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|  | | | **BURSA ULUDAĞ ÜNİVERSİTESİ**  **FEN BİLİMLERİ ENSTİTÜSÜ**  **2022-2023 EĞİTİM ÖĞRETİM YILI DERS PLANLARI** | | | | | | | | | | | | **FR 1.1.1\_02** | | | |
| **ANABİLİM DALI** | | | | POLİMER MALZEMELER | | | | | | | | | | | | | | |
| **BİLİM DALI / PROGRAMI** | | | | YÜKSEK LİSANS PROGRAMI | | | | | | | | | | | | | | |
| **DERS AŞAMASI** | **I. YARIYIL / GÜZ** | | | | | | | | | | **II. YARIYIL / BAHAR** | | | | | | | |
| **Kodu** | **Dersin Adı** | | | **Türü** | **T** | **U** | **L** | **Kredi** | **AKTS** | **Kodu** | **Dersin Adı** | **Türü** | **T** | **U** | **L** | **Kredi** | **AKTS** |
| POL5001 | POLİMER MALZEMELERE GİRİŞ | | | Z | 3 | 0 | 0 | 3 | 6 | FEN5000 | ARAŞTIRMA TEKNİKLERİ VE YAYIN ETİĞİ | Z | 2 | 0 | 0 | 2 | 2 |
| POL5191 | YÜKSEK LİSANS TEZ DANIŞMANLIĞI I | | | Z | 0 | 1 | 0 | 0 | 1 | POL5004 | POLİMERLERİN MEKANİK ÖZELLİKLERİ | Z | 3 | 0 | 0 | 3 | 6 |
| POL5181 | YÜKSEK LİSANS UZMANLIK ALAN DERSİ I | | | Z | 4 | 0 | 0 | 0 | 5 | POL5172 | SEMİNER | Z | 0 | 2 | 0 | 0 | 4 |
|  |  | | |  |  |  |  |  |  | POL5182 | YÜKSEK LİSANS UZMANLIK ALAN DERSİ II | Z | 4 | 0 | 0 | 0 | 5 |
|  |  | | |  |  |  |  |  |  | POL5192 | YÜKSEK LİSANS TEZ DANIŞMANLIĞI II | Z | 0 | 1 | 0 | 0 | 1 |
| POL | SEÇMELİ DERS | | | S |  |  |  | 3 | 6 | POL | SEÇMELİ DERS | S |  |  |  | 3 | 6 |
| POL | SEÇMELİ DERS | | | S |  |  |  | 3 | 6 |  | SEÇMELİ DERS \* | S |  |  |  | 3 | 6 |
|  | SEÇMELİ DERS\* | | | S |  |  |  | 3 | 6 |  |  |  |  |  |  |  |  |
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| **Toplam Kredi** | | | | | | | | **12** | **30** | **Toplam Kredi** | | | | | | **11** | **30** |
| **TEZ AŞAMASI** | **III. YARIYIL / GÜZ** | | | | | | | | | | **IV. YARIYIL / BAHAR** | | | | | | | |
| POL5183 | YÜKSEK LİSANS UZMANLIK ALAN DERSİ III | | | Z | 4 | 0 | 0 | 0 | 5 | POL5194 | YÜKSEK LİSANS TEZ DANIŞMANLIĞI IV | Z | 0 | 1 | 0 | 0 | 25 |
| POL5193 | YÜKSEK LİSANS TEZ DANIŞMANLIĞI III | | | Z | 0 | 1 | 0 | 0 | 25 | POL5184 | YÜKSEK LİSANS UZMANLIK ALAN DERSİ IV | Z | 4 | 0 | 0 | 0 | 5 |
| **Toplam Kredi** | | | | | | | | **0** | **30** | **Toplam Kredi** | | | | | | **0** | **30** |
| **TOPLAM KREDİ: 23 - TOPLAM AKTS: 120** | | | | | | | | | | | | | | | | | | |
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|  | | | **BURSA ULUDAĞ ÜNİVERSİTESİ**  **FEN BİLİMLERİ ENSTİTÜSÜ**  **2020-2021** **EĞİTİM ÖĞRETİM YILI DERS PLANLARI (SEÇMELİ DERSLER)** | | | | | | | | | | | | | | **FR 1.1.1\_02** | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | |
| **ANABİLİM DALI** | | | | POLİMER MALZEMELER | | | | | | | | | | | | | | | | | | | | |
| **BİLİM DALI / PROGRAMI** | | | | YÜKSEK LİSANS PROGRAMI | | | | | | | | | | | | | | | | | | | | |
| **DERS AŞAMASI** | **I. YARIYIL / GÜZ** | | | | | | | | | | **II. YARIYIL / BAHAR** | | | | | | | | | | | | | |
| **Kodu** | **Dersin Adı** | | | **Türü** | **T** | **U** | **L** | **Kredi** | **AKTS** | **Kodu** | **Dersin Adı** | | **Türü** | | **T** | | | **U** | **L** | | **Kredi** | | **AKTS** |
| POL5049 (TEK5049) | POLİMER KİMYASI | | | S | 3 | 0 | 0 | 3 | 6 | POL5022 | POLİMER KOMPOZİTLER VE KARIŞIMLAR | | S | | 3 | | | 0 | 0 | | 3 | | 6 |
| POL5021 | POLİMER KARAKTERİZASYONU | | | S | 3 | 0 | 0 | 3 | 6 | POL5024 | POLİMER İŞLEME | | S | | 3 | | | 0 | 0 | | 3 | | 6 |
| POL5023 | ELEKTROPOLİMERİK NANOYAPILAR | | | S | 3 | 0 | 0 | 2 | 6 | POL5038 | Blok Kopolimerler | S | | 3 | | | 0 | | 0 | 3 | | 6 | | |
| POL5025 | MEMBRAN TEKNOLOJİSİ | | | S | 3 | 0 | 0 | 3 | 6 | POL5040 (TEK5040) | FONKSİYONEL POLİMERLER | | S | | 3 | | | 0 | 0 | | 3 | | 6 |
| POL 5021 (KİM5021) | AKILLI POLİMERLER | | | S | 3 | 0 | 0 | 3 | 6 | POL5032 (KİM5032) | SENTETİK ÖZEL POLİMERLER | | S | | 3 | | | 0 | 0 | | 3 | | 6 |
| POL5043 (TEK5043) | FİZİKSEL POLİMER BİLİMİ | | | S | 3 | 0 | 0 | 3 | 6 | POL5034 | NANOLİF ÜRETİMİNDE YENİ YAKLAŞIMLAR | | S | | 3 | | | 0 | 0 | | 3 | | 6 |
| POL5027 | POLİMER VE POLİMER KOMPOZİT YAPILARIN BİLGİSAYAR DESTEKLİ SİMÜLASYONLARI | | | S | 3 | 0 | 0 | 3 | 6 | POL5036 | YÜKSEK PERFORMANSLI LİFLER VE ENDÜSTRİYEL UYGULAMALARI | | S | | 3 | | | 0 | 0 | | 3 | | 6 |
|  |  | | |  |  |  |  |  |  | POL5050  (TEK 5050) | MALZEME BİLİMİNDE İLERİ KAVRAMLAR | | S | | 3 | | | 0 | 0 | | 3 | | 6 |
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|  | | | **BURSA ULUDAĞ UNIVERSITY**  **GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES**  2020-2021**ACADEMIC YEAR COURSE PLAN** | | | | | | | | | | | | | **FR 1.1.1\_02** | | | |
| **DEPARTMENT OF** | | | | POLYMERIC MATERIALS | | | | | | | | | | | | | | | |
| **DEPARTMENT / PROGRAM** | | | | Master's Degree Program | | | | | | | | | | | | | | | |
| **COURSE STAGE** | **I. TERM / FALL** | | | | | | | | | | **II. TERM / SPRING** | | | | | | | | |
| **Code** | **Course Title** | | | **Type** | **T** | **U** | **L** | **Credit** | **ECTS** | **Code** | **Course Title** | **Type** | **T** | **U** | | **L** | **Credit** | **ECTS** |
| POL5191 | MA THESIS CONSULTING I | | | C | 0 | 1 | 0 | 0 | 1 | POL5192 | MA THESIS CONSULTING II | C | 0 | 1 | | 0 | 0 | 1 |
| POL5181 | ADVANCED TOPICS IN MA THESIS I | | | C | 4 | 0 | 0 | 0 | 5 | POL5182 | ADVANCED TOPICS IN MA THESIS II | C | 4 | 0 | | 0 | 0 | 5 |
| POL5001 | INTRODUCTION TO POLYMER MATERIALS | | | C | 3 | 0 | 0 | 3 | 6 | POL5172 | SEMINAR | C | 0 | 2 | | 0 | 0 | 4 |
|  |  | | |  |  |  |  |  |  | FEN 5000 | RESEARCH TECHNIQUES AND PUBLICATION ETHICS IN POLYMER MATERIALS | C | 2 | 0 | | 0 | 2 | 2 |
|  |  | | |  |  |  |  |  |  | POL5004 | MECHANICAL PROPERTIES OF POLYMERS | C | 3 | 0 | | 0 | 3 | 6 |
| POL.. | ELECTIVE COURSE | | | E |  |  |  | 3 | 6 | POL.. | ELECTIVE COURSE | E |  |  | |  | 3 | 6 |
| POL.. | ELECTIVE COURSE | | | E |  |  |  | 3 | 6 |  | ELECTIVE COURSE \* | E |  |  | |  | 3 | 6 |
| POL… | ELECTIVE COURSE\* | | | E |  |  |  | 3 | 6 |  |  |  |  |  | |  |  |  |
| **Total Credits** | | | | | | | | **12** | **30** | **Total Credits** | | | | | | | **11** | **30** |
| **STAGE THESIS** | **III. TERM / FALL** | | | | | | | | | | **IV. TERM / SPRING** | | | | | | | | |
| POL5183 | ADVANCED TOPICS IN MA THESIS III | | | C | 4 | 0 | 0 | 0 | 5 | POL5184 | ADVANCED TOPICS IN MA THESIS IV | C | 4 | 0 | | 0 | 0 | 5 |
| POL5193 | MA THESIS CONSULTING III | | | C | 0 | 1 | 0 | 0 | 25 | POL5194 | MA THESIS CONSULTING IV | C | 0 | 1 | | 0 | 0 | 25 |
| **Total Credits** | | | | | | | | **0** | **30** | **Total Credits** | | | | | | | **0** | **30** |
| **TOTAL CREDITS: 23 TOTAL ECTS: 120** | | | | | | | | | | | | | | | | | | | |

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|  | | | **BURSA ULUDAĞ UNIVERSİTY**  **GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES**  2020-2021 **ACADEMIC YEAR COURSE PLAN (ELECTIVE COURSES)** | | | | | | | | | | | | **FR 1.1.1\_02** | | | | | |
| **ANABİLİM DALI** | | | | POLYMERİC MATERİALS | | | | | | | | | | | | | | | |
| **BİLİM DALI / PROGRAMI** | | | | Master's Degree Program | | | | | | | | | | | | | | | |
| **DERS AŞAMASI** | **I. TERM / FALL** | | | | | | | | | | **II. TERM / SPRING** | | | | | | | | |
| **Code** | **Course Title** | | | **Type** | **T** | **U** | **L** | **Credit** | **ECTS** | **Code** | **Course Title** | **Type** | **T** | | **U** | **L** | **Credit** | **ECTS** |
| POL 5049 (TEK5049) | POLYMER CHEMISTRY | | | E | 3 | 0 | 0 | 3 | 6 | POL5022 | POLYMER COMPOSITES AND BLENDS | E | 3 | | 0 | 0 | 3 | 6 |
| POL5021 | CHARACTERIZATION OF POLYMERS | | | E | 3 | 0 | 0 | 3 | 6 | POL5024 | POLYMER PROCESSING | E | 3 | | 0 | 0 | 3 | 6 |
| POL5023 | ELECTROPOLYMERIC NANOSTRUCTRES (POLYMERİC NANOSTRUCTRES) | | | E | 3 | 0 | 0 | 3 | 6 | POL5038 | BLOCK COPOLYMERS | E | 3 | | 0 | 0 | 3 | 6 |
| POL5025 | MEMBRANE TECHNOLOGY | | | E | 3 | 0 | 0 | 3 | 6 | POL5040 (TEK5040) | FUNCTIONAL POLYMERS | E | 3 | | 0 | 0 | 3 | 6 |
| POL5021 (KİM5021) | SMART POLYMERS | | | E | 3 | 0 | 0 | 3 | 6 | POL5032 (KİM5032) | SYNTHETIC SPECIFIC POLYMERS | E | 3 | | 0 | 0 | 3 | 6 |
| POL5043 (TEK5043 | PHYSICAL POLYMER SCIENCE | | | E | 3 | 0 | 0 | 3 | 6 | POL5034 | NEW APPROACHES IN NANOFIBER PRODUCTION | E | 3 | | 0 | 0 | 3 | 6 |
| POL5027 | COMPUTER-AIDED SIMULATIONS OF POLYMER AND POLYMER COMPOSITE STRUCTURES | | | E | 3 | 0 | 0 | 3 | 6 | POL5036 | HIGH-PERFORMANCE FIBERS AND INDUSTRIAL APPLICATIONS | E | 3 | | 0 | 0 | 3 | 6 |
|  |  | | |  |  |  |  |  |  | POL5050  (TEK 5050) | ADVANCED CONCEPTS IN MATERIALS SCIENCE | S | 3 | | 0 | 0 | 3 | 6 |

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|  | | | | **BURSA ULUDAĞ ÜNİVERSİTESİ**  **FEN BİLİMLERİ ENSTİTÜSÜ**  **2022-2023** **EĞİTİM ÖĞRETİM YILI DERS PLANLARI** | | | | | | | | | | | | | | **FR 1.1.1\_02** | | | | | | | |
| **ANABİLİM DALI** | | | | | POLİMER MALZEMELER | | | | | | | | | | | | | | | | | | | | |
| **BİLİM DALI / PROGRAMI** | | | | | DOKTORA PROGRAMI | | | | | | | | | | | | | | | | | | | | |
| **DERS AŞAMASI** | | **I. YARIYIL / GÜZ** | | | | | | | | | | | **II. YARIYIL / BAHAR** | | | | | | | | | | | | |
| **Kodu** | **Dersin Adı** | | | **Türü** | | **T** | **U** | **L** | **Kredi** | **AKTS** | **Kodu** | | **Dersin Adı** | **Türü** | **T** | | **U** | **L** | | **Kredi** | | **AKTS** | |
| POL6001 | POLİMERLERİN İŞLENMESİ VE KARAKTERİZASYONU | | | Z | | 3 | 0 | 0 | 3 | 6 | FEN6002 | | TEKNOLOJİ TRANSFERİ, AR-GE VE İNOVASYON | Z | 2 | | 0 | 0 | | 2 | | 2 | |
| POL6181 | DOKTORA UZMANLIK ALAN DERSİ I | | | Z | | 4 | 0 | 0 | 0 | 5 | POL6182 | | DOKTORA UZMANLIK ALAN DERSİ II | Z | 4 | | 0 | 0 | | 0 | | 5 | |
| POL6191 | DOKTORA TEZ DANIŞMANLIĞI I | | | Z | | 0 | 1 | 0 | 0 | 1 | POL6172 | | SEMİNER | Z | 0 | | 2 | 0 | | 0 | | 4 | |
|  |  | | |  | |  |  |  |  |  | POL6192 | | DOKTORA TEZ DANIŞMANLIĞI II | Z | 0 | | 1 | 0 | | 0 | | 1 | |
|  | SEÇMELİ DERS | | | S | |  |  |  | 3 | 6 |  | | SEÇMELİ DERS | S |  | |  |  | | 3 | | 6 | |
|  | SEÇMELİ DERS | | | S | |  |  |  | 3 | 6 |  | | SEÇMELİ DERS | S |  | |  |  | | 3 | | 6 | |
|  | SEÇMELİ DERS | | | S | |  |  |  | 3 | 6 |  | | SEÇMELİ DERS | S |  | |  |  | | 3 | | 6 | |
| **Toplam Kredi** | | | | | | | | | **12** | **30** | **Toplam Kredi** | | | | | | | | | **11** | | **30** | |
| **TEZ AŞAMASI** | | **III. YARIYIL / GÜZ** | | | | | | | | | | | **IV. YARIYIL / BAHAR** | | | | | | | | | | | | |
|  |  | | |  | |  |  |  |  |  | POL6184 | | DOKTORA UZMANLIK ALAN DERSİ IV | Z | 4 | | 0 | 0 | | 0 | | 5 | |
| POL6183 | DOKTORA UZMANLIK ALAN DERSİ III | | | Z | | 4 | 0 | 0 | 0 | 5 | POL6194 | | DOKTORA TEZ DANIŞMANLIĞI IV | Z | 0 | | 1 | 0 | | 0 | | 25 | |
| POL6193 | DOKTORA TEZ DANIŞMANLIĞI III | | | Z | | 0 | 1 | 0 | 0 | 25 |  | |  |  |  | |  |  | |  | |  | |
| **Toplam Kredi** | | | | | | | | | **0** | **30** | **Toplam Kredi** | | | | | | | | | **0** | | **30** | |
| **V. YARIYIL / GÜZ** | | | | | | | | | | | **VI. YARIYIL / BAHAR** | | | | | | | | | | | | |
| POL6185 | DOKTORA UZMANLIK ALAN DERSİ V | | | Z | | 4 | 0 | 0 | 0 | 5 | POL6186 | | DOKTORA UZMANLIK ALAN DERSİ VI | Z | 4 | | 0 | 0 | | 0 | | 5 | |
| POL6195 | DOKTORA TEZ DANIŞMANLIĞI V | | | Z | | 0 | 1 | 0 | 0 | 25 | POL6196 | | DOKTORA TEZ DANIŞMANLIĞI VI | Z | 0 | | 1 | 0 | | 0 | | 25 | |
| **Toplam Kredi** | | | | | | | | | **0** | **30** | **Toplam Kredi** | | | | | | | | | **0** | | **30** | |
| **VII. YARIYIL / GÜZ** | | | | | | | | | | | **VIII. YARIYIL / BAHAR** | | | | | | | | | | | | |
| POL6187 | DOKTORA UZMANLIK ALAN DERSİ VII | | | Z | 4 | | 0 | 0 | 0 | 5 | POL6188 | | DOKTORA UZMANLIK ALAN DERSİ VIII | Z | 4 | | 0 | 0 | 0 | | 5 | | |
| POL6197 | DOKTORA TEZ DANIŞMANLIĞI VII | | | Z | 0 | | 1 | 0 | 0 | 25 | POL6198 | | DOKTORA TEZ DANIŞMANLIĞI VIII | Z | 0 | | 1 | 0 | 0 | | 25 | | |
| **Toplam Kredi** | | | | | | | | | **0** | **30** | **Toplam Kredi** | | | | | | | | **0** | | **30** | | |
| **TOPLAM KREDİ: 23 - TOPLAM AKTS: 240** | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | **BURSA ULUDAĞ ÜNİVERSİTESİ**  **FEN BİLİMLERİ ENSTİTÜSÜ**  **2022-2023** **EĞİTİM ÖĞRETİM YILI DERS PLANLARI (SEÇMELİ DERSLER)** | **FR 1.1.1\_02** |

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| **ANABİLİM DALI** | | | POLİMER MALZEMELER | | | | | | | | | | | | | | | | |
| **BİLİM DALI / PROGRAMI** | | | DOKTORA PROGRAMI | | | | | | | | | | | | | | | | |
| **DERS AŞAMASI** | **I. YARIYIL / GÜZ** | | | | | | | | | | **II. YARIYIL / BAHAR** | | | | | | | | |
| **Kodu** | **Dersin Adı** | | **Türü** | **T** | **U** | **L** | **Kredi** | **AKTS** | **Kodu** | | **Dersin Adı** | **Türü** | **T** | **U** | **L** | **Kredi** | **AKTS** |
| POL6021 | ELEKTROKİMYADA GELİŞMELER | | S | 3 | 0 | 0 | 3 | 6 | POL6120 | | TAŞITLARDA KOMPOZİT VE SANDVİÇ YAPILAR | S | 3 | 0 | 0 | 3 | 6 |
| POL6023 | BİYOPOLİMERLER | | S | 3 | 0 | 0 | 3 | 6 | POL6018 | | POLİMER NANOKOMPOZİTLER | S | 3 | 0 | 0 | 3 | 6 |
| POL6019 (TEK6019) | POLİMER REOLOJİSİ VE PROSESLERİ | | S | 3 | 0 | 0 | 3 | 6 | POL6012 | | BİYOTIP UYGULAMALARI İÇİN TEKSTİL MALZEMELERİ | S | 3 | 0 | 0 | 3 | 6 |
| POL6025 | POLİMERLERİN MODİFİKASYONU | | S | 3 | 0 | 0 | 3 | 6 | POL6922 (KİM6022) | | İLERİ MALZEME KİMYASI | S | 3 | 0 | 0 | 3 | 6 |
| POL6041 (KİM6041) | İLERİ POLİMER BİLİMİ VE TEKNOLOJİSİ I | | S | 3 | 0 | 0 | 3 | 6 | POL6032 (KİM6032) | | ANORGANİK POLİMERLER | S | 3 | 0 | 0 | 3 | 6 |
| POL6027 | İNŞAAT MÜHENDİSLİĞİNDE POLİMERİK MALZEMELER | | S | 3 | 0 | 0 | 3 | 6 | POL6036 (KİM6036) | | POLİMER KİNETİK TEORİLERİ | S | 3 | 0 | 0 | 3 | 6 |
| POL6051 | ELASTOMER MALZEMELER VE ENDÜSTRİYEL UYGULAMALARI | | S | 3 | 0 | 0 | 3 | 6 | POL6038 (KİM6038) | | İLERİ POLİMER BİLİMİ VE TEKNOLOJİSİ II | S | 3 | 0 | 0 | 3 | 6 |
| TEK6029 | İNCE FİLM KAPLAMA TEKNOLOJİLERİ | | S | 3 | 0 | 0 | 3 | 6 | POL6040 (KİM6040) | | MAKROMOLEKÜLER KİMYA | S | 3 | 0 | 0 | 3 | 6 |
|  |  | |  |  |  |  |  |  | POL6008 | | POLİMER FİZİĞİ | S | 3 | 0 | 0 | 3 | 6 |
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|  | | | **BURSA ULUDAĞ UNIVERSITY**  **GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES**  2022-2023 **ACADEMIC YEAR COURSE PLAN** | | | | | | | | | | | | | | | **FR 1.1.1\_02** | | | | |
| **DEPARTMENT OF** | | | | POLYMERİC MATERİALS | | | | | | | | | | | | | | | | | | |
| **DEPARTMENT / PROGRAM** | | | | Doctoral Program | | | | | | | | | | | | | | | | | | |
| **COURSE STAGE** | **I. TERM / FALL** | | | | | | | | | | | **II. TERM / SPRING** | | | | | | | | | | |
| **Code** | **Course Title** | | | **Type** | | **T** | **U** | **L** | **Credit** | **ECTS** | **Code** | **Course Title** | **Type** | **T** | **U** | **L** | | **Credit** | | **ECTS** | |
| POL6001 | POLYMER PROCESSİNG AND CHARACTERIZATION | | | C | | 0 | 1 | 0 | 0 | 6 | BYM6192 | PHD THESIS CONSULTING II | C | 0 | 1 | 0 | | 0 | | 1 | |
| POL6181 | ADVANCED TOPICS IN PHD THESIS I | | | C | | 4 | 0 | 0 | 0 | 5 | POL6182 | ADVANCED TOPICS IN PHD THESIS II | C | 4 | 0 | 0 | | 0 | | 5 | |
| POL6191 | PHD THESIS CONSULTING I | | | C | | 3 | 0 | 0 | 3 | 1 | POL6172 | SEMINAR | C | 0 | 2 | 0 | | 0 | | 4 | |
|  |  | | |  | |  |  |  |  |  | FEN6002 | TECHNOLOGY TRANSFER, R&D AND INNOVATION | C | 2 | 0 | 0 | | 2 | | 2 | |
|  | ELECTIVE COURSE | | | E | |  |  |  | 3 | 6 |  | ELECTIVE COURSE | E |  |  |  | | 3 | | 6 | |
|  | ELECTIVE COURSE | | | E | |  |  |  | 3 | 6 |  | ELECTIVE COURSE | E |  |  |  | | 3 | | 6 | |
|  | ELECTIVE COURSE | | | E | |  |  |  | 3 | 6 |  | ELECTIVE COURSE | E |  |  |  | | 3 | | 6 | |
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| **Total Credits** | | | | | | | | | **12** | **30** | **Total Credits** | | | | | | | **11** | | **30** | |
| **STAGE THESIS** | **III. TERM / FALL** | | | | | | | | | | | **IV. TERM / SPRING** | | | | | | | | | | |
| POL6183 | ADVANCED TOPICS IN PHD THESIS III | | | C | | 4 | 0 | 0 | 0 | 5 | POL6184 | ADVANCED TOPICS IN PHD THESIS IV | C | 4 | 0 | 0 | | 0 | | 5 | |
| POL6193 | PHD THESIS CONSULTING III | | | C | | 0 | 1 | 0 | 0 | 25 | POL6194 | PHD THESIS CONSULTING IV | C | 0 | 1 | 0 | | 0 | | 25 | |
| **Total Credits** | | | | | | | | | **0** | **30** | **Total Credits** | | | | | | | **0** | | **30** | |
| **V. TERM / FALL** | | | | | | | | | | | **VI. TERM / SPRING** | | | | | | | | | | |
| POL6185 | ADVANCED TOPICS IN PHD THESIS V | | | C | | 4 | 0 | 0 | 0 | 5 | POL6186 | ADVANCED TOPICS IN PHD THESIS VI | C | 4 | 0 | 0 | | 0 | | 5 | |
| POL6195 | PHD THESIS CONSULTING V | | | C | | 0 | 1 | 0 | 0 | 25 | POL6196 | PHD THESIS CONSULTING VI | C | 0 | 1 | 0 | | 0 | | 25 | |
| **Total Credits** | | | | | | | | | **0** | **30** | **Total Credits** | | | | | | | **0** | | **30** | |
| **VII. TERM / FALL** | | | | | | | | | | | **VIII. TERM / SPRING** | | | | | | | | | | |
| POL6187 | ADVANCED TOPICS IN PHD THESIS VII | | | C | 4 | | 0 | 0 | 0 | 5 | POL6188 | ADVANCED TOPICS IN PHD THESIS VIII | C | 4 | 0 | 0 | | 0 | | 5 | |
| POL6197 | PHD THESIS CONSULTING VII | | | C | 0 | | 1 | 0 | 0 | 25 | POL6198 | PHD THESIS CONSULTING VIII | C | 0 | 1 | 0 | | 0 | | 25 | |
| **Total Credits** | | | | | | | | | **0** | **30** | **Total Credits** | | | | | | | | **0** | | **30** |
| **TOTAL CREDITS: 23 TOTAL ECTS: 240** | | | | | | | | | | | | | | | | | | | | | | |

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|  | | | **BURSA ULUDAĞ UNIVERSİTY**  **GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES**  2022-2023 **ACADEMIC YEAR COURSE PLAN (ELECTIVE COURSES)** | | | | | | | | | | | | **FR 1.1.1\_02** | | | | |
| **ANABİLİM DALI** | | | | POLYMERİC MATERİALS | | | | | | | | | | | | | | | |
| **BİLİM DALI / PROGRAMI** | | | | Doctoral Program | | | | | | | | | | | | | | | |
| **DERS AŞAMASI** | **I. TERM / FALL** | | | | | | | | | | **II. TERM / SPRING** | | | | | | | | |
| **Code** | **Course Title** | | | **Type** | **T** | **U** | **L** | **Credit** | **ECTS** | **Code** | **Course Title** | **Type** | **T** | | **U** | **L** | **Credit** | **ECTS** |
| POL6021 | ADVANCES IN ELECTROCHEMISTRY | | | S | 3 | 0 | 0 | 3 | 6 | POL6120 | AUTOMOTIVE COMPOSITES AND SANDWICH STRUCTURES | S | 3 | | 0 | 0 | 3 | 6 |
| POL6023 | BIOPOLYMERS | | | S | 3 | 0 | 0 | 3 | 6 | POL6018 | POLYMER NANOCOMPOSITES | S | 3 | | 0 | 0 | 3 | 6 |
| POL6019 (TEK6019) | POLIMER RHEOLOGY AND PROCESSING | | | S | 3 | 0 | 0 | 3 | 6 | POL6012 | TEXTILE MATERIALS FOR BIOMEDICAL APPLICATIONS | S | 3 | | 0 | 0 | 3 | 6 |
| POL6025 | MODIFICATION OF POLYMERS | | | S | 3 | 0 | 0 | 3 | 6 | POL6922 (KİM6022) | ADVANCED MATERIALS CHEMISTRY | S | 3 | | 0 | 0 | 3 | 6 |
| POL6041 (KİM6041) | ADVANCED POLYMER SCIENCE AND TECHNOLOGY I | | | S | 3 | 0 | 0 | 3 | 6 | POL6032 (KİM6032) | INORGANIC POLYMERS | S | 3 | | 0 | 0 | 3 | 6 |
| POL6027 | POLYMERIC MATERIALS IN CIVIL ENGINEERING | | | S | 3 | 0 | 0 | 3 | 6 | POL6036 (KİM6036) | POLYMER KINETIC THEORIES | S | 3 | | 0 | 0 | 3 | 6 |
| POL6051 | ELASTOMER MATERIALS AND INDUSTRIAL APPLICATIONS | | | S | 3 | 0 | 0 | 3 | 6 | POL6038 (KİM6038) | ADVANCED POLYMER SCIENCE AND TECHNOLOGY II | S | 3 | | 0 | 0 | 3 | 6 |
| TEK6029 | THIN FILM COATING TECHNOLOGIES | | | S | 3 | 0 | 0 | 3 | 6 | POL6040 (KİM6040) | MACROMOLECULAR CHEMISTRY | S | 3 | | 0 | 0 | 3 | 6 |
|  |  | | |  |  |  |  |  |  | POL6008 | POLYMER PHYSICS | S | 3 | | 0 | 0 | 3 | 6 |

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|  | | | **BURSA ULUDAĞ ÜNİVERSİTESİ**  **FEN BİLİMLERİ ENSTİTÜSÜ**  **2022-2023** **EĞİTİM ÖĞRETİM YILINDA EKLENEN DERSLER** | | | | | | | | | | | | **FR 1.1.1\_02** | |
| **ANABİLİM DALI** | | | | POLİMER MALZEMELER | | | | | | | | | | | | |
| **BİLİM DALI PROGRAMI** | | | | YÜKSEK LİSANS PROGRAMI / DOKTORA PROGRAMI | | | | | | | | | | | | |
| **Kodu** | | **Dersin Adı** | | | **Yarıyıl** | **Türü** | **T** | **U** | **L** | **Kredi** | **AKTS** | **Uygulama Esasları\*** | | **Gerekçe** | | |
| POL5038 | | Blok Kopolimerler | | | BAHAR | S | 3 | 0 | 0 | 3 | 6 | 2022-2023 Bahar yarıyılından itibaren alınabilecek seçmeli derstir. | |  | | |
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| **Toplam Kredi/AKTS** | | | | | | | | | |  |  |  | | | | |

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|  | | **BURSA ULUDAĞ ÜNİVERSİTESİ**  **FEN BİLİMLERİ ENSTİTÜSÜ**  **2022-2023** **EĞİTİM ÖĞRETİM YILI KALDIRILAN/DEĞİŞTİRİLEN DERSLER** | | | | | | | | | | | | | | | | | | | **FR 1.1.1\_02** | |
| **ANABİLİM DALI** | | | POLİMER MALZEMELER | | | | | | | | | | | | | | | | | | | |
| **BİLİM DALI PROGRAMI** | | | YÜKSEK LİSANS PROGRAMI / DOKTORA PROGRAMI | | | | | | | | | | | | | | | | | | | |
| 2022.-2023.. **Eğitim-Öğretim Yılı Kaldırılan/Değiştirilen Ders**  *(Bir önceki eğitim-öğretim yılı yazılacak)* | | | | | | | | | | | 2022.-2023.. **Eğitim-Öğretim Yılı Eş Değeri**  *(Teklif edilen eğitim-öğretim yılı yazılacak)* | | | | | | | | | **Uygulama Esasları\*** | | **Gerekçe\*\*** |
| **Kodu** | **Dersin Adı** | | | **Yarıyıl** | **Türü** | **T** | **U** | **L** | **Kredi** | **AKTS** | **Kodu** | **Dersin Adı** | **Yarıyıl** | **Türü** | **T** | **U** | **L** | **Kredi** | **AKTS** |
| POL5026 | MALZEME BİLİMİ ve MÜHENDİSLİĞİ | | | BAHAR | S | 3 | 0 | 0 | 3 | 6 | POL5050 | MALZEME BİLİMİNDE İLERİ KAVRAMLAR | BAHAR | S | 3 | 0 | 0 | 3 | 6 |  | | Aynı dönem açılan POL5050  (TEK 5050) MALZEME BİLİMİNDE İLERİ KAVRAMLAR dersi ile içerik birebir aynı olması nedeniyle kaldırılmıştır. |
| POL5001 | POLİMER MÜHENDİSLİĞİNE GİRİŞ | | | GÜZ | Z | 3 | 0 | 0 | 3 | 6 | POL5001 | POLİMER MALZEMELERE GİRİŞ | GÜZ | Z | 3 | 0 | 0 | 3 | 6 |  | | Polimer Malzemeler ABD’nin zorunlu temel giriş dersi olduğu için ismindeki “MÜHENDİSLİĞİNE” kelimesi “MALZEMELERİNE” şeklinde değiştirilmiştir. İçerik aynıdır. |
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| **Toplam Kredi/AKTS** | | | | | | | | |  |  | **Toplam Kredi/AKTS** | | | | | | |  |  |  | | |

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|  | | **BURSA ULUDAĞ ÜNİVERSİTESİ**  **FEN BİLİMLERİ ENSTİTÜSÜ**  **2022-2023** **EĞİTİM ÖĞRETİM YILI ÖNERİLEN DERSLERİN ULUSAL/ULUSLARARASI KARŞILIKLARI** | | | | | | | | | | | | | **FR 1.1.1\_02** |
| **ANABİLİM DALI** | | | POLİMER MALZEMELER | | | | | | | | | | | | |
| **BİLİM DALI / PROGRAMI** | | | YÜKSEK LİSANS PROGRAMI / DOKTORA PROGRAMI | | | | | | | | | | | | |
| **Kodu** | **Dersin Adı** | | | **Yarıyıl** | **Türü** | **T** | **U** | **L** | **Kredi** | **AKTS** | **Dersin İçeriği** | **Örnek Üniversiteler** | | | |
| **Örnek 1** | **Örnek 2** | **Örnek 3** | |
| POL5038 | Blok Kopolimerler | | | BAHAR | S | 3 | 0 | 0 |  | 6 | Blok kopolimerler, hazırlama metotları, özellikleri ve uygulama alanları hakkında bilgi verilecektir. | ORTADOĞU TEKNİK ÜNİV.  https://catalog.metu.edu.tr/course.php?prog=234&course\_code=2340571 | İstanbul Üniversitesi-Cerrahpaşa  https://avesis.iuc.edu.tr/ozeroglu/deneyim | Clemson University  https://catalog.clemson.edu/preview\_course\_nopop.php?catoid=13&coid=54762 | |
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