

Note: the selection of IDM electives must be approved in advance by the IDM-coordinator (dr. v. Nederveen).

Code	Name	ECTS	Quarter
CIE4120	Information Systems for the Construction Industry	4	Q1
CME2300	Financial Engineering	4	Q1
EPA1323	Introduction to TPM Modeling	5	Q2
SPM8000	Project Management	7	Q3
IN4170	Databases and Datamining	6	Q1, Q2
WI4051TU	Introduction to Operation Research	6	Q1, Q2
CIE4100 ¹	Materials and Ecological Engineering	4	Q3
CIE4130 ¹	Probabilistic Design	4	Q2
CIE4395 ¹	Risk and Variability in GeoEngineering	4	Q4
CIE4491 ¹	Urban Drainage and Watermanagement	4	Q1
CIE5830 ¹	Freight Transportation Systems: Analysis and Modelling	5	Q3
CIE5981 ¹	Forms of Collaboration in Civil Engineering	4	Q1
CMExxxx	Other financial or management courses		
EPAxxxx	Other system modeling courses		
WI/INxx	Other risk or information courses		

¹ Students may use one 4 ECTS course out of their MSc-track program as an IDM elective.

ANNOTATION WITHIN 120 ECTS

For all MSc-students Civil Engineering

Do you want to

- Become a ζ-engineer who is able to integrate technology (β) and management (γ)?
- Graduate with specific civil technical knowledge from your MSc-track, but also obtain engineering management skills so that you are well prepared for future roles in multidisciplinary design & engineering, asset and project management?
- Deserve an extra certificate together with your CE diploma still within the regular 120 ECTS?

THEN CHOOSE FOR THE IDM ANNOTATION BY USING YOUR ELECTIVE SPACE IN A DEDICATED WAY

CE MSc		CE MSc + IDM annotation	
Msc-track	60 ECTS	Msc-track	60 ECTS
Electives	20 ECTS	IDM courses	10 ECTS
Thesis	40 ECTS	Multi. Project	10 ECTS
		Thesis	40 ECTS

No impact on total ECTS

IDM annotation has been fully integrated within the 120 ECTS of the CE Master by using the MSc track elective space in a dedicated way!

IDM annotation

What to do?

In order to obtain the IDM annotation you must do three things within your elective space:

- I. Two mandatory IDM courses (combined 8 ECTS) and a minimum of 6 ECTS elective courses out of a IDM list (see last page). One 4 ECTS course from your compulsory MSc-track may be used for the 6 ECTS IDM elective space (this course is indicated with an ¹ in the table on the last page).
- II. The multidisciplinary project CIE4061 of 10 ECTS with an 'IDM flavour' (80/20 engineering vs. management).
- III. The MSc graduation thesis in your specialization domain, with an 'IDM flavour' (ratio of specialization domain vs. IDM to be determined by the graduation committee, which is a combination of members your domain and IDM staff).

Questions?

Please contact the IDM coordinator:

Dr. Sander van Nederveen (g.a.vannederveen@tudelft.nl) or

Prof. Rogier Wolfert (r.wolfert@tudelft.nl)

Detailed elaboration

I - A number of mandatory IDM courses - 14 ECTS

- 8 ECTS mandatory IDM courses: CIE4381¹ (Engineering Asset Management) and CIE4481 (System Engineering Management)
- 6 ECTS elective courses² from the IDM-list of electives, selection to be approved by the IDM coordinator, see next page.

II - A multidisciplinary project - 10 ECTS

- 10 ECTS multidisciplinary project CIE4061 with a specific IDM evaluation. You define IDM-objectives at the start, together with an IDM lecturer. At the end of the project, these IDM objective are also used in the project evaluation. Building Engineering students must do the Workshop High Rise Buildings in the same way.
- Alternatively, CE-students (not CME-students) can choose the 7 ECTS course CME1200 Collaborative Design and Engineering. It should be completed with the 4 ECTS course CME2210 Open Design & Construction Management.

III – MSc Graduation thesis

- MSc graduation project: you define an IDM objective at the start of the project, together with an IDM professor. At the end of the project, the IDM objective is used in the project evaluation. The graduation committee chair is either an IDM professor or a professor of the engineering track/specialisation. In the first case, there is at least one lecturer from the engineering track/specialisation in the committee. In the second case, there is at least one IDM lecturer in the committee.

¹ If you have done this course already as an BSc elective course (CTB3380), then you must do another 4 ECTS course from the IDM list of electives instead.

² Students may use one 4 ECTS course out of their MSc-track program as an IDM elective, see the last page.