

## Production and Logistics

### Sustainable Supply Chain Management

#### Module objectives and intended study results:

The students

- ▶ know the objectives, management tasks, and challenges of supply chain management under consideration of different dimensions of sustainability.
- ▶ understand the effects of a lack of coordination in supply chains and countermeasures.
- ▶ apply concepts and methods to improve supply chain processes to increase their economic, environmental, and social sustainability.

#### Contents:

This lecture deals with supply chain management and discusses the impact of sustainability considerations on decision-making. After introducing fundamental concepts of supply chain management, we explore various decision areas, such as supply chain design, sourcing and coordination, and inventory management in supply chains. This class will build on fundamental knowledge production and operations management and will apply quantitative methods.

**Language:** English

#### Credits:

- ▶ See the LSF (you need to search for this class)

#### Previous Knowledge Recommendations:

The contents of one of the following modules are recommended:

- ▶ Fundamental knowledge in statistics and optimization: probability basics, theoretical probability models, linear programming, and integral calculus
- ▶ Introduction to Production Management / Produktion, Logistik und Operations Research, or similar introductory class to operations management

#### Credits towards Electives in Master programs:

- ▶ See the LSF (you need to search for this class)

**Registration:** Not required.

**Next time offered in:** Summer Semester 2024