

**MAKİNE MÜHENDİSLİĞİ BÖLÜMÜ**

**2022-2023 EĞİTİM PLANI**

| Ders Kodu                | Dersin Adı  | Saat/Hafta |          |                      |        | Kredisi | AKTS Kredisi | Dersin Türü |
|--------------------------|---|------------|----------|----------------------|--------|---------|--------------|-------------|
|                          |   | Kuramsal   | Uygulama | Pratik/<br>Laboratuv | Toplam |         |              |             |
| <b>Yıl 1 / Yarıyıl 1</b> |   |            |          |                      |        |         |              |             |
| 507001012022             | TURKISH LANGUAGE I  | 2          | 0        | 0                    | 2      | 2       | 2            | Zorunlu     |
| 507001022022             | PRINCIPLES OF ATATURK AND RECENT<br>TURKISH HISTORY I     | 2          | 0        | 0                    | 2      | 2       | 2            | Zorunlu     |
| 507001042022             | CALCULUS I  | 4          | 0        | 0                    | 4      | 4       | 6            | Zorunlu     |
| 507001052016             | PHYSICS I   | 3          | 0        | 2                    | 5      | 4       | 6            | Zorunlu     |
| 507001062022             | GENERAL CHEMISTRY   | 3          | 0        | 1                    | 4      | 3,5     | 7            | Zorunlu     |
| 507001072022             | TECHNICAL DRAWING   | 2          | 2        | 0                    | 4      | 3       | 4            | Zorunlu     |
| 507001272022             | INTRODUCTION TO MECHANICAL<br>ENGINEERING                 | 2          | 0        | 0                    | 2      | 2       | 1            | Zorunlu     |
| 507001292022             | CAREER PLANNING   | 1          | 0        | 0                    | 1      | 1       | 2            | Zorunlu     |
| TOPLAM                   |   | 19,0       | 2,0      | 3,0                  | 24,0   | 21,5    | <b>30,0</b>  |             |
| <b>Yıl 1 / Yarıyıl 2</b> |   |            |          |                      |        |         |              |             |
| 507000922022             | TURKISH LANGUAGE II                                       | 2          | 0        | 0                    | 2      | 2       | 2            | Zorunlu     |
| 507000942022             | PRINCIPLES OF ATATURK AND RECENT<br>TURKISH HISTORY II    | 2          | 0        | 0                    | 2      | 2       | 2            | Zorunlu     |
| 507001112022             | CALCULUS II   | 4          | 0        | 0                    | 4      | 4       | 7            | Zorunlu     |
| 507001122016             | PHYSICS II  | 3          | 0        | 2                    | 5      | 4       | 7            | Zorunlu     |
| 507001132018             | STATICS   | 3          | 0        | 0                    | 3      | 3       | 5            | Zorunlu     |
| 507001142022             | COMPUTER AIDED TECHNICAL DRAWING                          | 2          | 2        | 0                    | 4      | 3       | 4            | Zorunlu     |
| 507001242018             | TECHNICAL ENGLISH   | 3          | 0        | 0                    | 3      | 3       | 3            | Zorunlu     |
| TOPLAM                   |   | 19,0       | 2,0      | 2,0                  | 23,0   | 21,0    | <b>30,0</b>  |             |
| <b>Yıl 2 / Yarıyıl 1</b> |   |            |          |                      |        |         |              |             |
| 507002012022             | THERMODYNAMICS I  | 3          | 0        | 0                    | 3      | 3       | 4            | Zorunlu     |
| 507002022022             | MATERIAL SCIENCE  | 3          | 0        | 0                    | 3      | 3       | 4            | Zorunlu     |
| 507002032022             | DIFFERENTIAL EQUATIONS                                    | 4          | 0        | 0                    | 4      | 4       | 7            | Zorunlu     |
| 507002042018             | STRENGTH OF MATERIALS                                     | 4          | 0        | 0                    | 4      | 4       | 5            | Zorunlu     |
| 507002132018             | DYNAMICS  | 3          | 0        | 0                    | 3      | 3       | 4            | Zorunlu     |
| 507002272022             | LINEAR ALGEBRA  | 3          | 0        | 0                    | 3      | 3       | 6            | Zorunlu     |
| TOPLAM                   |   | 20,0       | 0,0      | 0,0                  | 20,0   | 20,0    | <b>30,0</b>  |             |
| <b>Yıl 2 / Yarıyıl 2</b> |   |            |          |                      |        |         |              |             |
| 507002302022             | THERMODYNAMICS II   | 3          | 0        | 0                    | 3      | 3       | 4            | Zorunlu     |
| 507002102022             | ENGINEERING MATERIALS                                     | 3          | 0        | 1                    | 4      | 3,5     | 4            | Zorunlu     |
| 507002122018             | COMPUTATIONAL MECHANICS                                   | 2          | 1        | 0                    | 3      | 2,5     | 5            | Zorunlu     |
| 507002062022             | FUNDAMENTALS TO ELECTRICAL AND<br>ELECTRONICS ENGINEERING | 2          | 0        | 0                    | 2      | 2       | 2            | Zorunlu     |
| 507002242022             | ENGINEERING ECONOMICS                                     | 2          | 0        | 0                    | 2      | 2       | 2            | Zorunlu     |
| 507002322018             | FLUID MECHANICS   | 4          | 0        | 0                    | 4      | 4       | 5            | Zorunlu     |
| 507002282018             | COMPUTER PROGRAMMING                                      | 2          | 1        | 0                    | 3      | 2,5     | 4            | Zorunlu     |
| 507002202022             | TECHNICAL TRAINING I                                      | 0          | 0        | 0                    | 0      | 0       | 4            | Zorunlu     |
| TOPLAM                   |   | 18,0       | 2,0      | 1,0                  | 21,0   | 19,5    | <b>30,0</b>  |             |
| <b>Yıl 3 / Yarıyıl 1</b> |   |            |          |                      |        |         |              |             |
| 507003012022             | MACHINE ELEMENTS - I                                      | 3          | 0        | 0                    | 3      | 3       | 3            | Zorunlu     |
| 507003052022             | MECHANISM TECHNIQUE                                       | 3          | 0        | 0                    | 3      | 3       | 3            | Zorunlu     |
| 507003072022             | SYSTEM DYNAMICS AND CONTROL                               | 3          | 0        | 0                    | 3      | 3       | 3            | Zorunlu     |
| 507003272018             | COMPUTATIONAL FLUID DYNAMICS                              | 2          | 1        | 0                    | 3      | 2,5     | 5            | Zorunlu     |
| 507003312018             | NUMERICAL ANALYSIS  | 4          | 0        | 0                    | 4      | 4       | 7            | Zorunlu     |
| 507003112018             | HEAT TRANSFER   | 4          | 0        | 0                    | 4      | 4       | 6            | Zorunlu     |
| UNI.ELEC.CO.U.I          | UNIVERSITY ELECTIVE COURSE-I                              | 2          | 0        | 0                    | 2      | 2       | 3            | Zorunlu     |
| TOPLAM                   |   | 21,0       | 1,0      | 0,0                  | 22,0   | 21,5    | 30,0         |             |

| Yil 3 / Yarıyıl 2   |   |      |     |     |      |      |      |         |
|---|---|------|-----|-----|------|------|------|---------|
| 507003022022  | MACHINE ELEMENTS - II                       | 3    | 0   | 0   | 3    | 3    | 3    | Zorunlu |
| 507003062022  | MACHINE DYNAMICS                            | 3    | 0   | 0   | 3    | 3    | 3    | Zorunlu |
| 507003302018  | STATISTICS                                  | 3    | 0   | 0   | 3    | 3    | 7    | Zorunlu |
| 507003442022  | MICROCONTROLLER APPLICATIONS                | 2    | 2   | 0   | 4    | 3    | 4    | Zorunlu |
| 507003462022  | PROJECT MANAGEMENT                          | 2    | 0   | 0   | 2    | 2    | 1    | Zorunlu |
| 507003482022  | MECHATRONIC WORKSHOP                        | 0    | 4   | 0   | 4    | 2    | 3    | Zorunlu |
| 507003322022  | TECHNICAL TRAINING II                       | 0    | 0   | 0   | 0    | 0    | 2    | Zorunlu |
| 507003042022  | MANUFACTURING PROCESSES                     | 4    | 0   | 0   | 4    | 4    | 4    | Zorunlu |
| UNI.ELEC.CO.U.II  | UNIVERSITY ELECTIVE COURSE-II               | 2    | 0   | 0   | 2    | 2    | 3    | Zorunlu |
| TOPLAM  |   | 19,0 | 6,0 | 0,0 | 25,0 | 22,0 | 30,0 |         |
| Yil 4 / Yarıyıl 1   |   |      |     |     |      |      |      |         |
| 507004012022  | GRADUATE PROJECT                            | 0    | 2   | 0   | 2    | 1    | 7    | Zorunlu |
| 507008472022  | GRADUATE PROJECT <sup>(1)</sup>             | 0    | 4   | 0   | 4    | 2    | 14   | Zorunlu |
| 507008012022  | OCCUPATIONAL HEALTH AND SAFETY I            | 2    | 0   | 0   | 2    | 2    | 2    | Zorunlu |
| 507008152022  | INNOVATION, TECHNOLOGY AND ENTREPRENEURSHIP | 2    | 0   | 0   | 2    | 2    | 2    | Zorunlu |
| 507004092022  | MACHINE PROJECT                             | 0    | 2   | 0   | 2    | 1    | 7    | Zorunlu |
| TEKSECDERS-I  | TECHNICAL ELECTIVE COURSE I                 | 2    | 0   | 0   | 2    | 2    | 4    | Seçmeli |
| TEKSECDERS-I  | TECHNICAL ELECTIVE COURSE I                 | 2    | 0   | 0   | 2    | 2    | 4    | Seçmeli |
| TEKSECDERS-I  | TECHNICAL ELECTIVE COURSE I                 | 2    | 0   | 0   | 2    | 2    | 4    | Seçmeli |
| TOPLAM  |   | 10,0 | 4,0 | 0,0 | 14,0 | 12,0 | 30,0 |         |
| Yil 4 / Yarıyıl 2   |   |      |     |     |      |      |      |         |
| 507004012022  | GRADUATE PROJECT                            | 0    | 2   | 0   | 2    | 1    | 7    | Zorunlu |
| 507008002022  | GRADUATE PROJECT <sup>(1)</sup>             | 0    | 4   | 0   | 4    | 2    | 14   | Zorunlu |
| 507008022022  | OCCUPATIONAL HEALTH AND SAFETY II           | 2    | 0   | 0   | 2    | 2    | 2    | Zorunlu |
| 507008222022  | MACHINE LABORATORY                          | 0    | 0   | 2   | 2    | 1    | 6    | Zorunlu |
| TEKSECDERS-II   | TECHNICAL ELECTIVE COURSE II                | 2    | 0   | 0   | 2    | 2    | 4    | Seçmeli |
| TEKSECDERS-II   | TECHNICAL ELECTIVE COURSE II                | 2    | 0   | 0   | 2    | 2    | 4    | Seçmeli |
| TEKSECDERS-II   | TECHNICAL ELECTIVE COURSE II                | 2    | 0   | 0   | 2    | 2    | 4    | Seçmeli |
| NON.TECH.ELEC.CO<br>URSE  | NON-TECHNICAL ELECTIVE COURSE               | 2    | 0   | 0   | 2    | 2    | 3    | Seçmeli |
| TOPLAM  |   | 10,0 | 2,0 | 2,0 | 14,0 | 12,0 | 30,0 |         |
| <p>(1) : Mezun olacak durumda olan bir öğrenci, 7. veya 8. yarıyıldarda açılan Bitirme Tezini, mezun olabileceği dönemde alabilir.</p> <p>(2) : Kayıtlı oldukları dönem mezun olabilecek durumda olan öğrenciler ise, (I) yerine (II) veya tersi grubu dersleri alabileceklerdir.</p> |   |      |     |     |      |      |      |         |

**2022-2023 EĞİTİM PLANI SEÇMELİ DERSLER**

| Ders Kodu  | Dersin Adı  | Saat/Hafta |          |                        |        | Kredisi | AKTS Kredisi | Dersin Türü |
|--|---|------------|----------|------------------------|--------|---------|--------------|-------------|
|  |   | Kuramsal   | Uygulama | Pratik/<br>Laboratuvar | Toplam |         |              |             |
| <b>Yıl 3/Yarıyıl 1</b>   |   |            |          |                        |        |         |              |             |
| <b>UNIVERSITY ELECTIVE COURSE-I (Bu seçmeli grubundan sadece 1 ders alınacaktır.)/ (Bu seçmeli grubundan toplam 3 AKTS kredisi ders</b>  |   |            |          |                        |        |         |              |             |
| 503003572010   | BACTERIA,BIOFILM AND BIOLOGICAL DENITRIFICATION                   | 2          | 0        | 0                      | 2      | 2       | 3            | Seçmeli     |
| 503004491999   | DRINKING AND WASTE WATER TECHNOLOGY                               | 2          | 0        | 0                      | 2      | 2       | 3            | Seçmeli     |
| 507004652020   | INTRODUCTION TO COMPOSITE MATERIALS                               | 2          | 0        | 0                      | 2      | 2       | 3            | Seçmeli     |
| HEM305GHFA   | GENERAL HEALTH AND FIRST AID                                      | 2          | 0        | 0                      | 2      | 2       | 3            | Seçmeli     |
| TE733  | INTRODUCTION TO TEXTILE ENGINEERING                               | 2          | 0        | 0                      | 2      | 2       | 3            | Seçmeli     |
| Tip314ONH  | OPTIMUM NUTRITION FOR HEALTH                                      | 2          | 0        | 0                      | 2      | 2       | 3            | Seçmeli     |
| <b>Yıl 3/Yarıyıl 2</b>   |   |            |          |                        |        |         |              |             |
| <b>UNIVERSITY ELECTIVE COURSE-II (Bu seçmeli grubundan sadece 1 ders alınacaktır.)/ (Bu seçmeli grubundan toplam 3 AKTS kredisi ders</b> |   |            |          |                        |        |         |              |             |
| 11320203E11842   | CURRENT ISSUES IN MANAGEMENT                                      | 3          | 0        | 0                      | 3      | 3       | 3            | Seçmeli     |
| 1302009042018  | STRATEGIC BRAND MANAGEMENT  | 3          | 0        | 0                      | 3      | 3       | 3            | Seçmeli     |
| 503004602019   | INOVATION, TECHNOLOGY AND ENTREPRENEURSHIP                        | 2          | 0        | 0                      | 2      | 2       | 3            | Seçmeli     |
| 503004622019   | ENTREPRENEURSHIP AND INTRODUCTION TO INTELLECTUAL PROPERTY RIGHTS | 2          | 0        | 0                      | 2      | 2       | 3            | Seçmeli     |
| 507004262020   | INTRODUCTION TO BIOMECHANICS                                      | 2          | 0        | 0                      | 2      | 2       | 3            | Seçmeli     |
| FEN306FUND   | FUNDEMENTAL PRINCIPLES OF LIFE                                    | 2          | 0        | 0                      | 2      | 2       | 3            | Seçmeli     |
| Hem312GenH   | GENERAL HEALTH AND FIRST AID COURSE                               | 2          | 0        | 0                      | 2      | 2       | 3            | Seçmeli     |
| Tip314ONH  | OPTIMUM NUTRITION FOR HEALTH                                      | 2          | 0        | 0                      | 2      | 2       | 3            | Seçmeli     |
| <b>Yıl 4/Yarıyıl 1</b>   |   |            |          |                        |        |         |              |             |
| <b>TECHNICAL ELECTIVE COURSE I (Bu seçmeli grubundan sadece 3 ders alınacaktır.)/ (Bu seçmeli grubundan toplam 12 AKTS kredisi ders</b>  |   |            |          |                        |        |         |              |             |
| 507008172020   | ADVANCED COMPUTER PROGRAMMING & APPLICATIONS                      | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008192020   | NUMERICAL HEAT TRANSFER   | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008212020   | INTRODUCTION TO ROCKET TECHNOLOGY                                 | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507004192020   | NUMERICAL THERMODYNAMICS  | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507004932020   | WIND ENERGY ENGINEERING   | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507004372020   | HYDRAULIC MACHINES  | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008292020   | ADVANCED COMPUTATIONAL FLUID DYNAMICS                             | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008432022   | CLIMATISATION TECHNIQUES  | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008452022   | GAS DYNAMICS  | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507004392020   | DESIGN OF THERMAL SYSTEMS   | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008492022   | SOLAR ENERGY AND ITS APPLICATIONS                                 | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008512022   | STEAM BOILERS   | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008532022   | ENERGY TRANSFORMATIONS  | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507004532020   | INTRODUCTION TO COMBUSTION  | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008112020   | THERMAL SYSTEM COMPUTER MODELLING                                 | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008552022   | INDUSTRIAL ENERGY MANAGEMENT I                                    | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008572022   | ENERGY SYSTEMS MEASUREMENTS AND CONTROL DESIGN                    | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008592022   | HYDRAULIC SYSTEMS   | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008612022   | MOTORS  | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008632022   | AUTOMOTIVE CONTROL SYSTEMS  | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008652022   | INTRODUCTION TO FRACTURE MECHANICS                                | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008672022   | MATERIAL REMOVAL PROCESSES  | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008692022   | MECHANICAL VIBRATONS  | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008712022   | INTRODUCTION TO THEORY OF ELASTICITY                              | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008732022   | ADVANCED STRENGTH OF MATERIALS                                    | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507004652020   | INTRODUCTION TO COMPOSITE MATERIALS                               | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008752022   | WELDING TECHNIQUES  | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |
| 507008772022   | SELECTING OF MATERIALS  | 2          | 0        | 0                      | 2      | 2       | 4            | Seçmeli     |

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|--|--|---|---|---|---|---|---|---------|
| 507008792022   | MANUFACTURING METHODS OF POLYMER                 | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008812022   | PLASTIC FORMING OF METALS                        | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008832022   | INTRODUCTION TO PHOTONICS ENGINEERING            | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008852022   | MAINTANENCE ENGINEERING                          | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008872022   | QUALITY CONTROL                                  | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008892022   | FACTORY ORGANIZATION                             | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008332020   | INTRODUCTION TO NANOCOMPOSITES                   | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008352020   | INTRODUCTION TO MEDICAL DEVICE DESIGN            | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008912022   | HEAT CONDUCTION                                  | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008932022   | HEAT CONVECTION                                  | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008952022   | PIPE FLOW  | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008972022   | GAS TURBINES                                     | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| <b>Yıl 4/Yarıyıl 2</b>   |  |   |   |   |   |   |   |         |
| <b>TECHNICAL ELECTIVE COURSE II (Bu seçmeli grubundan sadece 3 ders alınacaktır.)/ (Bu seçmeli grubundan toplam 12 AKTS kredisi ders</b> |  |   |   |   |   |   |   |         |
| 507008382022   | ANALYSIS AND SOLUTION OF ENGINEERING SYSTEMS     | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008402022   | COMPUTER AIDED VIBRATION SIMULATIONS             | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008422022   | COMPUTER AIDED STRUCTURAL ANALYSIS               | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008142020   | THE FINITE ELEMENT METHOD                        | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507004642020   | ADVANCED COMPUTER PROGRAMMING                    | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507004962020   | INDUSTRIAL FANS                                  | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507004162020   | FUELS AND COMBUSTION SYSTEMS                     | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008442022   | REFRIGERATION TECHNIQUES                         | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008462022   | DESIGN OF CLIMATIZATION SYSTEMS                  | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008482022   | INDUSTRIAL ENERGY MANAGEMENT II                  | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008502022   | RENEWABLE ENERGY SYSTEMS                         | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008522022   | HEAT RADIATION                                   | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507004242020   | INTRODUCTION TO MECHANICS OF COMPOSITE MATERIALS | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008542022   | INTRODUCTION TO THEORY OF PLASTICITY             | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008562022   | INTRODUCTION TO MECHATRONICS                     | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008582022   | MATERIAL INSPECTION METHODS                      | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008602022   | NUMERICAL CONTROLLED MACHINES                    | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008622022   | INTRODUCTION TO THE THEORY OF STABILITY          | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507004702020   | INTRODUCTION TO ROBOTICS                         | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008642022   | POLYMERIC TECHNOLOGY                             | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008662022   | POWDER METALLURGY                                | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008682022   | POLYMERIC COMPOSITE TEST METHODS                 | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008702022   | NONTRADITIONAL MANUFACTURING                     | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008722022   | INDUSTRIAL ACOUSTICS AND NOISE                   | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507004982020   | INTRODUCTION TO NANOSCIENCE AND NANOTECHNOLOGY   | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507004262020   | INTRODUCTION TO BIOMECHANICS                     | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008242020   | INTRODUCTION TO MEDICAL IMAGING SYSTEMS          | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008742022   | LEAN PRODUCTION AND ENERGY MANAGEMENT            | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008762022   | HEATING TECHNIQUES                               | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008782022   | HEAT EXHANGERS                                   | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008802022   | CASTING TECHNOLOGY                               | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| 507008822022   | FUNDAMENTALS OF EXERGY ANALYSIS                  | 2 | 0 | 0 | 2 | 2 | 4 | Seçmeli |
| <b>Yıl 4/Yarıyıl 2</b>   |  |   |   |   |   |   |   |         |
| <b>NON-TECHNICAL ELECTIVE COURSE (Bu seçmeli grubundan sadece 1 ders alınacaktır.)/ (Bu seçmeli grubundan toplam 3 AKTS kredisi ders</b> |  |   |   |   |   |   |   |         |
| MAK4182022   | HUMAN RESOURCE MANAGEMENT                        | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| MAK4042022   | MARKETING  | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |

|            |  |   |   |   |   |   |   |         |
|------------|--|---|---|---|---|---|---|---------|
| MTY4022022 | BASIS OF BUSINESS MANAGEMENT AND MANAGERIAL SKILLS FOR ENGINEERS | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| MAK4062022 | ENTREPRENEURSHIP FOR QUALITY                                     | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| INT4042022 | COMMERCIALIZATION OF INNOVATION AND ENTREPRENEURSHIP             | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| GIP4022022 | ENTREPRENEURSHIP AND PREPARATION OF BUSINESS PLAN                | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| MAK4582022 | FUNDAMENTALS OF COMMUNICATION                                    | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| GID4062022 | FUNDAMENTALS OF LAW  | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| GID4082022 | MANAGEMENT OF HUMAN RESOURCES                                    | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| MAK4602022 | PUBLIC AFFAIRS   | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| GID4122022 | TECHNICAL FOREIGN LANGUAGE II                                    | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| GID414     | MARKETING  | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| GID416     | READING AND WRITING SKILLS                                       | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| GRE4022022 | ENTREPRENEURSHIP   | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| MAK424     | HISTORY OF ENGINEERING SCIENCES                                  | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| MAK4102022 | BUSINESS LAW AT ENGINEERING                                      | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| MAK4122022 | INTRODUCTION TO COMPUTER   | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| MAK4142022 | INTRODUCTION TO UNIVERSITY LIFE                                  | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| MAK4162022 | COMMUNITY SERVICES ACTIVITIES                                    | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |
| AKT4022022 | ACADEMIC TURKISH   | 2 | 0 | 0 | 2 | 2 | 3 | Seçmeli |