Short-term programme Information Sheet

Programme title: Innovation for Industrial Sustainability in an international context

Coordinating institution: Saxion | University of Applied Sciences | School of Business, Building & Technology

Participating institutions:

- Instituto Superior de Engenharia do Porto (Department of Mechanical Industrial Engineering), Porto, Portugal, E10208246.
- Jan Amos Komenski University of Applied Sciences, Leszno, Poland, PL LESZNO01.
- Szechenyi Istvan University (Audi Hungaria Faculty of Automotive Engineering, Department of Logistics and Forwarding), Győr, Hungary, HU GYOR01.
- Politecnico de Leiria, Leiria, Portgual, P LEIRIA01
- Saxion, University of Applied Sciences, School of Business, Building & Technology, Enschede, Netherlands, NL ENSCHEDE03.

Virtual and physical duration:

Virtual: 18 March 2025. – 27 May 2025

Physical: 12 -16 May 2025

Place for physical mobility: Enschede and Deventer, The Netherlands

Number of SZE student places: 5

Academic, language, professional requirements for participation: English B2

Participation in technical training (logistics engineering and vehicle engineering are an advantage), good presentation skills, confident communication in English, and good team player.

Enthusiastic and committed attitude to completing the Blended Intensive Program. Commitment to active participation in Online sessions, as this is a prerequisite for physical mobility, that is to travel to the Netherlands.

Professional content of the virtual period:

Prior to the presential week, there are seven online sessions where students are taught theory and models. Additionally, there are seven online sessions dedicated to collaboration on the final product, addressing the client's/company's problem. The theoretical knowledge will be assessed through a multiple-choice exam, and the outcome of the final assignment will be partially evaluated by the client/company.

After the presential week, there will be an additional online session where students present the final version of their work, incorporating the latest feedback, and discuss the definitive results with all students, lecturers, and the company.

Online Sessions on TEAMS:

The virtual component will consist of seven online meetings/lecturers and a closing meeting. The content of the lessons will be tested with an exam in Enschede.

• Week 12: Kick-Off meeting: Tuesday March 18 (7:00 p.m. (Central European Time), (6:00 p.m. Portugal Time))

- o Introduction + information about the project and the company (Everyone)
- Week 13: Meeting 2: Tuesday March 25 (7:00 p.m. (Central European Time), (6:00 p.m. Portugal Time))
- o Sustainability and circular economy (Saxion)
- Week 14: Meeting 3: Tuesday April 1 (7:00 p.m. (Central European Time), (6:00 p.m. Portugal Time))
- o Designing products for sustainability (vacancy)
- Week 15: Meeting 4: Tuesday April 8 (7:00 p.m. (Central European Time), (6:00 p.m. Portugal Time))
- o Designing processes for sustainability (vacancy)
- Week 16: Meeting 5: Tuesday April 15 (7:00 p.m. (Central European Time), (6:00 p.m. Portugal Time))
- o Low energy districts (vacancy)
- Week 17: Final meeting: Tuesday April 22 (7:00 p.m. (Central European Time), (6:00 p.m. Portugal Time))
- o Sustainability and company strategy and MCDA methods (ISEP)
- Week 18: No scheduled meeting
- o No Meetings
- Week 19: Meeting 6: Tuesday May 6 (7:00 p.m. (Central European Time), (6:00 p.m. Portugal Time))
- o Sustainability and governmental (EU) regulations to CO2 neutral (Saxion)

Besides these lectures, a weekly meeting is scheduled for the students to work together online on the company challenge based on the divergent/convergent design thinking methodology. This meeting will be scheduled weekly at 7.00 p.m. (CET) and last for one hour.

- Week 12: Collaboration meeting 1: Thursday March 20 (7:00 p.m. (Central European Time), (6:00 p.m. Portugal Time))
- o Ice-breaking activity and introduction of the company and the project (to understand it) Project Presentation by Bosch (Everyone)
- Week 13: Collaboration meeting 2: Thursday March 27 (7:00 p.m. (Central European Time), (6:00 p.m. Portugal Time))
- o To frame the challenge (mind map), and discuss about data collection methodology (ISEP?? and Saxion).
- Week 14: Collaboration meeting 3: Thursday April 3 (7:00 p.m. (Central European Time), (6:00 p.m. Portugal Time))
- o Discussion about how to collect the data (primary and secondary), including literature review (Saxion)
- Week 15: Collaboration meeting 4: Thursday April 10 (7:00 p.m. (Central European Time), (6:00 p.m. Portugal Time))
- o Discussion and development of a PESTEL analysis (?? and Saxion)
- Week 16: Collaboration meeting 5: Thursday April 17 (7:00 p.m. (Central European Time), (6:00 p.m. Portugal Time))
- o Developing a value stream map/empathy map of the company processes related to the challenge (???)
- Week 17: Collaboration meeting 6: Thursday April 24 (7:00 p.m. (Central European Time), (6:00 p.m. Portugal Time))
- o Do "How-might-we" solve the challenge analysis (list of possible options to be ranked) and define actions and select the most promising sustainable solutions and develop the final report (???)

- Week 18: No scheduled meeting
- Week 19: Collaboration meeting 7: Thursday May 8 (7:00 p.m. (Central European Time), (6:00 p.m. Portugal Time))
- o Refining and tunning the selected solution and its validation

Professional content of physical mobility:

During the presential week, there will be opportunities to communicate with the company via Teams at specific times

Grading:

The grading system is determined by two components:

- Multiple Choice Test Contributes 50% of the grade, with a minimum passing score of 10 (on a 0-20 scale), totalling 50 points. This is an individual assessment.
- Business Concept Presentation and Final Report Also accounts for 50% of the grade, requiring a minimum grade of 10 (on a 0-20 scale), totalling 50 points. This is a group assignment.

Presential week – May 12 – May 16 (week 20)

Monday May 12, 2025

- 09:00 Official opening in the university with ice-breaking (introductory) activity
- 10:00 Lecture "Welcome to Enschede/Deventer and the Netherlands"
- 11:00 Lunch break
- 12:15 Departure for a site visit and Lab site visit at the host company
- 14:00 Presentation of the company and site visit
- 16:30 Questions and answers
- 17:00 Departure from the company
- 19:00 Back in Enschede end of day

Tuesday May 13, 2025

- 09:00 Tour of the university to get to know your way around
- 11:00 Group work
- 13:00 Lunch break
- 14:00 Individual EXAM
- 15:00 Group work
- 18:00 Global Village and Start of teambuilding evening/activity. Presentation of the home country by Hungarian, Portuguese Polish and Dutch students

Wednesday - Social day May 14, 2025

- 09.00 Meet-up at entrance of Saxion
- 10.30 Traveling
- 11.00 Giethoorn boat tour
- 14.00 Traveling
- 16.30 Walking city tour and and drinks
- 19.00 Dinner
- 21:00 End of the day

Thursday May 15, 2025

- 09:00 Online question session with the host company
- 10:00 Group work

- 13:00 Lunch break
- 14:00 Lecture provided by one of the experts in Industrial Sustainability
- 15:00 Group work
- 17:00 End of the day

Friday May 15, 2025

- 09:00 Preparation of the intermediate results and a short pitch
- 10:30 Intermediate presentations of results for the host company
- 13:00 Lunch break
- 14:00 Intermediate presentations of results for the host company
- 15:30 Closing of the presential week with certificates

After presential week

• Week 22: Final meeting 8 Online): Tuesday May 27 (7:00 p.m. (Central European Time), (6:00 p.m. Portugal Time))

o Final Pich presentation

Number of credits: 3 ECTS

Participation costs (other than travel):

Accommodation, Transfer, Meals

Accommodation information:

Catering information:

Website of the programme:

Contact person at SZE: Dr. Sós Eszter