This form can be used to add courses from an external institution, these will only be visible in Osiris after taking the courses and the results being processed. No further action is needed, simply a bit of patience.

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

**MSc ODE 1st YEAR**

**COURSES** **ODE Core** (Obligatory 31 ECTS)

|  |  |  |  |
| --- | --- | --- | --- |
| Course code | Course name | Period | EC |
| CIE4325 | Ocean Waves | 1 | 6 |
| MT44020 | Motions & Loading of Structures in Waves | 2 | 5 |
| MT44045 | Introduction to Ship and Offshore Hydromechanics | 2 | 3 |
| MT44085 | Ultimate Strength in Marine Structures | 1 | 5 |
| OE44005  OE44010 | Introduction to Offshore Engineering | 1 | 3 |
| OE44010 | Introduction to Dredging Engineering | 1 | 3 |
| OE44076 | Offshore Renewable Energy | 3 | 6 |
|  | **Total** | | **31** |

**COURSES** **ODE Ethics and Engineering:** Choose 1 out of 2 (3 ECTS)

|  |  |  |  |
| --- | --- | --- | --- |
| Course code | Course name | Period | EC |
| WM0320TU  448 | Ethics and Engineering (period 1 or 3) | 1 or 3 | 3 |
| WM0349WB | Philosophy of Engineering Science and Design | 4 | 3 |
|  | **Total** | |  |

**COURSES ODE** **SPECIALISATIONS**: Choose your specialisation (14-18 ECTS)

|  |  |  |  |
| --- | --- | --- | --- |
| Course code | Course name | Period | EC |
|  | **ODE Dredging Engineering (18 ECTS)** |  | |
| OE44030 | Offshore Geotechnical Engineering | 3 | 4 |
| OE44035 | Dredging Pumps & Slurry Transport | 3 | 4 |
| OE44040 | Dredging Processes I | 2 | 4 |
| OE44045 | Dredging Processes II | 3 | 3 |
| OE44050 | CFD for Dredging and Offshore Engineering | 4 | 3 |
|  | **ODE Offshore Renewable Energy (16 ECTS)** |  | |
| CIEQ5002A | Structural Dynamics | 2 | 4 |
| OE44097 | Offshore Support Structures | 3 | 6 |
| OE44100 | Floating Structures & Offshore Moorings | 4 | 6 |
|  | **ODE Structural Design & Analysis (14 ECTS)** |  | |
| CIEQ5002A | Structural Dynamics | 2 | 4 |
| MT44030 | Torsion and Shear in Marine Structures | 1 | 5 |
| OE44085 | Fatigue Strength of Marine Structures | 3 | 5 |
|  | **Total** | |  |

**ODE Electives 1st YEAR 8-12 ECTS (courses from other specializations can be chosen as elective)**

|  |  |  |  |
| --- | --- | --- | --- |
| Course code | Course name | Period | EC |
| AE4W31 | Floating Offshore Wind Energy | 4 | 3 |
| MT44000 | Mechatronics in MT (period 3 and 4) | 3-4\* | 5 |
| MT44010 | Non-Metallic Materials in Marine Structures  Non-metallic materials in Marine Structures | 4 | 5 |
| OE44090 | Introduction to Computational Dynamics of Offshore Structures | 4 | 4 |
| OE44105 | Marine Pipelines | 4 | 4 |
| OE44110 | Subsea Engineering | 4 | 4 |
|  | **Total** | |  |

## \*Theoretical content is offered in period 3, practicals in period 4 (consult [CourseBase](https://studiegids.tudelft.nl/a101_displayProgram.do?program_tree_id=28151) for more information).

**MSc ODE 2nd YEAR**

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

|  |  |  |  |
| --- | --- | --- | --- |
| Course code | Course name |  | EC |
| OE54010-22 | ODE Literature Research |  | 10 |
| OE54035 | ODE MSc Thesis |  | 35 |
|  | **Total** | | **45** |

**ME-ODE suggested elective courses 2nd year (or free elective courses, min. 15 ECTS)**

|  |  |  |  |
| --- | --- | --- | --- |
| Course code | Course name | Period | EC |
| CIEM4302 | Cold Regions Engineering | 1 | 5 |
| MT44090 | Fluid - Structure Interaction in Marine Structures | 1 | 5 |
| OE44145 | Research Exercise\* |  | 6 |
| RO47001 | Robot Dynamics & Control | 1 | 5 |
| RO47002 | Machine Learning for Robotics | 1 | 5 |
| SC42001 | Control System Design | 1 | 5 |
| SC42015 | Control Theory | 1 | 6 |
| SC42056 | Optimization for Systems and Control | 1 | 3 |
| SET3055 | Economics and Regulations of Sustainable Energy Systems | 1 | 4 |
| TPM404B | Technology Entrepreneurship and Internationalization | 1 | 5 |
| TUD4040 | Joint Interdisciplinary Project | 1 | 15 |
|  | Additional Electives |  |  |
|  |  | **Total** |  |

\*In consultation with the supervisor, this course can be followed in any period.

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

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

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

|  |  |  |
| --- | --- | --- |
| Signature Head of Studies  Date: | Signature Student  Date: | On behalf of the Examination Board  Date: |