



SUSTAINABLE PLASTICS 2024

from feedstocks to product design

polymeric and composite

ERASMUS+ Blended Intensive Programme (BIP)

materials science and OUR APPROACH technology that enabled job ready skills 15 online lectures 5 days hand-on experience in reuse of industrial wastes beautiful Aveiro city in Portugal for a circular design Project-based learning method with industrial mentors traditional and emerging processing plastic Working towards sustainable plastic techologies solutions advanced characterization **AVAILABLE SPOTS** of polymeric materals 20 spots available (+5 local places) design-oriented sustainable International and multicultural plastic manufacturing learning environment Multidisciplinary and creative approach Virtual lectures May - June 2024 Application deadline - April 15th In Aveiro - June 19th - 25th Report and virtual presentation pcferreira@ua.pt July 2024

5 days in Aveiro, Portugal

SUSTAINABLE PLASTICS from feedstocks to product design

PROGRAM DETAILS

MAY '24

Polymers, blends and composites Recycling and Circular Economy Biodegradable polymers: types, properties and actual market Biopolymers/bioplastics and morphologic characterization Biopolymers/bioplastics physical-chemical characterization Mechanical and thermal characterization Desing for sustainability Compounding technologies Processing technologies Additive manufacturing (stereolithography, Fused Filament Fabrication, etc) Sustainable Lyfe Cycle Assessment

JUNE '24

CAD design I CAD design II CAD design III Brainstorm I Brainstorm II Brainstorm III

5 days project

JULY '24

Preparation of deliverables Preparation of deliverables Final presentation



- 41 hours virtual component
- 40 hours short-tem physical mobility
- Award 3 ECTS
- 15 online lectures (2 hours each) to deliver skills for better project-based learning in mobility
- Access to all equipment/sotwares used for sustainable plastics' products design, compounding, characterization and manufacturing
- Visit plastic industries, and contact with the latest trending and emerging technologies torwards sustainability





universidade de aveiro



f /demac.univ @@demac_ua www.ua.pt/demac