# IDM engineering bundles for CME-students

# Integral Design & Management (IDM) Electives
## for all MSc CME students

Academic year 2019/2020

The examination programme for CME students who have opted for the IDM annotation must include at least 14 ECTS from one of the Master Specialization-related bundles below, choose from i, ii, iii, iv, or v.

| i. Hydraulic Engineering | | ECTS | Quarter |
|---|---|---|---|
| CIE3330 | Hydraulic Structures 1 | 4 | |
| CIE4330 | Ports and Waterways | 4 | |
| CIE5313-18 | Hydraulic Structures 2 | 4 | |
| CIE5305 | Bored and Immersed Tunnels | 4 | |

| ii. Building Engineering | | | |
|---|---|---|---|
| CIE3340 | Building Structures I | 4 | |
| CIE4281 | Building Structures II | 4 | |
| CIE4210 | Parametric Design | 3 | |
| CIE5251 | Special Structures | 4 | |

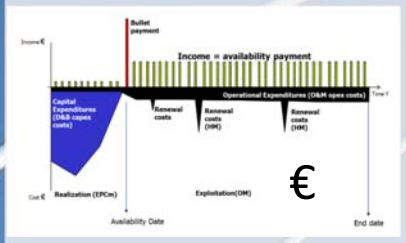
| iii. Road and Railway Engineering | | | |
|---|---|---|---|
| CIE4874 | Elements of Railway Engineering | 4 | |
| CIE5850 | Prod, Constr & Maintenance of Pavements | 4 | |
| CIE5874 | Railway Assets: Performance by Design | 4 | |
| CIE4870 | Structural Design of Railway Track | 4 | |

| iv. Offshore and Dredging Engineering | | | |
|---|---|---|---|
| OE44005 | Introduction to Offshore Engineering | 3 | |
| OE44010 | Introduction to Dredging Engineering | 4 | |
| OE44115 | Arctic Engineering | 4 | |
| OE44120 | Offshore Wind Farms Design | 4 | |

v. Another Specialization – to be determined with and approved by the IDM annotation coordinator.

**Information**
**Organization**
**Systems**

**Logistics**
**Scheduling**
**Budget**




**Contract**
**Finance**
**Risk**

Engineering Asset Domains

Hydraulic Engineering — Structural Engineering
Road and Railway Engineering
Building Engineering — Offshore Engineering

# IDM annotation

## What to do?

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

I. A cross-over bundle of engineering courses (min 14 ECTS, see last page)

II. The multidisciplinary project CIE4061 or an internship CME2100 of 10 ECTS with an 'IDM flavour' (80/20 management vs. engineering)

III. The MSc graduation thesis in the CME domain, with an 'IDM flavour' (ratio of IDM/CME vs. technical domain to be determined by the graduation committee, which is a combination of members of a technical domain and IDM/CME staff)

## More info:

www.tudelft.nl/citg/IDMannotation

## Questions?

Contact the IDM coordinator:
Dr. ir. G.A. van Nederveen (g.a.vannederveen@tudelft.nl), or
Prof. dr. ir. A.R.M. Wolfert (r.wolfert@tudelft.nl)

# Detailed elaboration

## I - A cross-over bundle of engineering courses 14 ECTS

A bundle of engineering courses from one of the following domains: hydraulic engineering, building engineering, railway engineering, or offshore and dredging engineering, see next page.

## II - An IDM multidisciplinary project or internship - 10 ECTS

10 ECTS multidisciplinary project CIE4061 or internship CME2100 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.

## III - MSc Graduation thesis with IDM part

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.