

## Resources Chemical Technology (I002848)

**Course size** *(nominal values; actual values may depend on programme)*

**Credits** 5.0

**Study time** 150 h

**Course offerings in academic year 2023-2024**

A (Year)

English

Gent

**Lecturers in academic year 2023-2024**

Bertau, Martin

FREIBE01

lecturer-in-charge

**Offered in the following programmes in 2023-2024**

[International Master of Science in Sustainable and Innovative Natural Resource Management](#)

**crdts**

5

**offering**

A

**Teaching languages**

English

**Keywords**

**Position of the course**

**Contents**

Fundamentals: Chemical technology of raw material recovery processes, chemistry of main group and transition metals as well as lanthanides, basic unit operations, basic reaction engineering.

Applications: Realisation of raw material processing on a technical scale, process economy, environmental safeguards.

**Initial competences**

Fundamental knowledge in chemical technology, chemical engineering and inorganic chemistry

**Final competences**

- 1 After completing this module, students should be able to understand raw material processing on a technical scale
- 2 explain the chemical-technological concepts behind modern production techniques

**Conditions for credit contract**

This course unit cannot be taken via a credit contract

**Conditions for exam contract**

This course unit cannot be taken via an exam contract

**Teaching methods**

Lecture

**Extra information on the teaching methods**

S1 (WS): Lectures (1 SWS)

S1 (WS): Tutorials / Exercises (1 SWS)

S1 (WS): Case studies (problem-based learning workshops) / project (1 SWS)

**Learning materials and price**

**References**

M. Bertau, P. Fröhlich, M. Katzberg, Industrial Inorganic Chemistry, Wiley, 2016

Kirk-Othmer et al., Chemical Technology, Wiley, 2013

J. Huheey et al., Inorganic Chemistry, Pearson, 2008

**Course content-related study coaching**

**Assessment moments**

**Examination methods in case of periodic assessment during the first examination period**

**Examination methods in case of periodic assessment during the second examination period**

**Examination methods in case of permanent assessment**

**Possibilities of retake in case of permanent assessment**

examination during the second examination period is possible

**Extra information on the examination methods**

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

**Calculation of the examination mark**