

Course Descriptions None 2026-2027

Course Title Chemical Engineering
Course Code BENC2009
ECTS Credits 5,0
Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
4	1-2-2027	25-3-2027		X		X	L

Level Introductory/Intermediate
Coordinator Carla Koopman For more information:c.koopman@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

Transitional Regulations

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+3 Elective Courses
SBE Exchange Bachelor	Bachelor Exchange Courses
SBE Exchange Master	Bachelor Exchange Courses