2024/25 BIP: Green Engineering for a Brighter Future

DETAILED PROGRAMME OF THE PHYSICAL COMPONENT

Monday March 17th

09:00 – 09:30
OVERVIEW of the course objectives and schedule

09:30 – 10:00
ICEBREAKER

10:00 – 11:00
TALK Introduction to Green Engineering (Alexandra Costa & Patrícia Barata / ISEL)

11:00 – 11:30
BREAK

11:30 – 13:00
INTERACTIVE DISCUSSION Introduction to Green Engineering and Sustainability. Showroom of scientific works by ISEL's teachers and students.

13:00 – 14:00
LUNCH

14:00 – 16:00
CAMPUS TOUR

16:00 – 17:00
GROUP ACTIVITY Presentation of the work carried out by the groups throughout the virtual component

Tuesday March 18th

09:00 – 10:00
TALK Circular Product Design (Isabel João / ISEL)

10:00 – 11:00
TALK Introduction to Sustainable Materials. Characteristics and types of sustainable materials (Céline Fraipont / He2b & Cristina Borges / ISEL)

11:00 – 11:30
BREAK

11:30 – 13:00
TALK Business Model for Circular Economy (Marco Berger & Volker Koch / TUGraz)

13:00 – 14:00
LUNCH

14:00 – 15:00
TALK Advanced Composites and Innovative Materials. (Aurore Olivier / HELHa)

15:00 – 17:00
GROUP ACTIVITY How to communicate and present my work (Rita Pereira / ISEL)

18:30 – 21:00
DINNER at ISEL

Wednesday March 19th

09:00 – 10:00
TALK Green Chemistry (Ann Creemers / UCLL)

10:00 – 11:30
GROUP ACTIVITY

11:30 – 13:00
TALK Energy Efficiency (Filipe Barata / ISEL)

13:00 – 14:00
LUNCH

14:00 – 17:00
INDUSTRY VISIT

Thursday March 20th

09:00 – 10:00
TALK Life Cycle Assessment (Dino Schönberg / FH Dortmund)

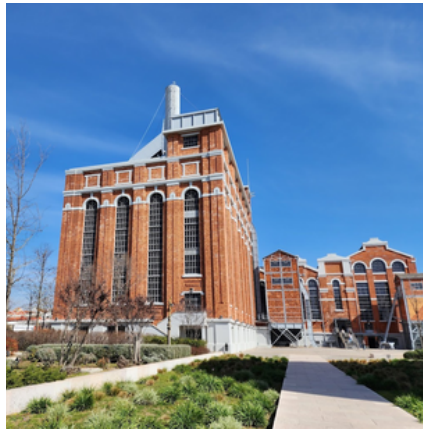
10:00 – 11:30
WORK ASSIGNMENT Development of a Business Model (Marco Berger & Volker Koch / TUGraz)

11:30 – 13:00
GROUP ACTIVITY

13:00 – 14:00
LUNCH

14:00 – 16:00
GROUP ACTIVITY

16:00 – 18:00
CULTURAL VISIT



Friday March 21th

09:00 – 11:00
PROJECT PRESENTATIONS

11:00 – 11:30
BREAK

11:30 – 13:00
PROJECT PRESENTATIONS

Green engineering, circularity and sustainable practices must be incorporated in all stages of a value chain to achieve a fully circular economy - from design to production and all the way to the consumer. To gain knowledge about sustainable engineering practices and their relevance, the students will chose an essential area of circular economy to explore. The options are the seven key areas in the achievement of a circular economy set down in the European Commission action plan: Plastics, Textiles, e-Waste, Food, water and nutrients, Packaging, Batteries and vehicles, Buildings and construction.

Funded by the European Union