Course: Circular design

credits: 5

Course code	WBVB25CDE-NL
Name	Circular design
Study year	2026-2027
ECTS credits	5
Language	English
Coordinator	H.J. Grijpstra
Modes of delivery	Education
Assessments	Circular design - Assignment

Learning outcomes

The student:

- conducts an analysis of the user and the usage scenario to develop a list of requirements;
- applies a systems approach to analyze the main function of a product;
- learns to use methodical design according to “Van Den Kroonenberg” during product development;
- conducts reverse engineering to adapt existing designs with a focus on improved sustainability;
- applies LCA (Life Cycle Analysis) in the product design process;
- describes the functions of system components based on the system analysis.

Content

In this module, you will learn how to systematically approach design throughout the entire product lifecycle and understand why this is a valuable addition to the quick, inventive approach. Through systems theory, you will learn to identify relationships between subsystems and their functions and to think at different levels. After the design and production phases, you will gain deeper insights into maintenance and management and material choice. By systematically addressing design and maintenance throughout the product lifecycle, students will be equipped with the skills necessary to create efficient, sustainable, and high-quality products.

Included in programme(s)

Mechanical Engineering

School(s)

Engineering, Life Sciences & ICT

share your talent. move the world.

Although every effort has been taken to ensure the accuracy of the information in the ECTS Course Catalogue, we cannot guarantee that the content and the information contained in it is always up-to-date, complete or true. Accordingly, no rights can be derived from the contents of the catalogue.