**Industrial Engineering (1. Program) – Mechatronics Engineering (2. Program)**

**Double Major Program**

**(21.01.2020)**

**Courses that Industrial Engineering (English) Students Should Take from the Mechatronics Engineering (English) Program**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Code** | **Course** | **Course./Ps./Lab** | **ECTS Credit** |
| 1 | MECH1120 | Engineering Graphics  | 2 0 4 | 6 |
| 2 | MECH2120 | Computational Methods | 3 0 2 | 6 |
| 3 | MECT2520 | Materials and Manufacturing | 4 1 0 | 6 |
| 4 | MECT2211 | Engineering Mechanics - I | 3 1 0 | 5 |
| 5 | MECT2222 | Engineering Mechanics - II | 3 1 0 | 5 |
| 6 | MECH3111 | Measurements & Instrumentation | 1 0 2 | 3 |
| 7 | MECT3122 | Mechatronics Engineering Laboratory | 1 0 2 | 3 |
| 8 | MECH3211 | Machine Design-I | 3 0 2 | 6 |
| 9 | MECH3311 | Fluid Mechanics | 3 1 0 | 5 |
| 10 | MECT3322 | Fundamentals of Thermal Sciences | 3 1 0 | 5 |
| 11 | MECH3422 | Modeling and Control of Dyn. Systems | 3 1 0 | 5 |
| 12 | MECT3444 | Control System Design | 2 0 2 | 4 |
| 13 | MECT4470 | Modern Control Theory | 3 0 0 | 5 |
| 14 | MECT4410 | Mechatronics System Design | 3 0 2 | 6 |
| 15 | ELEC1401 | Logic Circuit Design | 3 1 0 | 5 |
| 16 | ELEC1402 | Logic Circuit Lab | 0 0 2 | 2 |
| 17 | ELEC2205 | Electrical Circuits | 3 1 0 | 5 |
| 18 | ELEC2207 | Electrical Circuits Lab | 0 0 2 | 2 |
| 19 | ELEC3305 | Electronics | 3 1 0 | 5 |
| 20 | ELEC3307 | Electronics Lab | 0 0 2 | 2 |
| 21 | MECT4902 | Design Project | 0 6 0 | 6 |
| 22 |   | MECT Area Elective | 3 0 0 | 5 |
| 23 | MECT3910 | Industrial Training-II | 0 160 0 | 1 |
| 23 Course | **103** |

***(Note: It is the student's responsibility to provide the prerequisites for the courses to be taken.)***

**Minor Program**

**Courses that Industrial Engineering (English) Students Should Take from the Mechatronics Engineering (English) Program**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Code** | **Course** | **Course./Ps./Lab** | **ECTS Credit** |
| 1 | MECT2211 | Engineering Mechanics - I | 3/1/0 | 5 |
| 2 | MECT2222 | Engineering Mechanics - II | 3/1/0 | 5 |
| 3 | MECT2520 | Materials and Manufacturing | 3/1/0 | 6 |
| 4 | MECH3211 | Machine Design-I | 3/0/2 | 6 |
| 5 | ELEC2309 | Fund. of Electrical & Electronics Engin. | 3/1/0 | 5 |
| 6 | MECT3322 | Fundamentals of Thermal Sciences | 3/1/0 | 5 |
| 7 | MECH3311 | Fluid Mechanics | 3/1/0 | 5 |
| 8 | MECH3422 | Modeling and Control of Dyn. Systems | 3/1/0 | 5 |
| 9 | ELEC3305 | Electronics | 3/1/0 | 5 |
| 10 | ELEC3307 | Electronics Lab. | 0/0/2 | 2 |
| 11 | MECT4410 | Mechatronics System Design | 3/0/2 | 6 |
| 11 Course | **55** |

***(Note: It is the student's responsibility to provide the prerequisites for the courses to be taken.)***

**Computer Engineering  (1. Program) – Mechatronics Engineering (2. Program)**

**Double Major Program**

**(21.01.2020)**

**Courses that Computer Engineering (English) Students Should Take from the Mechatronics Engineering (English) Program**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Code** | **Course** | **Course./Ps./Lab** | **ECTS Credit** |
| 1 | MECH1120 | Engineering Graphics  | 2 0 4 | 6 |
| 2 | MATH2106 | Multivariable Calc. & Diff. Eqns. | 3 0 2 | 6 |
| 3 | MECT2520 | Materials and Manufacturing | 4 1 0 | 6 |
| 4 | MECT2211 | Engineering Mechanics - I | 3 1 0 | 5 |
| 5 | MECT2222 | Engineering Mechanics - II | 3 1 0 | 5 |
| 6 | MECT3122 | Mechatronics Engineering Laboratory | 1 0 2 | 3 |
| 7 | MECH3211 | Machine Design-I | 3 0 2 | 6 |
| 8 | MECH3311 | Fluid Mechanics | 3 1 0 | 5 |
| 9 | MECT3322 | Fundamentals of Thermal Sciences | 3 1 0 | 5 |
| 10 | MECH3422 | Modeling and Control of Dyn. Systems | 3 1 0 | 5 |
| 11 | MECT3444 | Control System Design | 2 0 2 | 4 |
| 12 | MECT4470 | Modern Control Theory | 3 0 0 | 5 |
| 13 | MECT4410 | Mechatronics System Design | 3 0 2 | 6 |
| 14 | MECT4902 | Design Project | 0 6 0 | 6 |
| 15 |   | MECT Area Elective | 3 0 0 | 5 |
| 16 | MECT3910 | Industrial Training-II | 0 160 0 | 1 |
| 16 Course | **79** |

 ***(Note: It is the student's responsibility to provide the prerequisites for the courses to be taken.)***

**Minor Program**

**Courses that Computer Engineering (English) Students Should Take from the Mechatronics Engineering (English) Program**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Code** | **Course** | **Course./Ps./Lab** | **ECTS Credit** |
| 1 | MECT2211 | Engineering Mechanics - I | 3/1/0 | 5 |
| 2 | MECT2222 | Engineering Mechanics - II | 3/1/0 | 5 |
| 3 | MECT2520 | Materials and Manufacturing | 4/1/0 | 6 |
| 4 | MECH3211 | Machine Design-I | 3/0/2 | 6 |
| 5 | MECT3322 | Fundamentals of Thermal Sciences | 3/1/0 | 5 |
| 6 | MECH3311 | Fluid Mechanics | 3/1/0 | 5 |
| 7 | MECH3422 | Modeling and Control of Dyn. Systems | 3/1/0 | 5 |
| 8 | MECT4410 | Mechatronics System Design | 3/0/2 | 6 |
| 8 Course | **43** |

***(Note: It is the student's responsibility to provide the prerequisites for the courses to be taken.)***

**Software Engineering  (1. Program) – Mechatronics Engineering (2. Program)**

**Double Major Program**

**(21.01.2020)**

**Courses that Software Engineering (English) Students Should Take from the Mechatronics Engineering (English) Program**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Code** | **Course** | **Course./Ps./Lab** | **ECTS Credit** |
| 1 | MECH1120 | Engineering Graphics  | 2 0 4 | 6 |
| 2 | MATH2106 | Multivariable Calc. & Diff. Eqns. | 3 0 2 | 6 |
| 3 | MECT2520 | Materials and Manufacturing | 4 1 0 | 6 |
| 4 | MECT2211 | Engineering Mechanics - I | 3 1 0 | 5 |
| 5 | MECT2222 | Engineering Mechanics - II | 3 1 0 | 5 |
| 6 | MECT3122 | Mechatronics Engineering Laboratory | 1 0 2 | 3 |
| 7 | MECH3211 | Machine Design-I | 3 0 2 | 6 |
| 8 | MECH3311 | Fluid Mechanics | 3 1 0 | 5 |
| 9 | MECT3322 | Fundamentals of Thermal Sciences | 3 1 0 | 5 |
| 10 | MECH3422 | Modeling and Control of Dyn. Systems | 3 1 0 | 5 |
| 11 | MECT3444 | Control System Design | 2 0 2 | 4 |
| 12 | MECT4470 | Modern Control Theory | 3 0 0 | 5 |
| 13 | MECT4410 | Mechatronics System Design | 3 0 2 | 6 |
| 14 | MECT4902 | Design Project | 0 6 0 | 6 |
| 15 |   | MECT Area Elective | 3 0 0 | 5 |
| 16 | MECT3910 | Industrial Training-II | 0 160 0 | 1 |
| 16 Course | **79** |

 ***(Note: It is the student's responsibility to provide the prerequisites for the courses to be taken.)***

**Minor Program**

**Courses that Software Engineering (English) Students Should Take from the Mechatronics Engineering (English) Program**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Code** | **Course** | **Course./Ps./Lab** | **ECTS Credit** |
| 1 | MECT2211 | Engineering Mechanics – I | 3/1/0 | 5 |
| 2 | MECT2222 | Engineering Mechanics – II | 3/1/0 | 5 |
| 3 | MECT2520 | Materials and Manufacturing | 4/1/0 | 6 |
| 4 | MECH3211 | Machine Design-I | 3/0/2 | 6 |
| 5 | MECT3322 | Fundamentals of Thermal Sciences | 3/1/0 | 5 |
| 6 | MECH3311 | Fluid Mechanics | 3/1/0 | 5 |
| 7 | MECH3422 | Modeling and Control of Dyn. Systems | 3/1/0 | 5 |
| 8 | MECT4410 | Mechatronics System Design | 3/0/2 | 6 |
| 8 Course | **43** |

 ***(Note: It is the student's responsibility to provide the prerequisites for the courses to be taken.)***

[**Electrical and Electronics Engineering**](https://www.isikun.edu.tr/en/electrical-and-electronics-engineering) **(1. Program) – Mechatronics Engineering (2. Program)**

**Double Major Program**

**(21.01.2020)**

**Courses that** [**Electrical and Electronics Engineering**](https://www.isikun.edu.tr/en/electrical-and-electronics-engineering) **(English) Students Should Take from the Mechatronics Engineering (English) Program**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Code** | **Course** | **Course./Ps./Lab** | **ECTS Credit** |
| 1 | MECH1120 | Engineering Graphics  | 2 0 4 | 6 |
| 2 | MECH2120 | Computational Methods | 3 0 2 | 6 |
| 3 | MECT2520 | Materials and Manufacturing | 4 1 0 | 6 |
| 4 | MECT2211 | Engineering Mechanics - I | 3 1 0 | 5 |
| 5 | MECT2222 | Engineering Mechanics - II | 3 1 0 | 5 |
| 6 | MECT3122 | Mechatronics Engineering Laboratory | 1 0 2 | 3 |
| 7 | MECH3211 | Machine Design-I | 3 0 2 | 6 |
| 8 | MECH3311 | Fluid Mechanics | 3 1 0 | 5 |
| 9 | MECT3322 | Fundamentals of Thermal Sciences | 3 1 0 | 5 |
| 10 | MECT3444 | Control System Design | 2 0 2 | 4 |
| 11 | MECT4470 | Modern Control Theory | 3 0 0 | 5 |
| 12 | MECT4410 | Mechatronics System Design | 3 0 2 | 6 |
| 13 | MECT4902 | Design Project | 0 6 0 | 6 |
| 14 |   | MECT Area Elective | 3 0 0 | 5 |
| 15 | MECT3910 | Industrial Training-II | 0 160 0 | 1 |
| 15 Course | **74** |

 ***(Note: It is the student's responsibility to provide the prerequisites for the courses to be taken.)***

**Minor Program**

**(21.01.2020)**

**Courses that** [**Electrical and Electronics Engineering**](https://www.isikun.edu.tr/en/electrical-and-electronics-engineering) **(English) Students Should Take from the Mechatronics Engineering (English) Program**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Code** | **Course** | **Course./Ps./Lab** | **ECTS Credit** |
| 1 | MECT2211 | Engineering Mechanics – I | 3/1/0 | 5 |
| 2 | MECT2222 | Engineering Mechanics – II | 3/1/0 | 5 |
| 3 | MECT2520 | Materials and Manufacturing | 3/1/0 | 6 |
| 4 | MECH3211 | Machine Design-I | 3/0/2 | 6 |
| 5 | MECT3322 | Fundamentals of Thermal Sciences | 3/1/0 | 5 |
| 6 | MECH3311 | Fluid Mechanics | 3/1/0 | 5 |
| 7 | MECT4410 | Mechatronics System Design | 3/0/2 | 6 |
| 7 Course | **38** |

 ***(Note: It is the student's responsibility to provide the prerequisites for the courses to be taken.)***

**Biomedical Engineering  (1. Program) – Mechanical Engineering (2. Program)**

**Double Major Program**

**(21.01.2020)**

**Courses that** [**Biomedical Engineering**](https://www.isikun.edu.tr/en/electrical-and-electronics-engineering) **(English) Students Should Take from the Mechatronics Engineering (English) Program**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Code** | **Course** | **Course./Ps./Lab** | **ECTS Credit** |
| 1 | MECH1120 | Engineering Graphics  | 2 0 4 | 6 |
| 2 | MECH2120 | Computational Methods | 3 0 2 | 6 |
| 3 | MECT2520 | Materials and Manufacturing | 4 1 0 | 6 |
| 4 | MECT2211 | Engineering Mechanics – I | 3 1 0 | 5 |
| 5 | MECT2222 | Engineering Mechanics – II | 3 1 0 | 5 |
| 6 | MECT3122 | Mechatronics Engineering Laboratory | 1 0 2 | 3 |
| 7 | MECH3211 | Machine Design-I | 3 0 2 | 6 |
| 8 | MECH3311 | Fluid Mechanics | 3 1 0 | 5 |
| 9 | MECT3322 | Fundamentals of Thermal Sciences | 3 1 0 | 5 |
| 10 | MECT3444 | Control System Design | 2 0 2 | 4 |
| 11 | MECT4470 | Modern Control Theory | 3 0 0 | 5 |
| 12 | MECT4410 | Mechatronics System Design | 3 0 2 | 6 |
| 13 | MECT4902 | Design Project | 0 6 0 | 6 |
| 14 |   | MECT Area Elective-1 | 3 0 0 | 5 |
| 15 | MECT3910 | Industrial Training-II | 0 160 0 | 1 |
| 15 Course | **74** |

 ***(Note: It is the student's responsibility to provide the prerequisites for the courses to be taken.)***

**Minor Program**

**Courses that** [**Biomedical Engineering**](https://www.isikun.edu.tr/en/electrical-and-electronics-engineering) **(English) Students Should Take from the Mechatronics Engineering (English) Program**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Code** | **Course** | **Course./Ps./Lab** | **ECTS Credit** |
| 1 | MECT2211 | Engineering Mechanics – I | 3/1/0 | 5 |
| 2 | MECT2222 | Engineering Mechanics – II | 3/1/0 | 5 |
| 3 | MECT2520 | Materials and Manufacturing | 3/1/0 | 6 |
| 4 | MECH3211 | Machine Design-I | 3/0/2 | 6 |
| 5 | MECT3322 | Fundamentals of Thermal Sciences | 3/1/0 | 5 |
| 6 | MECH3311 | Fluid Mechanics | 3/1/0 | 5 |
| 7 | MECT4410 | Mechatronics System Design | 3/0/2 | 6 |
| 7 Course | **38** |

 ***(Note: It is the student's responsibility to provide the prerequisites for the courses to be taken.)***

**Civil Engineering  (1. Program) – Mechatronics Engineering (2. Program)**

**Double Major Program** **(21.01.2020)**

**Courses that** [**Civil Engineering**](https://www.isikun.edu.tr/en/electrical-and-electronics-engineering) **(English) Students Should Take from the Mechatronics Engineering (English) Program**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Code** | **Course** | **Course./Ps./Lab** | **ECTS Credit** |
| 1 | MECH1120 | Engineering Graphics  | 2 0 4 | 6 |
| 2 | MECH2120 | Computational Methods | 3 0 2 | 6 |
| 3 | MECT2520 | Materials and Manufacturing | 4 1 0 | 6 |
| 4 | MECH3111 | Measurements & Instrumentation | 1 0 2 | 3 |
| 5 | MECT3122 | Mechatronics Engineering Laboratory | 1 0 2 | 3 |
| 6 | MECH3211 | Machine Design-I | 3 0 2 | 6 |
| 7 | MECT3322 | Fundamentals of Thermal Sciences | 3 1 0 | 5 |
| 8 | MECH3422 | Modeling and Control of Dyn. Systems | 3 1 0 | 5 |
| 9 | MECT3444 | Control System Design | 2 0 2 | 4 |
| 10 | MECT4470 | Modern Control Theory | 3 0 0 | 5 |
| 11 | MECT4410 | Mechatronics System Design | 3 0 2 | 6 |
| 12 | ELEC1401 | Logic Circuit Design | 3 1 0 | 5 |
| 13 | ELEC1402 | Logic Circuit Lab | 0 0 2 | 2 |
| 14 | ELEC2205 | Electrical Circuits | 3 1 0 | 5 |
| 15 | ELEC2207 | Electrical Circuits Lab | 0 0 2 | 2 |
| 16 | ELEC3305 | Electronics | 3 1 0 | 5 |
| 17 | ELEC3307 | Electronics Lab | 0 0 2 | 2 |
| 18 | MECT4902 | Design Project | 0 6 0 | 6 |
| 19 |   | MECT Area Elective | 3 0 0 | 5 |
| 20 | MECT3910 | Industrial Training-II | 0 160 0 | 1 |
| 20 Course | **88** |

 ***(Note: It is the student's responsibility to provide the prerequisites for the courses to be taken.)***

**Minor Program**

**Courses that** [**Civil Engineering**](https://www.isikun.edu.tr/en/electrical-and-electronics-engineering) **(English) Students Should Take from the Mechatronics Engineering (English) Program**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Code** | **Course** | **Course./Ps./Lab** | **ECTS Credit** |
| 1 | MECT2520 | Materials and Manufacturing | 3/1/0 | 6 |
| 2 | MECH3211 | Machine Design-I | 3/0/2 | 6 |
| 3 | ELEC2309 | Fund. of Electrical & Electronics Eng. | 3/1/0 | 5 |
| 4 | ELEC3305 | Electronics | 3/1/0 | 5 |
| 5 | ELEC3307 | Electronics Lab. | 0/0/2 | 2 |
| 6 | MECT3322 | Fundamentals of Thermal Sciences | 3/1/0 | 5 |
| 7 | MECH3422 | Modeling and Control of Dyn. Systems | 3/1/0 | 5 |
| 8 | MECT4410 | Mechatronics System Design | 3/0/2 | 6 |
| 8 Course | **40** |

 ***(Note: It is the student's responsibility to provide the prerequisites for the courses to be taken.)***