

## Organisation

### Director of Studies

**Jan van Esch**

The director of studies has final responsibility for the Chemical Engineering master of science programme.

Prof.dr. J.H. van Esch

Applied Sciences building (58), Van der Maasweg 9, room E2.040

T: +31 (0) 15 27 88826 ✉ [J.H.vanEsch@tudelft.nl](mailto:J.H.vanEsch@tudelft.nl)

### Programme coordinator

**Sinan Al-Attar**

The programme coordinator manages the daily matters of the programme and answers questions regarding organisational and course-related issues.

Dr. Ir. S. Al-Attar

Applied Sciences building (58), van der Maasweg 9, room B0.120

Applied Physics building (22), Lorentzweg 1, room A206

T: +31 (0)15 27 83633 ✉ [s.al-attar@tudelft.nl](mailto:s.al-attar@tudelft.nl)

### Academic counsellor

**Carina Vonk**

The academic counsellor advises students on all kinds of study related matters, including personal problems; all private matters can be discussed confidentially. Students' questions are generally related to the programme, illness and personal problems and study problems (e.g. planning and time management).

Drs. Carina Vonk

Applied Science building (58), van der Maasweg 9

T: +31(0)15 27 85411 ✉ [C.C.Vonk@tudelft.nl](mailto:C.C.Vonk@tudelft.nl)

### Education & Student Affairs

Jaffalaan 9a (entrance Mekelweg) 2628 BX Delft

T: +31(0)15 27 88012 [www.tudelft.nl/studenten/administratie](http://www.tudelft.nl/studenten/administratie)

**Administration of results, account group Applied Sciences**

T: +31(0)15 27 89826 ✉ [spa-tnw@tudelft.nl](mailto:spa-tnw@tudelft.nl)

### Board of Examiners

The Board of Examiners decides on whether you deserve a master diploma for a set of successfully completed courses and projects. If you have followed the regular programme this decision is straightforward, but deviations are possible. To apply for acceptance of changes to the regular programme, a request should be submitted to the Board of Examiners. It is advised to consult the programme coordinator in advance. These requests should be sent to the secretary of the board:

✉ [BoardofExaminers-CE-AS@tudelft.nl](mailto:BoardofExaminers-CE-AS@tudelft.nl)

### Board of Studies

The Board of Studies is an advisory body, consisting of students and teachers, which meets at least every quarter. The Board of Studies has three main responsibilities:

- To advise on the Teaching and Examination Regulations and the Implementation Regulations
- To annually evaluate the programme
- To advise on all matters concerning education

If you have any comments concerning these points, please send an email to ✉ [BoardofStudies-CE-AS@tudelft.nl](mailto:BoardofStudies-CE-AS@tudelft.nl)

## Useful web addresses

### Brightspace

[brightspace.tudelft.nl](http://brightspace.tudelft.nl)

Brightspace is TU Delft's digital learning environment. Students, instructors and staff use Brightspace for almost all communication for their courses. There is a Brightspace page for every course, but also for the master Chemical Engineering programme.

### Digital study guide

[chem.msc.studyguide.tudelft.nl](http://chem.msc.studyguide.tudelft.nl)

In the digital study guide you can find programme details, courses and course details related to your study programme.

### Timetables

[timetables.tudelft.nl](http://timetables.tudelft.nl)

Here you can find the timetables for courses and for the programme. For individual timetables see: [MyTimetable.tudelft.nl](http://MyTimetable.tudelft.nl)

### Register for exams

[examdesk.tudelft.nl](http://examdesk.tudelft.nl)

Written exams require registration! You have to register using Osiris which can be found via Brightspace. Students are required to register for written exams in the examination registration system no later than 14 days before the exam.

### Regulations

[tnw.tudelft.nl/regulations](http://tnw.tudelft.nl/regulations)

The regulations handle all possible issues concerning education and examinations. All rights and obligations of both students and teachers are explained in detail. The Teaching & Examination Regulations and the Implementation Regulations are established by the Board of Studies. The Board of Examiners establishes the Rules and Guidelines regarding examinations. See the web page for an overview and archive of all regulations. In the Rules and Guidelines you will find the pass/fail regulations, the meaning of the marks, and the conditions for the predicate 'with distinction'.

### Faculty student portal

[tudelft.nl/en/student/faculties/as-student-portal/](http://tudelft.nl/en/student/faculties/as-student-portal/)

Within the student portal of the Faculty of Applied Sciences you can find lots of relevant information relating to student matters at TU Delft, such as timetables, internship, master thesis project, contact information and study facilities.

On this webpage you also find links to the general TU Delft student information.

### E-service

[e-service.tudelft.nl](http://e-service.tudelft.nl)

Allows you to forward TU Delft e-mail to your personal e-mail address, and change your password.

### Student association

[tg.tudelft.nl](http://tg.tudelft.nl)

"Technologisch Gezelschap" is the study association for Chemical Engineering.

### TU Delft Library

[library.tudelft.nl](http://library.tudelft.nl)

TU Delft has an extended library where you can borrow books. The website gives access to many search portals, electronic journals etc.

## Study programme

The MSc programme takes two years (120 ECTS).  
There is a choice of three tracks: Chemical Product Engineering (CPE) and Process Engineering (PE).  
The core programme comprises 90 credits:

### Obligatory Core Modules (all tracks, period 1, 15 EC)

Course Code	Course Title	Instructor	EC
CH3132A	Applied Numerical Mathematics (ANM)	Lahaye, Bera	5
CH3142	Molecular Thermodynamics (MTD)	Mendes, Smith, Bruck	5
CH3152	Molecular Transport Phenomena (MTP)	Garbin, Boukany	5

### Obligatory Track Modules (period 2, 15 EC)

#### Track Chemical Product Engineering

Course Code	Course Title	Instructor	EC
CH3162a	Design and Synthesis of Advanced Chemical Products (DSP)	Eelkema, Houtepen, Jager	6
CH3174a	Quantum Properties and Structure of Materials (QPSM)	Siebbeles, Savenije, van der Veen	6
CH3372a	Soft Matter for Chemical Products (SMP)	Mendes, Boukany	3

#### Track Process Engineering

Course Code	Course Title	Instructor	EC
CH3043a	Process Dynamics and Control (PD&C)	Huesman	3
CH3053	Applied Transport Phenomena (ATP)	Rwei, Burdyny	6
CH3681a	Reactors and Kinetics (R&K)	van Ommen, Urakawa	6

### Obligatory Design Modules (period 3&4, 20 EC)

Course Code	Course Title	Instructor	EC
CH3804	Product & Process Design (PPD)	de Haan, Meesters	5
CH3843	Design Project	de Haan, Meesters	12
WM0320TU	Ethics and Engineering	Santoni de Sio	3

### Thesis Project (CH3901, 40 EC)

A Thesis Project, done in the second year, completes the core programme. The thesis project is always done within one of the research sections of the university (Chemical Engineering department and some affiliated groups for CPE and PE tracks, or radiation science and technology department). The thesis project is track specific.

Combining the core programme with 30 EC Scientific and Social Orientation (elective part) completes the Master's programme. Students may opt for:

- Research and Development (R&D) – an Industrial Internship plus 12 EC of electives.
- Education (Ed1/Ed2) – get a Dutch secondary school qualification.
- Management of Technology (MoT) – consists of (either the first or) the second semester of the MSc MoT programme.
- Study Abroad (SA) – one semester, project and/or courses, at a foreign university.

### Programme additions

Contact the programme coordinator:

- Honours programme: this is an individual programme of at least 20 EC on top of the full Chemical Engineering programme, which contains a specially developed 5 EC course for all TU Delft honours track students. The full programme including the additional honours track should be completed within 2 years. Prior approval is required.

- Double degree programmes, such as Chemical Engineering-Management of Technology, require a minimum of 180 EC and should be completed within 3 years. Formal permission to start a double degree programme is ALWAYS required in advance!

### Approved Chemical Engineering Electives

Course Code	Course Module	Credits	Period
CH3061	Multiphase Reactor Engineering	4	3
CH3073	Separation Processes, Design and Operation	3	3
CH3101	Heterogeneous Catalysis	3	3
CH3181	Scale Up / Scale Down	3	3
CH3222	Energy Storage in Batteries	4	3
CH3421	Computational Transport Phenomena	6	3
CH3513	Electrochemistry for Renewable Energy	4	3
CH3531	Functional Ceramics	3	3
CH3563	Product and Process Engineering of Solid (nano)particles	3	3
CH3622	Process Intensification	3	3
CH3632	Chemistry and Physics of Solar Cells	6	3
CH3672	Computational Materials Science	3	3
CH3763	Nuclear Medicine	3	3
CH3783	Materials Chemistry for the Nuclear Fuel Cycle	3	3
CH3771	Nuclear Chemistry	6	3
CH3982	Literature Study	3	
AP3171	Advanced Physical Transport Phenomena	6	3
AP3252	Electron Microscopy Characterization of the Nanoscale	3	4
AP3371	Radiological Health Physics	6	3*
AP3352	Introduction to Nuclear Science and Engineering	6	1
LM3311	Green Chemistry and Sustainable Technology	3	4
LM3731	Advanced Biocatalysis	6	2+3
CH3542	Inorganic Materials	3	2
SET3070	Thermochemistry of Biomass Conversion	4	3
SET3085	Hydrogen Technology	4	4

\*This course starts before and ends after period 3

The obligatory track courses from other tracks and – to a limited extent – courses from other programmes not mentioned on this list (including Dutch and English language courses), can be chosen as well. At least 6 EC of the 12 EC of electives must be from Chemical Engineering

A more detailed description of the programme and courses can be found in the study guide:  
**[chem.msc.studyguide.tudelft.nl](http://chem.msc.studyguide.tudelft.nl)**

## Master's programme

### 1<sup>st</sup> year – Regular programme (with Internship and electives)

Monday month	1 <sup>st</sup> period										2 <sup>nd</sup> period										3 <sup>rd</sup> period										4 <sup>th</sup> period										Summer																																															
	Sept					Oct					Nov					Dec					Jan					Feb					March					April					May					June					July			Aug																																		
	week	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	1	2	3	4	...	7	8	9																													
EC	CH3132A Applied Numerical Mathematics (ANM)										Compulsory Track Courses										Christmas Holidays										Holidays										WM0320TU Ethics and Engineering										CH3804 Product and Process Design (PPD)										CH3843 Design Project										(Result) Exams									Summer Holidays								
	CH3142 Molecular Thermodynamics (MTD)																																								Elective																																															
	CH3152 Molecular Transport Phenomena (MTP)																																								Elective																																															
																																									Elective																																															

### 2<sup>nd</sup> year

Monday month	1 <sup>st</sup> period										2 <sup>nd</sup> period										3 <sup>rd</sup> period										4 <sup>th</sup> period										Summer																											
	Sept					Oct					Nov					Dec					Jan					Feb					March					April					May					June					July			Aug														
	week	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	1	2	3	4	...	7	8	9																			
EC	CH3702 Internship in Industry										Christmas Holidays										Holidays										Elective										CH3901 Master Thesis Project																			Summer Holidays								

**Remark:** The second year is flexible. Electives can also be done in other periods.  
Internship in Industry can also be done after the Master Thesis Project.