

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

	crdts	offering
International Master of Science in Sustainable and Innovative Natural Resource Management	5	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

Evaluation methods

Examination methods in case of periodic evaluation during the first examination period

Examination methods in case of periodic evaluation during the second examination period

Examination methods in case of permanent evaluation

Possibilities of retake in case of permanent evaluation

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