

## G799 LIFE CYCLE ASSESSMENT

### DESCRIPTION

Life Cycle Assessment (LCA) is a course of 6 ECTS in which the students learn about Life Cycle Thinking (LCT), thus to get insights about the environmental sustainability of products, processes and services from the cradle-to-grave perspective. LCA has proved to be a key tool for designing more sustainable processes and products, improvement current process operations, establishing new environmental policies and for business/market applications thanks to eco-labelling.

The course covers all aspects of conducting an LCA: defining the goal and scope according to the intended use and reasons of the study as well as the target audience; gathering data on resource consumption and emissions; calculating the contribution to potential environmental impacts; interpreting the robustness and significance of results and conclusions, and finally reporting and reviewing to ensure transparency and quality. During half of the course, the students apply the fundamentals of LCA working in a group project using commercial LCA software.