

## Course Descriptions Bachelor 2023-2024

Course Title	Chemical Engineering																
Course Code	BENC2009																
ECTS Credits	5,0																
Assessment	Whole/Half Grades																
Period	<table><thead><tr><th>Period</th><th>Start</th><th>End</th><th>Mon</th><th>Tue</th><th>Wed</th><th>Thu</th><th>Fri</th></tr></thead><tbody><tr><td>4</td><td>5-2-2024</td><td>28-3-2024</td><td></td><td>X</td><td></td><td>X</td><td>L</td></tr></tbody></table>	Period	Start	End	Mon	Tue	Wed	Thu	Fri	4	5-2-2024	28-3-2024		X		X	L
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4	5-2-2024	28-3-2024		X		X	L										
Level	Introductory/Intermediate																
Coordinator	Carla Koopman For more information:c.koopman@maastrichtuniversity.nl																
Language of instruction	English																
Goals	<ul style="list-style-type: none"><li>* To determine the yield, conversion and selectivity of chemical reactions</li><li>* To know some typical chemical industrial unit operations and their application</li><li>* To complete energy and mass balances in flowsheets</li><li>* To perform some calculations on chemical reactions</li><li>* To discuss a circularity challenge of the chemical industry</li></ul>																
Description	<p>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.</p> <p>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.</p>																
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 <a href="http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM">http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM</a>																
This course belongs to the following programme / specialisation	<table><tbody><tr><td>Bachelor Business Engineering</td><td>Year 2+3 Elective Courses</td></tr><tr><td>SBE Exchange Bachelor</td><td>Bachelor Exchange Courses</td></tr><tr><td>SBE Exchange Master</td><td>Bachelor Exchange Courses</td></tr></tbody></table>	Bachelor Business Engineering	Year 2+3 Elective Courses	SBE Exchange Bachelor	Bachelor Exchange Courses	SBE Exchange Master	Bachelor Exchange Courses										
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