

UNIVERSITEIT TWENTE.

DIPLOMA SUPPLEMENT MASTER

This Diploma Supplement model was developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It should be free from any value judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.

1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

1.1	Family name(s):	<Family name(s)>
1.2	Given name(s):	<Given name(s)>
1.3	Date of birth:	<Date of birth>
1.4	Student identification number or code:	<Student identification number>

2. INFORMATION IDENTIFYING THE QUALIFICATION

2.1	Name of the qualification and title conferred:	Master of Science in Chemical Engineering
2.2	Main field(s) of study for the qualification:	Chemical Engineering
2.3	Name and status of awarding institution:	Universiteit Twente (public university, state recognized)
2.4	Name and status of institution administering studies:	Universiteit Twente (public university, state recognized)
2.5	Language(s) of instruction/examination:	English

3. INFORMATION ON THE LEVEL OF THE QUALIFICATION

3.1 Level of qualification:
Master's Degree
Research University

3.2 Official length of programme:
Two years (120 ECTS)

3.3 Access requirement(s):

1. Admission to the first-year of this Master of Science programme is granted if one of the educational background requirements for admission to university education, in accordance with Articles 7.30a, b and c of The Higher Education and Research Act (Wet op het Hoger Onderwijs en Wetenschappelijk Onderzoek, WHW), is met.

2. Sufficient mastery of the English language is required:

a. Academic IELTS, overall band score of at least 6.5.

b. TOEFL, internet based (TOEFL-iBT) of at least 90.

3. Applicants with a Bachelor's degree in Chemical Engineering awarded by a Dutch research university will be admitted to the programme.

4. The Board of Examiners can grant access to the Master's programme in individual cases under the condition that the student successfully completes an additional programme to eliminate deficiencies.

4. INFORMATION ON THE CONTENTS AND RESULTS GAINED

4.1 Mode of study:
Full-time

4.2 Programme requirements:
Relevant information regarding modules and grades obtained is provided in the transcript of records (see 4.3).

General skills and attributes

Graduates of the Master Chemical Engineering will: be capable of being analytical in their work on the basis of a broad and deep scientific knowledge; be able to synthesise knowledge and to solve problems in a creative way dealing with complex issues; have the qualities needed for employment in circumstances requiring sound judgement, personal responsibility and initiative, in complex and unpredictable professional environments; be able to assume leading roles, including management roles, in companies and research organisations, and be able to contribute to innovation; be able to work in an international environment, helped by their social and cultural sensitivity and language and communication abilities, partly acquired through experience of team work and any study periods abroad; have awareness of possible ethical, social, environmental, aesthetic and economic implications of their work and to act accordingly; have an awareness of their need to update their knowledge and skills.

Domain and subject-specific skills and competencies include

The graduate of the Master Chemical Engineering has obtained core knowledge, skills and understanding in the field of chemistry and/or chemical engineering on an advanced academic level i.e. has followed advanced modules, specialised core modules, has made a process or product design and/or has performed a MSc research project; is able to read and understand the relevant international literature; has obtained in-depth knowledge of at least one specialized topic in the field of chemical engineering; be able to work independently on an academic level in industry or other places in the society where the knowledge and skills of a chemical engineer are essential; be able to work on the development and/or research of (industrial) processes and products; be able to make a realistic process or product design, including economic and environmental as well as aspects of sustainability; be able to solve a wide variety of different chemical and/or chemical engineering problems varying from fundamental research to practical applications in plant operations; have thorough experience with research and complete awareness of the applicability of research into technological developments; be able to work in a interdisciplinary and/or multicultural team of experts; be able to present his/her results in English by means of a presentation to a professional audience and/or report/publication.

4.3 Programme details and the individual grades/marks/credits obtained:

The following list shows all the subjects completed by the student as part of the Programme of Study. It states the subject name, number of credits and the final mark awarded to the student.

Subject	ECTS	Mark
188085 International Study Tour Project	4.0	8
371502 Chemical Reaction Engineering	5.0	8
372001 Advanced Transport Phenomena	5.0	8
372002 Multiphase Reaction Technology	5.0	8
372005 Theory of Phase Equilibria	5.0	8
373501 Thermodynamica and Flowsheeting	5.0	8
375003 Process Equipment Design	5.0	8
376502 Catalysis for Sustainable Technologies	5.0	8
376503 Catalysis in the Procesindustry	5.0	8
379001 Process Design Assignment	10.0	8
379900 Internship	20.0	8
379914 MSc Thesis, PT, Research Aspects	25.0	8
379915 MSc Thesis, PT, Reporting & General Aspects	20.0	8
574003 Energy from Biomass	4.0	8
Total	123.0	Credits

4.4 Grading scheme and, if available, grade distribution guidance:

Dutch grading system

The Dutch grading system, used from elementary through to university education is the 1 to 10 scale given in the following table, in which 10 is the highest grade, 6 the minimum pass, and 1 the lowest grade. However, 10 is rarely awarded.

Mark	Definition
10	Excellent
9	Very good
8	Good
7	Satisfactory
6	Sufficient
5-1	Fail
Special marks	
G	Finished, no grade
V	Exemption

4.5 Overall classification of the qualification:

Pass

5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1 Access to further study:

Master-degree programmes may entitle access to third cycle studies (PhD programmes).

5.2 Professional status:

Not applicable
