

1. General contextualization. Circular Economy: concepts, characteristics, principles and benefits. Key strategies and instruments for measuring environmental impacts and promoting the Circular Economy. Introduction to the environmental impacts of the life cycle of a product and an organization (GHG emissions, eutrophication, water footprint, ecological footprint...).
2. Introduction to Life Cycle Thinking (LCT). Life Cycle and extended producer responsibility. Life Cycle concepts. Methodological principles of Life Cycle Assessment (LCA) based on international standards UNE-EN ISO 14040, UNE-EN ISO 14044 and ISO 59000 series.
3. Methodology and tools for Life Cycle Assessment calculation. Basic skills for the use of Life Cycle Assessment software: OpenLCA.
4. Calculation of the environmental footprint of products and organizations through an LCA tool.
5. Sustainable product design tools. Possibilities for transforming production with a more qualitative perspective. Eco-innovation and a change of values in a new or existing product. Traditional R's (Reuse, Repair or Recycle) and more complex R's (Remanufacture, Relocate, Reconceptualize...) to generate a design based on new social values and responsibility management.