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

ME Core Courses (Select at least 2 courses in addition to the 3 obligatory courses)

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
| [x]  ME41055 | Multibody Dynamics B | 4 |
| [ ]  ME41106 | Intelligent Vehicles 3ME | 5 |
| [ ]  ME44210 | Drive & Energy Systems | 3 |
| [ ]  ME45001 | Advanced Heat Transfer | 4 |
| [ ]  ME45042 | Advanced Fluid Dynamics | 5 |
| [ ]  ME46000 | Nonlinear Mechanics | 4 |
| [ ]  ME46006 | Physics for Mechanical Engineers | 4 |
| [x]  ME46007 | Measurement Technology | 3 |
| [ ]  ME46055 | Engineering Dynamics | 4 |
| [ ]  ME46085 | Mechatronic System Design | 4 |
| [x]  SC42001 | Control System Design | 5 |
|  | **Total** |       |

ME Social courses (Select min 3 ECTS, max. 6 ECTS)

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
| [ ]  TBM022A | Technology, Innovation and Ethics for Companies | 5 |
| [ ]  TPM013A | Environmental Ethics | 5 |
| [ ]  TPM015B | Ethics of AI | 3 |
| [ ]  TPM024A | Methods for Risk Analysis and Management | 5 |
| [ ]  TPM404B | Technology Entrepreneurship and Internationalization | 5 |
| [ ]  TPM416A | Turning Technology into Business | 6 |
| [ ]  TPM420A | Ready to Start-up | 6 |
| [ ]  WM0320TU | Ethics and Engineering | 3 |
| [ ]  WM0329TU | Ethics and Engineering | 6 |
| [ ]  WM0349WB | Philosophy of Engineering Science and Design | 3 |
| [ ]  WM0353TU | Climate Ethics | 3 |
| [ ]  WM0375TU | Ethics of Technological Risks | 3 |
| [ ]  WM0801TU | Introduction to Safety Science | 3 |
| [ ]  WM1301TU | Ethics of Transportation | 3 |
| [ ]  WM1302TU | Ethics of Transportation | 5 |
| [ ]  WM1401TU | Ethics of Healthcare Technologies | 3 |
| [ ]  WM1402TU | Ethics of Healthcare Technologies | 5 |
|  | **Total** |       |

ME-BMD Obligatory courses

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
| BM41040 | Neuromechanics & Motor Control | 5 |
| ME41006 | Musculoskeletal Modeling and Simulation | 4 |
| RO47006 | Human Robot Interaction | 5 |
|  | **Total** | **14** |

ME-BMD Design Project Courses: Select at least 2

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
| [ ]  BM41070 | Medical Device Prototyping | 6 |
| [ ]  ME41085 | Biomechatronics | 4 |
| [ ]  ME41096 | Bio Inspired Design | 5 |
| [ ]  ME46015 | Precision Mechanism Design | 4 |
| [ ]  ME46115 | Compliant Mechanisms | 4 |
|  | **Total** |       |

ME-BMD Electives

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
| [ ]  BM41050 | Applied Experimental Methods: Medical Instruments | 4 |
| [ ]  BM41055 | Anatomy and Physiology | 4 |
| [ ]  BM41130 | Tissue Biomechanics | 3 |
| [ ]  BM41155 | 3D Printing | 4 |
| [ ]  ME41035 | Special Topics in Sports Engineering | 3 |
| [ ]  ME41065 | System Identification and Parameter Estimation | 7 |
| [ ]  ME41120 | Freehand Sketching of Products and Mechanisms | 3 |
| [ ]  ME41125 | Introduction to Engineering Research | 3 |
| [ ]  ME46041 | Experimental Dynamics | 4 |
| [ ]  ME46050 | Advanced Finite Element Methods | 4 |
| [ ]  ME46060 | Engineering Optimization: Concepts and Applications | 3 |
| [ ]  ME46070 | Fundamentals of Mechanical Analysis | 4 |
| [ ]  RO47003 | Robot Software Practicals | 5 |
| [ ]  RO47004 | Machine Perception | 5 |
| [ ]  RO47005 | Planning & Decision Making | 5 |
| [ ]  RO47013 | Control in Human-Robot Interaction | 5 |
| [ ]  RO47015 | Applied Experimental Methods | 5 |
| [ ]  RO47019 | Intelligent Control Systems | 4 |
| [ ]  SC42045 | Control Systems Lab | 4 |
| [ ]  SC42056 | Optimization for Systems and Control | 3 |
| [ ]  TW3720TU | Object Oriented Scientific Programming C | 3 |
|  | **Total** |       |

Alternative electives

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

If you chose alternative electives, please briefly explain your choice:

|  |  |
| --- | --- |
| Course code | Motivation |
|       |       |
|       |       |

ME-BMD Second Year Project: Select 1

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
| [ ]  ME51015 | ME-BMD Internship / Research Assignment | 15 |
| [ ]  TUD4040 | Joint Interdisciplinary Project | 15 |
|  | **Total** | **15** |

ME-BMD Graduation Project Obligatory (45 ECTS)

|  |  |  |
| --- | --- | --- |
| Course code | Course name | EC |
| ME51010-20 | ME-BMD Literature Research | 10 |
| ME51035 | ME-BMD MSc Thesis | 35 |
|  | **Total** | **45** |

|  |  |
| --- | --- |
| **Total EC of study program** |       |

|  |  |  |
| --- | --- | --- |
| Signature Master CoordinatorDate:       | Signature StudentDate:       | On behalf of the Examination BoardDate:       |