**Biyomedikal Mühendisliği Yan Dal Kılavuzu**

1. Öğrenciler Biyomedikal Mühendisliği Bölümü yan dal ders listelerinden toplamda en az 15 krediyi tamamlayacak şekilde en az 5 ders en fazla 10 ders seçmesi gerekmektedir.
2. Öğrenciler Tablo 1’de verilen Biyomedikal Mühendisliği Bölümü zorunlu ders havuzundan en az 3 ders, Tablo 2’de verilen Biyomedikal Mühendisliği Bölümü Seçmeli Ders Havuzundan en az 2 ders seçmeleri gerekmektedir.

**Tablo 1. Biyomedikal Mühendisliği Zorunlu Dersler**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Kodu** |  | **Ders Adı** | **Ders** | **Uygulama** | **Laboratuar** | **Yerel Kredi** | **AKTS** |
| [BME1532](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10573&aid=151&pid=504) |  | Cell Biology | 3 | 0 | 0 | 3 | 4 |
| [BME2911](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10578&aid=151&pid=504) |  | Introduction to Human Anatomy & Physiology | 3 | 0 | 0 | 3 | 4 |
| [BME2303](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10577&aid=151&pid=504) |  | Circuit Theory | 4 | 0 | 0 | 4 | 6 |
| [BME2122](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10576&aid=151&pid=504) |  | Signals & Systems | 3 | 0 | 0 | 3 | 5 |
| [BME2314](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10583&aid=151&pid=504) |  | Analog Electronics | 3 | 0 | 0 | 3 | 5 |
| [BME2324](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10584&aid=151&pid=504) |  | Logic Design | 2 | 0 | 0 | 2 | 3 |
| [BME3323](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10585&aid=151&pid=504) |  | Introduction to Microcontroller Programming | 3 | 0 | 0 | 3 | 4 |
| [BME3921](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10588&aid=151&pid=504) |  | Biomechanics 1 | 3 | 0 | 0 | 3 | 4 |
| [BME3142](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10598&aid=151&pid=504) |  | Biomedical Modeling & Simulation | 3 | 0 | 0 | 3 | 3 |
| [BME3402](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10592&aid=151&pid=504) |  | Medical Instrumentation | 3 | 0 | 2 | 4 | 5 |
| [BME3522](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10590&aid=151&pid=504) |  | Biomaterials | 3 | 0 | 0 | 3 | 3 |
| [BME4903](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10596&aid=151&pid=504) |  | Medical Imaging | 3 | 0 | 0 | 3 | 4 |

**Tablo 2. Biyomedikal Mühendisliği Seçmeli Dersler**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Kodu** | **Önk.** | **Ders Adı** | **Ders** | **Uygulama** | **Laboratuar** | **Yerel Kredi** | **AKTS** |
| [BME3180](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10602&aid=151&pid=504) |  | Machine Learning in Biomedical Engineering | 3 | 0 | 0 | 3 | 6 |
| [BME3310](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=11283&aid=151&pid=504) |  | System Identification | 3 | 0 | 0 | 3 | 6 |
| [BME3330](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10605&aid=151&pid=504) |  | Biolectromagnetism | 3 | 0 | 0 | 3 | 6 |
| [BME3540](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10608&aid=151&pid=504) |  | Cell and Tissue Engineering | 3 | 0 | 0 | 3 | 6 |
| [BME3570](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10610&aid=151&pid=504) |  | Biosensors | 3 | 0 | 0 | 3 | 6 |
| [BME3700](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=11566&aid=151&pid=504) |  | Analog Electronic Applications | 3 | 0 | 0 | 3 | 6 |
| [BME3922](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10911&aid=151&pid=504) |  | Biomechanics 2 | 3 | 0 | 0 | 3 | 6 |
| [BME4120](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10611&aid=151&pid=504) |  | Biomedical Image Processing | 3 | 0 | 0 | 3 | 6 |
| [BME4220](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10612&aid=151&pid=504) |  | Neurophysiologv & Applications | 3 | 0 | 0 | 3 | 6 |
| [BME4500](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=11382&aid=151&pid=504) |  | lntroduction to Nuclear Medicine | 3 | 0 | 0 | 3 | 6 |
| [BME4530](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10615&aid=151&pid=504) |  | Biofluid Mechanics and Mass Transport | 3 | 0 | 0 | 3 | 6 |
| [BME4550](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10620&aid=151&pid=504) |  | Nanotechnology & Nanomaterials | 3 | 0 | 0 | 3 | 6 |
| [BME4570](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10616&aid=151&pid=504) |  | Biomedical Optics & Lasers | 3 | 0 | 0 | 3 | 6 |
| [BME4580](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10617&aid=151&pid=504) |  | Genetic Engineering | 3 | 0 | 0 | 3 | 6 |
| [BME4600](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=11381&aid=151&pid=504) |  | Fluid Mechanics | 3 | 0 | 0 | 3 | 6 |
| [BME3161](http://www.bologna.yildiz.edu.tr/index.php?r=course/view&id=10909&aid=151&pid=504) |  | Biosignal Processing | 3 | 0 | 0 | 3 | 6 |