Mekelweg 2, 2628 CD DELFT

T: +31 15 27 85734

F: +31 15 27 88340

E: OSA@3mE.TUDelft.Nl

**Faculty of Mechanical, Maritime and Materials Engineering**

**STUDY PROGRAM IN MSC MATERIALS SCIENCE & ENGINEERING 2018-2019**

# FORM TO REGISTER THE MODULES OF THE INDIVIDUAL PROGRAMME,

# THE "SPECIALISATION COURSE" OF YOUR CHOICE AND YOUR ELECTIVE MODULES

Family name :       Given name(s) :

Student number :       E-mail address :

States that she / he will take part in the Specialisation Course:

Materials in Engineering Applications (MEA)

Metals Science and Technology (MST)

Materials for Sustainable Development (MSD)

Advanced Construction Materials: Roads & Buildings (ACM)

Self-defined (-)

[Please mark one and only one of these choices]

|  |
| --- |
| **To be completed and delivered or submitted to:**  Service point 3mE, Faculty of Mechanical, Maritime and Materials Engineering – Mekelweg 2 - Delft  Please keep a copy for own use! |

**Core Programme** Obligatory for all MSE master students

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Code** | **Module name** | **EC** |
| OBLIGATORY MODULES | | | |
|  | CH3531 | Functional Ceramics | 3 |
|  | CH4011MS | Polymer Science | 4 |
|  | MS43000 | Society’s Needs: Case Studies and Materials Challenges | 3 |
|  | MS43005 | Structure and Properties of Materials | 8 |
|  | MS43010 | Characterisation of Materials | 6 |
|  | MS43015 | Metals Science | 4 |
|  | MS43020 | Computational Materials Science | 3 |
|  | MS43025 | Mechanical Behaviour of Materials | 4 |
|  | MS43030 | Processing of Materials | 3 |
|  | WM0320TU | Ethics & Engineering | 3 |
| Total MSE Core Programme | | |  | ≥ 41 EC |

**Specialisation Course: Materials in Engineering Applications (MEA)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Code** | **Module name** | **EC** |
| OBLIGATORY MODULES | | | |
|  | MS43100 | Science of Failure | 3 |
|  | MS43105 | Processing of Materials II | 4 |
|  | MS43110 | Joining Technologies | 3 |
|  | MS43115 | Materials Selection for Engineering Applications | 3 |
|  | MS43120 | Corrosion and Protection against Corrosion | 3 |
|  | MS53100 | Internship | 15 |
| CHOOSE A TOTAL OF 8 EC ELECTIVE MODULES | | | |
| Total MEA Specialisation Course | | |  | ≥ 39 EC |

**Specialisation Course: Metals Science and Technology (MST)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Code** | **Module name** | **EC** |
| OBLIGATORY MODULES | | | |
|  | MS43200 | Metals Science II | 4 |
|  | MS43100 | Science of Failure | 3 |
|  | MS43205 | Computational Materials Science II | 3 |
|  | MS43210 | Advanced Characterisation | 4 |
|  |  | Steel Science | 3 |
|  |  | Corrosion Science | 3 |
| CHOOSE A TOTAL OF 19 EC ELECTIVE MODULES | | | |
| Total MST Specialisation Course | | |  | ≥ 39 EC |

**See next page for the other Specialisation Courses and Elective Modules**

Mekelweg 2, 2628 CD DELFT

T: +31 15 27 85734

F: +31 15 27 88340

E: OSA@3mE.TUDelft.Nl

**Faculty of Mechanical, Maritime and Materials Engineering**

**Specialisation Course: Materials for Sustainable Development (MSD)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Code** | **Module name** | **EC** |
| OBLIGATORY MODULES | | | |
|  | MS43300 | Materials and Sustainable Development | 3 |
|  | MS43205 | Computational Materials Science II | 3 |
|  | MS43305 | Materials for Clean Energy Technologies | 4 |
|  | MS43310 | Materials at High Temperature | 4 |
|  | MS43210 | Advanced Characterisation | 4 |
|  |  | Recycling Engineering Materials | 4 |
| CHOOSE A TOTAL OF 17 EC ELECTIVE MODULES | | | |
| Total MSD Specialisation Course | | |  | ≥ 39 EC |

**Specialisation Course: Advanced Construction Materials: Roads & Buildings (ACM)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Code** | **Module name** | **EC** |
| OBLIGATORY MODULES | | | |
|  | CIE5102 | Forensic Building Materials Science | 3 |
|  | CIE5110 | Concrete – Science and Technology | 4 |
|  | CIE5100 | Repair and Maintenance of Construction Materials | 4 |
|  | CIE5146 | Micromechanics and Comp. Modelling of Building Mat. | 3 |
| CHOOSE A TOTAL OF 25 EC ELECTIVE MODULES | | | |
| Total ACM Specialisation Course | | |  | ≥ 39 EC |

**Elective Modules Specialisation Courses MEA, MST, MSD, ACM**

**Self-Defined Specialisation Course (ask permission before you start)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Code** | **Module name** | **EC** |
| (ELECTIVE) MODULES | | | |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Total MSE Specialisation Course | | |  | ≥ 39 EC |

**Assignments** (MSc-project, other Projects)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Code** | **Module name** | **EC** |
|  | MS53000 | Graduation Project MSE | 40 |
|  |  |  |  |
|  |  |  |  |
| Total MSc-project, other Projects | | |  | ≥ 40 EC |

|  |  |  |
| --- | --- | --- |
| Total MSE master program |  | ≥ 120 EC |

EC = European Credit. 1 EC = 28 hours study load

Name professor:

Date:       Date:       Date:

Signature professor Signature student Board of Examiners: