



RESOURCE MANAGEMENT

Prof. Dr. Magnus FRÖHLING

Work load: 60h Theory (lectures), 120h Self-studies.

Number of credits: 6 ECTS

Course code: RESMGT. MA. Nr. 2082 / Examination number: 62407

▶ *Course contents:*

The course deals with the field of resource management from an industrial perspective. This comprises resource related management tasks, methods and tools to solve these and how they are embedded within functions and processes of companies. Thereby the focus lies on repetition factors mineral raw materials and energy carriers, renewable raw materials and energy carriers as well as secondary raw materials and energy carriers.

▶ *Intended Learning Outcomes:*

Students

- explain the resource related corporate management tasks, structure these,
- use selected tools and methods and
- explain the interplay between resource management and related tasks such as operations and supply chain management.

▶ *Planned learning activities and teaching methods:*

S1 (WS): Lectures (2 SWS)

S1 (WS): Exercises (2 SWS)

▶ *Mode of delivery (face-to-face; distance-learning):*

- Theoretical courses are given by modules of 2 hours.
- Face-to-face discussions with young researchers in the field. Supportive learning during practical lessons by working on datasets both in group and individually.

▶ *Recommended or required readings:*

Thiede (2012): Energy Efficiency in Manufacturing Systems, Springer

Thonemann (2015): Operations Management, Pearson



Vrat (2014): Materials Management, Springer

Wagner, Enzler (2006) Material Flow Management, Physica

► *Assessment methods and criteria:*

For the award of credit points it is necessary to pass the module exam.

The module exam contains:

AP*: Assignment

KA* [90 min]

The Grade is generated from the examination result(s) with the following weights (w):

AP*: Assignment [w: 1]

KA* [w: 5]

* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.

► *Contribution to EIT's Overarching Learning Outcomes:*

(EIT OLO1, OLO2 and OLO6): This course includes the study of repetition factors mineral raw materials and energy carriers, renewable raw materials and energy carriers as well as secondary raw materials and energy carriers. The study of resource-related management tasks, methods and tools, understanding how these are embedded within functions and processes of companies is also content. The students will understand and can explain the interplay between resource management and related tasks such as operations and supply chain management.