|  |  |  |  |
| --- | --- | --- | --- |
| 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 Devices: Past, Present, Future | 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 Devices: Designing for CE-marking (limited capacity: max 30 stud.) | 3 | 0/0/3/0 |
|  | BM41130 | Tissue Biomechanics | 3 | 4/0/0/0 |
|  | EE4C08 | Measurement and Instrumentation | 5 | 4/0/0/0 |
|  | EE4C11 | System Engineering | 5 | 7/0/0/0 |
|  | 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** | | |  |  |

|  |  |  |
| --- | --- | --- |
| **Free electives EC chosen from next page for 1st YEAR** |  |  |
| **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 |
|  |  | | **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 ME41096 course.
3. When you select this option, choose your electives from the next page. These should be added on top of any electives you chose for the 1st year.

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 |
|  | AE4ASM514TU | Continuum Mechanics | 4 | 0/0/4/0 |
|  | 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 |
|  | 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 |
|  | IFEEMCS520100 | Fundamentals of Artificial Intelligence Programme (limited capacity) | 15 | 8/0/0/0 |
|  | ME41035 | Special Topics in Sports Engineering (limited capacity) | 3 | 0/0/0/4 |
|  | ME41096 | Bio-inspired Design | 5 | 4/4/0/0 |
|  | ME41125 | Introduction to Engineering Research | 3 | 0/0/0/4 |
|  | 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 | 6 | - |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| **Total EC** | | |  |  |

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

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

Signature Track Coordinator: 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!