

Course Descriptions None 2022-2023

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

Period	Start	End	Mon	Tue	Wed	Thu	Fri
4	6-2-2023	31-3-2023		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 PLEASE NOTE THAT THE INFORMATION ABOUT THE TEACHING AND ASSESSMENT METHOD(S) USED IN THIS COURSE IS WITH RESERVATION. A RE-EMERGENCE OF THE CORONAVIRUS AND NEW COUNTERMEASURES BY THE DUTCH GOVERNMENT MIGHT FORCE COORDINATORS TO CHANGE THE TEACHING AND ASSESSMENT METHODS USED. THE MOST UP-TO-DATE INFORMATION ABOUT THE TEACHING/ASSESSMENT METHOD(S) WILL BE AVAILABLE IN THE COURSE SYLLABUS.

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)
SBE Exchange Bachelor	Bachelor Exchange Courses
SBE Exchange Master	Bachelor Exchange Courses