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| --- | --- | --- | --- |
| Student name |       | e-mail |       |
| Student number |       |  |  |

 **MSc ODE 1st YEAR**

 **COURSES** **ODE Core** (Obligatory 20 ECTS)

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
| CIE4325 | Ocean Waves | 6 |
| MT44020 | Motions & Loading of Structures in Waves | 5 |
| MT44045  | Introduction to Ship and Offshore Hydromechanics | 3 |
| OE44005OE44010 | Introduction to Offshore Engineering | 3 |
| OE44010 | Introduction to Dredging Engineering | 3 |
|  | **Total** | **20** |

 **COURSES** **ODE Obligatory elective 1**: Choose OE44076 or OE44145 (6 ECTS)

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
| [ ]  OE44076 | Offshore Renewable Energy | 6 |
| [ ]  OE44145 | Research Exercise | 6 |
|  | **Total** | **6** |

 **COURSES** **ODE Obligatory elective 2**: Choose CIE4130 or MT44085 (4 or 5 ECTS)

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
| [ ]  CIE4130 | Probabilistic Design | 4 |
| [ ]  MT44085 | Ultimate Strength in Marine Structures | 5 |
|  | **Total** |  |

 **COURSES** **ODE Personal development:** Choose min. 3 ECTS, max. 6 ECTS

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
| [ ]  TPM002A | Water Ethics | 3 |
| [ ]  WM0320TU448 | Ethics and Engineering | 3 |
| [ ]  WM0349WB | Philosophy of engineering science and design | 3 |
| [ ]  WM0353TU | Philosophy of engineering science and design | 3 |
| [ ]  WM0375TU | Ethics of Technological Risks | 3 |
| [ ]  WM1301TU | Ethics of Transportation | 3 |
|  | **Total** |  |

 **COURSES ODE** **SPECIALISATIONS**: Choose your specialisation\* (13-19 ECTS)

 \* Students can also choose courses through the specializations, in consultation with the head of studies.

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
| [ ]  | **ODE Bottom Founded Offshore Structures, Arctic & Wind (16 ECTS)** |
| [ ]  CIE4140 | Structural Dynamics | 4 |
| [ ]  OE44096 | Bottom Founded Offshore Structures | 6 |
| [ ]  OE44100 | Floating Structures & Offshore Moorings | 6 |
| [ ]  | **ODE Dredging Engineering (18 ECTS)** |
| [ ]  OE44030 | Offshore Geotechnical Engineering | 4 |
| [ ]  OE44035 | Dredging Pumps & Slurry Transport  | 4 |
| [ ]  OE44040 | Dredging Processes I | 4 |
| [ ]  OE44045 | Dredging Processes II | 3 |
| [ ]  OE44050 | CFD for Dredging and Offshore Engineering | 3 |
| [ ]  | **ODE Floating Offshore Structures (13 ECTS)** |
| [ ]  CIE4140 | Structural Dynamics | 4 |
| [ ]  OE44100 | Floating Structures & Offshore Moorings | 6 |
| [ ]  OE44125 | Dynamic Positioning | 3 |
| [ ]  | **ODE Structural Design & Analysis (14 ECTS*) (Instructor: Carey Walters)*** |
| [ ]  CIE4140 | Structural Dynamics | 4 |
| [ ]  MT44030 | Torsion and Shear in Marine Structures | 5 |
| [ ]  OE44085 | Fatigue Strength of Marine Structures | 5 |
| [ ]  | **ODE Offshore Renewable Energy (15 ECTS)** |
| [ ]  CIE4140 | Structural Dynamics | 4 |
| [ ]  ME44210 | Drive & Energy Systems | 3 |
| [ ]  OE44120 | Offshore Wind Farms Design | 4 |
| [ ]  OE44135 | Offshore Wind Support Structures  | 4 |
|  | **Total**  |  |

 **ODE Electives 1st YEAR**

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
| [ ]  OE44030 | Offshore Geotechnical Engineering | 4 |
| [ ]  OE44091 | Structural Dynamics Practical | 2 |
| [ ]  OE44105 | Marine Pipelines | 4 |
| [ ]  OE44110 | Subsea Engineering | 4 |
| [ ]  OE44115 | Arctic Engineering | 4 |
| [ ]  OE44120 | Offshore Wind Farms Design | 4 |
| [ ]  OE44135 | Offshore Wind Support Structures  | 4 |
|  | **Total** |  |

 **MSc ODE 2nd YEAR**

**ODE/EWEM Graduation Project (obligatory 45 ECTS)**

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
| [ ]  OE54010-20 | ODE Literature Research (including colloquium attendance & presentation) | 10 |
| [ ]  OE54035 | ODE MSc Thesis | 35 |
|  | **Total** | **45** |

 \*Tick this box if you used 15 or more EC in electives as a replacement for the Research Assignment / Joint Interdisciplinary Project.

**ME-ODE Electives courses 2nd YEAR (~15 EC)**

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
| [ ]  AT327-12 | Arctic Offshore Engineering (Spitsbergen) | 7.5 |
| [ ]  CIE4320  | Vibration-based Monitoring and Identification | 4 |
| [ ]  OE44090 | Introduction to Computational Dynamics of Offshore Structures | 4 |
| [ ]  OE44140 | Multidisciplinary Project | 1-15 |
| [ ]  OE54000 | Industrial Practice | 15 |
| [ ]  TUD4040 | Joint Interdisciplinary Project | 15 |
| [ ]  \* | Additional Electives | 15 |
|  | **Total** |    |

 \*Tick this box if you use 15 or more EC in electives

 **COURSES**: Use this space for any additional (free) electives or free specialisation.

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
|    |    |    |
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|  | **Total** |    |

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| --- | --- |
| **Total of MSc ODE Study Program** (min. 120 ECTS) |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Signature InstructorDate:       | Signature Head of Studies**Dr.ir. S.A. Miedema**Date:       | Signature StudentDate:       | On behalf of the Examination BoardDate:       |