

# Mastering the Circular Economy

# Course description

The lecture is based on the business game "The Blue Connection", an innovative, web-based business simulation game in which international teams of four students take on the role of the management of a virtual e-bike manufacturer. Their goal is to manage the company's transformation to circular economy while maintaining and improving profitability.

In the simulation, participants are confronted with a whole range of real-life management decisions that require strategic thinking and seamless cooperation between four functional areas: Finance, Purchasing, Supply Chain and Sales. This gives them the opportunity to learn circular economy concepts and theories in a practical way through direct application. The simulation is supplemented by practical case studies on the topic of circular economy.

The course is offered for BWL MSc students at Darmstadt Business School, and at several international universities, and will be run in English

During the gaming sessions, participation is mandatory, as participants need to take management decisions in their teams.

# Teaching method

Web-based simulation game (online, language of instruction English)

# Learning objectives

The students

- know concepts and theories of the circular economy
- know how and with which key figures circularity can be measured
- develop circular strategies independently and learn how they can harmonize these with their revenue model and cost structure.
- evaluate the impact of their own management decisions on the company's success and learn
  in a realistic way about the trade-offs that can occur in the process
- learn how you can profitably shape the transformation of a company towards a circular economy

#### Target group

Master students of industrial engineering, logistics and business administration, PhD students upon request, maximum 20 participants

# Exam type and performance

Individual term paper about the business simulation game outcome, personal experiences and learnings

#### Effort and ECTS

Presence time 64 hours (of which about 24 are gaming sessions), self study 116 hours. Gain 6 ETCS while competing with fellow students from all over the world in the design of the best circular operations.



# Time

Fall semester 2025/2026, spread over 8 weeks between end of October and December 2024

# Supervising professor

Prof. Dr. Dirk Wollenweber