Act-In Class

OBJECTIVE OF THE ACTIVITY

Act-In Class aims to offer Master's students in Management Engineering, Mechatronics, and Product Innovation the opportunity to work on real challenges that national or international companies present. Through a practical, problem-solving approach, the activity builds both technical and soft skills in cooperation with industry partners and qualified mentors.

STRUCTURE AND CONTENTS OF THE ACTIVITY

Participants will work in teams to develop innovative solutions for actual business problems. The activity includes guided sessions with trainers and company representatives, as well as independent group work. The course is structured into interactive workshops, coaching sessions, and final presentations to company stakeholders.

Each program edition focuses on a different real case, which may involve product innovation, process optimization, digital transformation, or sustainability strategies. The course content can vary widely, ranging from supply chain management to big data analytics, strategic planning, and logistics. Students are divided into interdisciplinary teams and follow a structured path composed of the following phases:

- **Kick-off and problem Framing**: introduction to the company, its context, and the challenge. Students analyze the problem and define the scope of their work, supported by academic tutors and company representatives.
- **Research and analysis**: teams conduct benchmarking, stakeholder analysis, user research, and feasibility studies. This phase aims to build a solid understanding of the context and generate data-driven insights.
- **Ideation and solution development**: Through creative techniques and structured methodologies (e.g., Design Thinking, Lean Startup), students develop and evaluate multiple solution concepts. They select the most promising ideas and translate them into actionable proposals.
- **Prototyping and validation**: depending on the challenge, students may create mock-ups, simulation models, process flows, or business models. They receive continuous feedback from trainers and company mentors.
- **Final presentation and feedback**: each team presents its solution to a panel of academic and company experts. Presentations include a description of the problem, proposed solution, implementation plan, and expected impact.

INVOLVED TEACHING STAFF

The activity involves external trainers and professionals from partner companies. The project is carried out in collaboration with Azzurro Digitale, a consulting firm that provides students with guidance on effective work methodologies and tools to address specific challenges. The company also delivers dedicated training sessions focused on Design Thinking methodologies and the use of Artificial Intelligence tools to support innovation and problem-solving processes.

ACQUIRED SKILLS FOR EMPLOYABILITY

Students will improve their communication, collaboration, problem-solving, and time management skills. Additionally, they will get first-hand experience communicating with professionals in the field and handling real-world business situations.

LEARNING ASSESSMENT

The assessment of the knowledge acquired will consider: a) the ability to apply the methodologies presented in class, and b) the way in which the proposed challenge was approached. Additionally, the ability to contribute to group work will be considered and evaluated through “peer assessment.”

MAXIMUM NUMBER OF STUDENTS ADMITTED

25

ADMISSION REQUIREMENTS

The activity is open to Master’s students enrolled in Management Engineering, Mechatronics, and Product Innovation programs. Admission requirements may vary from year to year, depending on the specific skills and expertise required by the challenges proposed by participating companies. Detailed prerequisites will be communicated in each edition’s call for applications. Up to 25 students may participate.

REQUIREMENTS FOR RECOGNITION OF THE ACTIVITY

To receive recognition for this activity, students must:

- Attend at least 80% of the sessions
- Actively contribute to teamwork assessed through peer evaluation

- Deliver a final project presentation evaluated based on the application of the presented methodologies and on how the challenge has been addressed.

STUDENT COMMITMENT AND UNIVERSITY CREDITS

The activity requires a commitment of approximately 24 hours. Upon successful completion, students will be awarded 3 ECTS credits.

LOCATION OF THE LABORATORY

The activity will take place at the DTG of the University of Padua, located at Viale Margherita, 87, Vicenza.

SEMESTER OF DELIVERY

Second semester, second year.

LANGUAGE OF INSTRUCTION

English