|  |  |  |  |
| --- | --- | --- | --- |
| Student name |       | Preliminary education |       |
| Student number |       | e-mail |       |

|  |  |
| --- | --- |
| HOMOLOGATION COURSES (IF NECESSARY) 1) (3-6 EC) |  |
|  | Course code | Course name | EC | Q |
| [ ]  | ET3604LR | Electronic Circuits | 3 | 1 |
| [ ]  | WB1631-15 | Sterkteleer | 6 | 2 |
| [ ]  | WB1135 | Dynamica | 6 | 3 |
| [ ]  | WB2235 | Signaalanalyse | 6 | 3 |
| **Subtotal EC** |       |  |

|  |  |
| --- | --- |
| 1st YEAR BME - OBLIGATORY COURSES (5 EC) |  |
|  | Course code | Course name | EC | Q |
|  | WM1402TU | Ethics of Healthcare Technologies | 5 | 1 |
| **Subtotal EC** | **5** |  |

|  |  |
| --- | --- |
| 1st YEAR BME - OBLIGATORY ELECTIVE COURSES (select 1 out of 2, depending on your background) 2) |  |
|  | Course code | Course name | EC | Q |
| [ ]  | BM41055 | Anatomy and Physiology (for students with technical background) | 4 | 1, 2 |
| [ ]  | ME41095 | Bio-inspired Design (for students with biomedical/medical background) | 4 | 1, 2 |
| **Subtotal EC** | **4** |  |

|  |  |
| --- | --- |
| 1st YEAR BME-MD - TRACK OBLIGATORY COURSES (24 EC) |  |
|  | Course code | Course name | EC | Q |
|  | BM41035 | Biomaterials | 4 | 2 |
|  | BM41050 | Applied Experimental Methods: Medical Instruments | 4 | 4 |
|  | BM41095 | Medical Instruments A: Clinical Challenges and Eng. Solutions | 3 | 1 |
|  | BM41155 | 3D Printing | 4 | 3 |
|  | EE4555 | Active Implantable Biomedical Microsystems | 5 | 4 |
|  | ET4127 | Themes in Biomedical Electronics | 4 | 3 |
| **Subtotal EC** | **24** |  |

|  |  |
| --- | --- |
| 1st YEAR BME-MD - Three additional courses from the following list are obligatory (9-18 EC) |  |
|  | Course code | Course name | EC | Q |
| [ ]  | BM41075 | Regenerative Medicine | 4 | 4 |
| [ ]  | BM41090 | Computational Mechanics of Tissues and Cells | 6 | 3, 4 |
| [ ]  | BM41100 | Medical instruments B: Quality Assurance in Design | 3 | 3 |
| [ ]  | EE4109 | Structured Electronic Design | 5 | 2 |
| [ ]  | EE4C02 | System Engineering | 3 | 3, 4 |
| [ ]  | ET4130 | Bioelectricity | 3 | 3 |
| [ ]  | ET4257 | Sensors and Actuators | 4 | 2 |
| [ ]  | ME41045 | Tissue Biomechanics of Bone, Cartilage and Tendon | 3 | 1 |
| [ ]  | ME41065 | System Identification and Parameter Estimation | 7 | 1, 2 |
| **Subtotal EC** |       |  |
| **Total EC 1st YEAR**  |       |  |

|  |  |
| --- | --- |
| 2nd YEAR BME – OBLIGATORY GRADUATION PROJECT (45 EC) |  |
|  | Course code | Course name | EC | Q |
|  | BM51010 | BME Literature Research | 10 | 2 |
|  | BM51035 | BME MSc-Thesis | 35 | 3, 4 |
|  | **Subtotal EC** | **45** |  |

|  |  |
| --- | --- |
| 2nd YEAR BME – OBLIGATORY ELECTIVE COURSES (15 EC) |  |
|  | Course code | Course name | EC | Q |
| [ ]  |  | Select 15 EC elective courses on next page 3) | 15 | - |
| [ ]  | BM51015 | BME Internship | 1 |
| [ ]  | TUD4040 | Joint Interdisciplinary Project | 1 |
|  | **Subtotal EC** | **15** |  |
|  | **Total EC 2nd year** | **60** |  |

1. If you follow a homologation course, select one of these courses.
2. If you have a background in Biomedical Engineering/Technology, Biomedical Sciences, Clinical Technology, Human Movements Sciences, Medical Natural Sciences or Medicine, you are not allowed to follow the BM41055 course. Instead, please select the ME41095 course.
3. When you select this option, choose your electives from the next page.

Student name:       Study number:

|  |  |
| --- | --- |
| Free elective courses |  |
| Select | Course code | Course name  | EC | Q |
| [ ]  | BM41060 | Physiology and Engineering | 3 | 4 |
| [ ]  | BM41070 | Medical Device Prototyping (limited capacity) | 6 | 3, 4 |
| [ ]  | BM41110 | Clinical Patient Safety | 2 | 2 |
| [ ]  | CIE4353 | Continuum Mechanics | 6 | 1, 2 |
| [ ]  | CIE5123 | Introduction to the Finite Element Method | 4 | 3 |
| [ ]  | EE4520 | Analog CMOS Design I | 3 | 2 |
| [ ]  | EE4585 | Semiconductor Device Physics | 5 | 2 |
| [ ]  | EE4C01 | Profile Orientation and Academic Skills | 3 | 1, 2 |
| [ ]  | EE4C03 | Statistical Digital Signal Processing | 5 | 1 |
| [ ]  | EE4C08 | Measurement and Instrumentation | 5 | 1 |
| [ ]  | ET4252 | Analogue IC Design | 4 | 3 |
| [ ]  | ET4260 | Microsystem Integration | 4 | 4 |
| [ ]  | ET4277 | Microelectronics Reliability | 4 | 3 |
| [ ]  | ET4289 | Integrated Circuits and MEMS Technology | 4 | 3 |
| [ ]  | ET4386 | Estimation and Detection | 5 | 2 |
| [ ]  | ET4399 | Extra Project | max 15 | 1 |
| [ ]  | ME41035 | Special Topics in Sports Engineering (limited capacity) | 3 | 4 |
| [ ]  | ME41095 | Bio-inspired Design | 4 | 1, 2 |
| [ ]  | ME46085 | Mechatronic System Design | 4 | 2 |
| [ ]  | SC42095 | Digital Control | 3 | 2 |
| [ ]  LUMC | BM41025 | Surgery for Engineers (not available in 2020-21) | 2 | 2 |
| [ ]  VU HMS |  | Applied Biomechanics | 6 | - |
| [ ]  VU HMS |  | 3D kinematics | 3 | - |
| [ ]  VU HMS |  | Electromyography | 3 | - |
| [ ]  |       |       |       |  |
| [ ]  |       |       |       |  |
| [ ]  |       |       |       |  |
| [ ]  |       |       |       |  |
| [ ]  |       |       |       |  |
| [ ]  |       |       |       |  |
| [ ]  |       |       |       |  |
| [ ]  |       |       |       |  |
| **Total EC** |       |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Name of Mastertrack Coordinator: | Prof.dr.ir. Wouter Serdijn | Date: |        |

Signature: Signature student: Examination board:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Please fill out the Form digitally and send it to** **SPA-3mE@tudelft.nl**

(Make sure the Form is signed by your track coordinator)

**Note**: Handwritten Forms will not be handled!

Please send also a signed copy of this Form to the Master Coordinator, Dr.ir. I. Apachitei, coordinator-BME-3mE@tudelft.nl