

## Course Descriptions Bachelor 2021-2022

Course Title Chemical Engineering

Course Code BENC2009

ECTS Credits 5,0

Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
4	31-1-2022	25-3-2022		X		X	L

Level no level

Coordinator Carla Koopman, Thomas Butterworth For more information: [c.koopman@maastrichtuniversity.nl](mailto:c.koopman@maastrichtuniversity.nl); [t.butterworth@maastrichtuniversity.nl](mailto:t.butterworth@maastrichtuniversity.nl)

Language of instruction English

Goals

- \* To determine the yield, conversion and selectivity of chemical reactions
- \* To know some typical chemical industrial unit operations and their application
- \* To complete energy and mass balances in flowsheets
- \* To perform some calculations on chemical reactions
- \* To discuss a circularity challenge of the chemical industry

Description Many daily used products contain materials produced in industrial chemical plants. "Chemical engineering" studies the development, design, operation and improvement of these chemical plants, their chemical and physical processes and their economical feasibility. This course will introduce students to the challenges of the modern chemical engineer, in which basic chemical and physical concepts, like material/heat balances, process design and typical unit operations, will be combined with discussions on sustainability/circularity and business consequences, like pay back times.

Literature Elementary principles of chemical processes 4th edition, R.M. Felder, R.W. Rousseau, L.G. Bullard, 2016

Prerequisites BENC1003 Fundamentals of Engineering  
BENC1007 Materials Engineering

Keywords

Teaching methods Lecture

Assessment methods Written Exam

Evaluation in previous academic year For the complete evaluation of this course please click <http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM>

This course belongs to the following programme / specialisation

Bachelor Business Engineering

Year 2 Elective Course(s)