

MSc Chemical Engineering - TU Delft

Master's Courses for Exchange Students

The course package proposals presented here were composed considering the coherence of their contents. Although an overlap between lectures and exams of the courses within the same package is not likely, it may occur due to unforeseen circumstances leading to schedule modifications. The course package proposals are intended for MSc students and students who are in the process of finalising their BSc programme.

Please read the courses' prerequisites [here](#) in order to determine whether the courses you select are a good fit for your educational background (note: for the description of WM0320TU, select '--all--' from the drop-down list of 'Organization').

Spring semester 2022

Energy and Sustainability (compose a package of 30 EC)							
Identifier	Course Name	Credits	Period				
			1	2	3	4	
CH3222	Energy Storage in Batteries	4 ECTS					
CH3513	Electrochemistry for Renewable Energy	4 ECTS					
CH3632	Chemistry and Physics of Solar Cells	6 ECTS					
CH3101	Heterogeneous Catalysis	3 ECTS					
WM0320TU + AS3131	Ethics & Engineering + Art, Empathy & Ethics (application required)	7 ECTS					
CH3982	Literature Study	3 ECTS					
CH3991	Research Project**	15ECTS					

Chemical Process Engineering (compose a package of 30 EC)							
Identifier	Course Name	Credits	Period				
			1	2	3	4	
CH3061	Multiphase Reactor Engineering	4 ECTS					
CH3073	Separation Processes, Design and Operation	3 ECTS					
CH3181	Scale Up / Scale Down	3 ECTS					
CH3421	Computational Transport Phenomena	6 ECTS					
CH3622	Process Intensification	3 ECTS					
CH3672	Computational Materials Science	3 ECTS					
WM0320TU + AS3131	Ethics & Engineering + Art, Empathy & Ethics* (application required)	7 ECTS					
CH3982	Literature Study	3 ECTS					
CH3991	Research Project**	15ECTS					

Nuclear Science (compose a package of 30 EC)							
Identifier	Course Name	Credits	Period				
			1	2	3	4	
CH3763	Nuclear Medicine	3 ECTS					
CH3783	Materials Chemistry for the Nuclear Fuel Cycle	3 ECTS					
CH3771	Nuclear Chemistry	6 ECTS					
WM0320TU + AS3131	Ethics & Engineering + Art, Empathy & Ethics* (application required)	7 ECTS					
CH3982	Literature Study	3 ECTS					
CH3991	Research Project**	15ECTS					

Chemical Products and Design(compose a package of 30 EC)							
Identifier	Course Name	Credits	Period				
			1	2	3	4	
CH3531	Functional Ceramics	3 ECTS					
CH3563	Product and Process Engineering of Solid Particles	3 ECTS					
CH3101	Heterogeneous Catalysis	3 ECTS					
WM0320TU + AS3131	Ethics & Engineering + Art, Empathy & Ethics* (application required)	7 ECTS					
CH3982	Literature Study	3 ECTS					
CH3991	Research Project**	15 ECTS					

* Art, Empathy & Ethics (AS3131) can only be taken in combination with Ethics & Engineering (WM0320TU). Please see the Art, Empathy & Ethics (AS3131) course description via [this link](#). Please note that AS3131 requires admission by the course manager, Dr Eduardo Mendes. To request admission, please send your APPLICATION LETTER explaining your motivation (max 1/2 an A4 sheet) to e.mendes@tudelft.nl.

- DEADLINE APPLICATION: TWO WEEKS BEFORE the start of the semester
- The subject line of your email should read 'Enrolment application for AS3131'
- The responsible instructor will enrol you and you will receive a notification of enrolment by email.

** A **Research Project** (of 15 ECTS) at one of our groups within the Faculty of Applied Sciences.

Depending on the developments of the covid-19 pandemic, the number of research projects positions could be limited and/or research projects could be partly or entirely off-campus.

It is possible to combine the research project with courses. The larger the project, the more chance to be accepted by the department. The course code of the Research project is CH3991. A Research Project of 24 EC can be finalized before Christmas. Please do notice that an early termination of a TU Delft housing rental contract is not possible.

The MSc Chemical Engineering study guide can be found [here](#). More information about the tracks can be found on [this webpage](#).

Please note that the course offerings and time schedules are subject to modification.

We do not recommend mixing courses from different programmes and/or faculties since this is likely to lead to scheduling conflicts and overlap. Such scheduling conflicts are the responsibility of the student.

Students who intend to do a research project are strongly encouraged to take a proactive role in finding a supervisor and a research project within the Chemical Engineering department. The first step is to find a scientific contact person within the Faculty of Applied Sciences (possibly someone you have already been in contact with or are planning to collaborate with) and get direct approval from the professor of the group where you wish to do your research. In most cases, you will work under the supervision of a PhD student and his/her professor. Before applying for one of our two annual exchange periods, you should have already arranged a project yourself or be in the process of doing so. Please mention in your application the relevant actions you have taken.

In special cases, we may assist you in finding a supervisor for the research project after the application deadline but as mentioned, we expect you to take the lead. You can choose from the seven research groups of the Chemical Engineering department and the Radiation Science & Technology department (Reactor Institute Delft).

For more information about the departments of the Faculty of Applied Sciences, see:

[Departments at the Faculty of Applied Sciences](#)
[The Department of Chemical Engineering](#)
[Radiation Science & Technology](#)

You may also contact the IRS department (Burak Eral or Andrzej Stankiewicz) of the 3ME Faculty. Their contact information can be found on [this website](#).

When contacting our academic staff for the first time, please include the following information in your email:

- Why you have chosen TU Delft and the respective department
- That you are an exchange student from a TU Delft partner university, registered through the International Office Applied Sciences.
- The research area/topic you are interested in and why
- A resume covering your experiences and personal details
- A transcript of records

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