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

Abbreviations used: **EC** = **E**uropean **C**redits (ECTS), **Q** = Lecture hours per week per **q**uarter/teaching period (Q1/Q2/Q3/Q4), **x** = hours vary or are flexible.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| HOMOLOGATION COURSES (IF NECESSARY) 1) (3-6 EC - These are part the 1st YEAR 60 EC, and must be done that year) | | | | | |  |
|  | Course code | Course name | | EC | | Q |
|  | ET3604LR | Electronic Circuits | | 3 | | 4/0/0/0 |
|  | WB1631-15 | Sterkteleer | | 6 | | 0/8/0/0 |
|  | WB1135 | Dynamica | | 6 | | 0/0/8/0 |
|  | WB2235 | Signaalanalyse | | 6 | | 0/0/8/0 |
| **Subtotal EC** | | |  | |  | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1st YEAR BME - PROGRAMME-OBLIGATORY COURSES (11 EC) | | | |  |
|  | Course code | Course name | EC | Q |
|  | BM41140 | Fundamentals of Biomedical Engineering | 6 | 4/4/0/0 |
|  | WM1402TU | Ethics of Healthcare Technologies | 5 | 2/0/0/0 |
| **Subtotal EC** | | | **11** |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1st YEAR BME - PROGRAMME-OBLIGATORY ELECTIVES (4/5 EC) (**select** **one**, depending on your background) 2) | | | |  |
|  | Course code | Course name | EC | Q |
|  | BM41055 | Anatomy and Physiology (only for students with technical background) | 4 | 2/2/0/0 |
|  | ME41096 | Bio-inspired Design (only for students with biomedical/medical background) | 5 | 4/4/0/0 |
| **Subtotal EC** | | | **4/5** |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1st YEAR [BME-MD – TRACK-OBLIGATORY COURSES](javascript:_n(20562);" \o "BME-MB Obligatory Courses ) (24 EC) | | | |  |
|  | Course code | Course name | EC | Q |
|  | BM41035 | Biomaterials | 4 | 0/4/0/0 |
|  | BM41050 | Applied Experimental Methods: Medical Instruments | 4 | 0/0/0/2 |
|  | BM41095 | Medical Instruments A: Clinical Challenges and Eng. Solutions | 3 | 4/0/0/0 |
|  | BM41155 | 3D Printing | 4 | 0/0/4/0 |
|  | EE4555 | Active Implantable Biomedical Microsystems | 5 | 0/0/0/4 |
|  | ET4127 | Themes in Biomedical Electronics | 4 | 0/0/3/0 |
| **Subtotal EC** | | | **24** |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1st YEAR [BME-MD – TRACK-OBLIGATORY ELECTIVES](javascript:_n(20563);)  (9-18 EC) (**select three**) | | | |  |
|  | Course code | Course name | EC | Q |
|  | BM41075 | Regenerative Medicine | 4 | 0/0/0/4 |
|  | BM41090 | Computational Mechanics of Tissues and Cells | 6 | 0/0/3/3 |
|  | BM41100 | Medical instruments B: Quality Assurance in Design (limited capacity: max 40 stud.) | 3 | 0/0/3/0 |
|  | BM41130 | Tissue Biomechanics | 3 | 4/0/0/0 |
|  | EE4C02 | System Engineering | 3 | 0/0/4/2 |
|  | EE4C08 | Measurement and Instrumentation | 5 | 4/0/0/0 |
|  | ET4130 | Bioelectricity | 3 | 0/0/3/0 |
|  | ET4257 | Sensors and Actuators | 4 | 0/3/0/0 |
|  | ME41065 | System Identification and Parameter Estimation | 7 | 2/2/0/0 |
| **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 | 0/x/0/0 |
|  | BM51035 | BME MSc-Thesis | 35 | 0/0/x/x |
|  | **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 | | x/0/0/0 |
|  | TUD4040 | Joint Interdisciplinary Project | | x/0/0/0 |
|  | **Doing an IDD with the 2nd year of the other master programme?** 4) | | **Subtotal EC** | **15** |  |
|  | If yes, replace this text with the name of the other MSc programme. | | **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 ME41096 course.
3. When you select this option, choose your electives from the next page.
4. If you do an IDD, you must take the 1st year of **both** programmes and the 2nd year of **only one**. If you choose the 2nd year of your BME programme, you don’t have to fill in anything here. If you choose the 2nd year of the other master programme, fill in the name of that programme here.

Student name:       Study number:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| RECOMMENDED FREE ELECTIVES (Choose at least enough to complete your YR1 to 60 EC. Add 15 more for YR2 if applicable.) | | | |  |
| Select | Course code | Course name | EC | Q |
|  | BM41070 | Medical Device Prototyping (limited capacity) | 6 | 0/0/2/2 |
|  | BM41110 | Clinical Patient Safety (limited capacity: max 28 students) | 2 | 0/2/0/0 |
|  | CIE4353 | Continuum Mechanics | 6 | 4/4/0/0 |
|  | CIE5123 | Introduction to the Finite Element Method | 4 | 0/0/6/0 |
|  | EE4520 | Analog CMOS Design I | 3 | 0/3/0/0 |
|  | EE4560 | Information Theory | 5 | 0/0/4/0 |
|  | EE4585 | Semiconductor Device Physics | 5 | 0/4/0/0 |
|  | EE4595 | Wavefield Imaging | 5 | 0/0/0/4 |
|  | EE4C01 | Profile Orientation and Academic Skills | 3 | 2/2/0/0 |
|  | EE4C03 | Statistical Digital Signal Processing | 5 | 4/0/0/0 |
|  | EE4C10 | Analog Circuit Design Fundamentals | 5 | 4/0/0/0 |
|  | EE4109 | Structured Electronic Design | 5 | 0/4/0/0 |
|  | ET4252 | Analogue IC Design | 4 | 0/0/3/0 |
|  | ET4260 | Microsystem Integration | 4 | 0/0/0/3 |
|  | ET4277 | Microelectronics Reliability | 4 | 0/0/3/0 |
|  | ET4289 | Integrated Circuits and MEMS Technology | 4 | 0/0/3/0 |
|  | ET4386 | Estimation and Detection | 5 | 0/4/0/0 |
|  | ET4399 | Extra Project | max 15 | x/x/x/x |
|  | ME41035 | Special Topics in Sports Engineering (limited capacity) | 3 | 0/0/0/4 |
|  | ME41096 | Bio-inspired Design | 5 | 4/4/0/0 |
|  | ME46085 | Mechatronic System Design | 4 | 0/4/0/0 |
|  | RO47015 | Applied Experimental Methods: Human Factors | 5 | 0/0/0/x |
|  | SC42025 | Filtering and Identification | 6 | 0/4/0/0 |
|  | SC42095 | Digital Control | 3 | 0/4/0/0 |
| LUMC | BM41025 | Surgery for Engineers | 2 | 0/x/0/0 |
| VU HMS |  | Applied Biomechanics | 6 | - |
| VU HMS |  | 3D kinematics | 3 | - |
| VU HMS |  | Electromyography | 3 | - |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| **Total EC** | | |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1st YEAR BME – Courses EC summary (use this to see if your course load is distributed nicely over the entire year) | | | | |
| Quarter | Q1 | Q2 | Q3 | Q4 |
| EC (not hours) total per quarter |  |  |  |  |

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

Signature: Signature student: Examination board:

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

**Follow these steps:**

1. **Fill in this form digitally and save/export/print as PDF**
2. **Put your last and first name and student number at the end of the filename**
3. **Have the form signed (preferably digitally) by your track coordinator**
4. **Send the signed form to** [**SPA-3mE@tudelft.nl**](mailto:SPA-3mE@tudelft.nl)
5. **Send a copy to the BME Master Coordinator:** [**coordinator-BME-3mE@tudelft.nl**](mailto:coordinator-BME-3mE@tudelft.nl)

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