analyzed practical requirements like speed thresholds for power generation and balanced material sustainability with the long-term efficiency of the integrated system.



I used a dual-channel strategy: documenting technical progress on Moodle for asynchronous feedback and using audio calls for real-time, collaborative problem-solving and deep-dive discussions on complex technical challenges.

Sustainability Awareness and Green Competences



As a future automation engineer, sustainability will be a core concept in my design process. I plan to integrate energy-efficient systems and sustainable resource management into every automated solution I create



My project promotes cycling by ensuring safety in low light. By using a dynamo to extend battery life cycles, we maximize the utility of non-recyclable components, significantly reducing electronic waste.



To me, it means a balanced synergy between protecting the planet and advancing human development. It's about creating solutions that support environmental health without compromising human progress or quality of life.

Problem-Solving and Soft Skills

-  What **new problem-solving skills** have you developed during the activities?
-  How has your **ability to analyze complex problems** improved?
-  Can you give an **example of an innovative solution** you proposed?
-  What have you **learned about working in interdisciplinary teams**?
-  How has **your role** in group work changed or improved?
-  What **strategies did you use** to share ideas effectively?
-  How did you **handle disagreements or conflicts** within the team?
-  What did you **learn from your teammates'** perspectives or disciplines?
-  How did you take **responsibility within your group project**?

Sustainability Awareness and Green Competences

-  What does **environmental sustainability** mean to you now?
-  How has **your attitude toward sustainability** changed?
-  Do you think **sustainability** should be part of all university curricula? Why?
-  How important are **sustainability competences for your future career**?
-  What **motivates you** to promote sustainability professionally or personally?
-  What **sustainability challenges** can you now identify in **your field**?
-  What **actions can you propose to reduce environmental impacts** in projects?
-  Describe a **sustainable solution** you helped develop.
-  How has **collaboration** influenced your approach to sustainability?