

Fen Bilimleri Enstitüsü

Biyomühendislik (İngilizce) - Dönemlik

Biyomühendislik (İngilizce) - Lisansüstü - Biyomühendislik - Biyomühendislik (İngilizce) - Tezli Yüksek Lisans - 2014

| 1. YARIYIL | | | | | | |
|------------|-----------------|--|----|---|-------|-------|
| No | Ders Kodu | Ders Adı | T | U | Kredi | ECTS |
| 1 | BIOE-CC1-YL | Core- 1 (Ders 1) <small>[Bu ders BIOE-CC1-YL ders grubundan alınacaktır, aşağıya bakınız]</small> | 3 | 0 | 8 | 8 |
| 2 | BIOE-EC1,2,3-LD | Elective Course - 1-2-3 (Ders 1) <small>[Bu ders BIOE-EC1,2,3-LD ders grubundan alınacaktır, aşağıya bakınız]</small> | 3 | 0 | 8 | 8 |
| 3 | BIOE-EC1,2,3-LD | Elective Course - 1-2-3 (Ders 2) <small>[Bu ders BIOE-EC1,2,3-LD ders grubundan alınacaktır, aşağıya bakınız]</small> | 3 | 0 | 8 | 8 |
| 4 | BIOE-EC1,2,3-LD | Elective Course - 1-2-3 (Ders 3) <small>[Bu ders BIOE-EC1,2,3-LD ders grubundan alınacaktır, aşağıya bakınız]</small> | 3 | 0 | 8 | 8 |
| Toplam | | | 12 | 0 | 32,00 | 32,00 |

| 2. YARIYIL | | | | | | |
|------------|---------------|--|---|---|-------|-------|
| No | Ders Kodu | Ders Adı | T | U | Kredi | ECTS |
| 1 | BIOE7000 | Seminar | 0 | 2 | 4 | 4 |
| 2 | BIOE-CC2-YL | Core- 2 (Ders 1) <small>[Bu ders BIOE-CC2-YL ders grubundan alınacaktır, aşağıya bakınız]</small> | 3 | 0 | 8 | 8 |
| 3 | BIOE-EC4,5-YL | Elective -4-5 (Ders 1) <small>[Bu ders BIOE-EC4,5-YL ders grubundan alınacaktır, aşağıya bakınız]</small> | 3 | 0 | 8 | 8 |
| 4 | BIOE-EC4,5-YL | Elective -4-5 (Ders 2) <small>[Bu ders BIOE-EC4,5-YL ders grubundan alınacaktır, aşağıya bakınız]</small> | 3 | 0 | 8 | 8 |
| Toplam | | | 9 | 2 | 28,00 | 28,00 |

| BIOE-CC1-YL | | | | | | |
|-------------|-----------|---|---|---|-------|------|
| No | Ders Kodu | Ders Adı | T | U | Kredi | ECTS |
| 1 | BIOE7003 | Basic Techniques in Bioprocess Engineering | 3 | 0 | 8 | 8 |
| 2 | BIOE7007 | Basic Techniques in Molecular Biology | 3 | 0 | 8 | 8 |
| 3 | BIOE7009 | Downstream Processing | 3 | 0 | 8 | 8 |
| 4 | BIOE7011 | Fermentation Technology | 3 | 0 | 8 | 8 |
| 5 | BIOE7013 | Bioengineering Fundamentals | 3 | 0 | 8 | 8 |
| 6 | BIOE7066 | Advanced Biotransport | 3 | 0 | 8 | 8 |
| 7 | BIOE7073 | Mathematical Modeling in Biological Systems | 3 | 0 | 8 | 8 |
| 8 | BIOE7081 | Enzyme Technology | 3 | 0 | 8 | 8 |

| BIOE-EC1,2,3-LD | | | | | | |
|-----------------|-----------|---|---|---|-------|------|
| No | Ders Kodu | Ders Adı | T | U | Kredi | ECTS |
| 1 | BIOE7002 | Advanced Bioinformatics | 3 | 0 | 8 | 8 |
| 2 | BIOE7003 | Basic Techniques in Bioprocess Engineering | 3 | 0 | 8 | 8 |
| 3 | BIOE7004 | Carbohydrate Technology | 3 | 0 | 8 | 8 |
| 4 | BIOE7005 | Mathematical Applications in Biological Systems | 3 | 0 | 8 | 8 |
| 5 | BIOE7006 | Microbial Proteomics | 3 | 0 | 8 | 8 |
| 6 | BIOE7007 | Basic Techniques in Molecular Biology | 3 | 0 | 8 | 8 |
| 7 | BIOE7008 | Plant Biodiversity and Genetic Resources | 3 | 0 | 8 | 8 |
| 8 | BIOE7009 | Downstream Processing | 3 | 0 | 8 | 8 |
| 9 | BIOE7010 | Plant Molecular Cytogenetics | 3 | 0 | 8 | 8 |
| 10 | BIOE7011 | Fermentation Technology | 3 | 0 | 8 | 8 |
| 11 | BIOE7012 | Recent Advances in Plant Biotechnology | 3 | 0 | 8 | 8 |
| 12 | BIOE7013 | Bioengineering Fundamentals | 3 | 0 | 8 | 8 |
| 13 | BIOE7014 | Introduction to Biomechanics | 3 | 0 | 8 | 8 |
| 14 | BIOE7018 | Biotechnology | 3 | 0 | 8 | 8 |
| 15 | BIOE7019 | Biomaterial Science and Engineering | 3 | 0 | 8 | 8 |
| 16 | BIOE7023 | Biopolymers | 3 | 0 | 8 | 8 |
| 17 | BIOE7024 | Tissue Engineering | 3 | 0 | 8 | 8 |
| 18 | BIOE7029 | Cell Culture Methods | 3 | 0 | 8 | 8 |
| 19 | BIOE7030 | Advanced Cell Biology | 3 | 0 | 8 | 8 |
| 20 | BIOE7039 | Advanced Molecular Biology | 3 | 0 | 8 | 8 |
| 21 | BIOE7040 | Cellular Engineering | 3 | 0 | 8 | 8 |
| 22 | BIOE7045 | Chemical Immunology | 3 | 0 | 8 | 8 |
| 23 | BIOE7047 | Protein Engineering | 3 | 0 | 8 | 8 |
| 24 | BIOE7050 | Chromosome Biology and Cytogenomics | 3 | 0 | 8 | 8 |
| 25 | BIOE7055 | Biostatistics | 3 | 0 | 8 | 8 |
| 26 | BIOE7057 | Biomedical Signal Processing | 3 | 0 | 8 | 8 |
| 27 | BIOE7059 | Neural Network | 3 | 0 | 8 | 8 |
| 28 | BIOE7061 | Eucaryotic Biotechnology | 3 | 0 | 8 | 8 |
| 29 | BIOE7063 | Immuno Biotechnology | 3 | 0 | 8 | 8 |
| 30 | BIOE7065 | Introduction to Environmental Bioengineering | 3 | 0 | 8 | 8 |
| 31 | BIOE7066 | Advanced Biotransport | 3 | 0 | 8 | 8 |
| 32 | BIOE7067 | Structural Dynamics of Proteins | 3 | 0 | 8 | 8 |
| 33 | BIOE7070 | Metabolism and Cellular Adaptation | 3 | 0 | 8 | 8 |
| 34 | BIOE7071 | Sterilization | 3 | 0 | 8 | 8 |
| 35 | BIOE7072 | Protein Interactions | 3 | 0 | 8 | 8 |
| 36 | BIOE7075 | Motion Biomechanics | 3 | 0 | 8 | 8 |
| 37 | BIOE7076 | Immobilization | 3 | 0 | 8 | 8 |
| 38 | BIOE7077 | Biomedical Instrumentation and Measurements | 3 | 0 | 8 | 8 |
| 39 | BIOE7078 | Biosafety | 3 | 0 | 8 | 8 |
| 40 | BIOE7079 | Biological Control Systems | 3 | 0 | 8 | 8 |
| 41 | BIOE7081 | Enzyme Technology | 3 | 0 | 8 | 8 |

| BIOE-CC2-YL | | | | | | |
|-------------|-----------|---|---|---|-------|------|
| No | Ders Kodu | Ders Adı | T | U | Kredi | ECTS |
| 1 | BIOE7003 | Basic Techniques in Bioprocess Engineering | 3 | 0 | 8 | 8 |
| 2 | BIOE7007 | Basic Techniques in Molecular Biology | 3 | 0 | 8 | 8 |
| 3 | BIOE7009 | Downstream Processing | 3 | 0 | 8 | 8 |
| 4 | BIOE7011 | Fermentation Technology | 3 | 0 | 8 | 8 |
| 5 | BIOE7013 | Bioengineering Fundamentals | 3 | 0 | 8 | 8 |
| 6 | BIOE7066 | Advanced Biotransport | 3 | 0 | 8 | 8 |
| 7 | BIOE7073 | Mathematical Modeling in Biological Systems | 3 | 0 | 8 | 8 |
| 8 | BIOE7081 | Enzyme Technology | 3 | 0 | 8 | 8 |

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Biyomühendislik (İngilizce) - Dönemlik

Biyomühendislik (İngilizce) - Lisansüstü - Biyomühendislik - Biyomühendislik (İngilizce) - Tezli Yüksek Lisans - 2014

| | | | | | | |
|----|----------|---|---|---|---|---|
| 42 | BIOE7085 | Bioanalytical Techniques | 3 | 0 | 8 | 8 |
| 43 | BIOE7086 | System Biology | 3 | 0 | 8 | 8 |
| 44 | BIOE7089 | Engineering Medicine | 3 | 0 | 8 | 8 |
| 45 | BIOE7095 | Special Topics in Bioengineering I | 3 | 0 | 8 | 8 |
| 46 | BIOE7096 | Special Topics in Bioengineering II | 3 | 0 | 8 | 8 |
| 47 | BIOE8001 | Metabolomics | 3 | 0 | 8 | 8 |
| 48 | BIOE8002 | Functional Glycomics | 3 | 0 | 8 | 8 |
| 49 | BIOE8003 | Structural and Functional Genomics | 3 | 0 | 8 | 8 |
| 50 | BIOE8004 | Agricultural Biotechnology | 3 | 0 | 8 | 8 |
| 51 | BIOE8005 | Molecular Plant Breeding | 3 | 0 | 8 | 8 |
| 52 | BIOE8016 | Advanced Biochemistry | 3 | 0 | 8 | 8 |
| 53 | BIOE8018 | Functional Genomics | 3 | 0 | 8 | 8 |
| 54 | BIOE8023 | Environmental Bioengineering | 3 | 0 | 8 | 8 |
| 55 | BIOE8024 | Biochemical Engineering and New Bioprocess Challenges | 3 | 0 | 8 | 8 |
| 56 | BIOE8025 | Drug Delivery Systems I | 3 | 0 | 8 | 8 |
| 57 | BIOE8026 | Drug Delivery Systems II | 3 | 0 | 8 | 8 |
| 58 | BIOE8028 | Advanced Molecular Dynamics of Proteins | 3 | 0 | 8 | 8 |
| 59 | BIOE8029 | Two Dimensional Electrophoresis and Mass Spectrometry | 3 | 0 | 8 | 8 |
| 60 | BIOE8030 | Statistical Bioinformatics | 3 | 0 | 8 | 8 |
| 61 | BIOE8035 | Nanomaterials and Applications | 3 | 0 | 8 | 8 |
| 62 | BIOE8038 | Computational Molecular Biology | 3 | 0 | 8 | 8 |
| 63 | BIOE8039 | Metabolic Engineering | 3 | 0 | 8 | 8 |
| 64 | BIOE8040 | Bioprocess Optimization | 3 | 0 | 8 | 8 |
| 65 | BIOE8043 | Advanced Biomaterials | 3 | 0 | 8 | 8 |
| 66 | BIOE8047 | Biological Networks Theory | 3 | 0 | 8 | 8 |
| 67 | BIOE8050 | Modern Control Theory | 3 | 0 | 8 | 8 |
| 68 | BIOE8053 | Mutagenesis and Gene Therapy | 3 | 0 | 8 | 8 |
| 69 | BIOE8055 | Methods in Biotechnology | 3 | 0 | 8 | 8 |
| 70 | BIOE8057 | Physiology for Bioengineers | 3 | 0 | 8 | 8 |
| 71 | BIOE8058 | Regulation of Gene Expression | 3 | 0 | 8 | 8 |
| 72 | BIOE8061 | Molecular Genetics | 3 | 0 | 8 | 8 |
| 73 | BIOE8063 | Signal Transduction | 3 | 0 | 8 | 8 |
| 74 | BIOE8066 | Proteins: Structure and Function | 3 | 0 | 8 | 8 |
| 75 | BIOE8067 | Appraisal and Application of Life Sciences | 3 | 0 | 8 | 8 |
| 76 | BIOE8070 | Computational Structural Biology | 3 | 0 | 8 | 8 |
| 77 | BIOE8072 | Human Genetics | 3 | 0 | 8 | 8 |
| 78 | BIOE8074 | Biodegradable Polymers | 3 | 0 | 8 | 8 |
| 79 | BIOE8076 | Advanced Biotechniques | 3 | 0 | 8 | 8 |
| 80 | BIOE8079 | Bioprocess Design and Implementation | 3 | 0 | 8 | 8 |
| 81 | BIOE8082 | Bioprocess Validation | 3 | 0 | 8 | 8 |
| 82 | BIOE8086 | Management of Bioprocess Ventures | 3 | 0 | 8 | 8 |
| 83 | BIOE8089 | Planning and Management of Research | 3 | 0 | 8 | 8 |
| 84 | BIOE8095 | Advanced Topics in Bioengineering I | 3 | 0 | 8 | 8 |
| 85 | BIOE8096 | Advanced Topics in Bioengineering II | 3 | 0 | 8 | 8 |

BIOE-EC4,5-YL

| No | Ders Kodu | Ders Adı | T | U | Kredi | ECTS |
|----|-----------|---|---|---|-------|------|
| 1 | BIOE7002 | Advanced Bioinformatics | 3 | 0 | 8 | 8 |
| 2 | BIOE7003 | Basic Techniques in Bioprocess Engineering | 3 | 0 | 8 | 8 |
| 3 | BIOE7004 | Carbohydrate Technology | 3 | 0 | 8 | 8 |
| 4 | BIOE7005 | Mathematical Applications in Biological Systems | 3 | 0 | 8 | 8 |
| 5 | BIOE7006 | Microbial Proteomics | 3 | 0 | 8 | 8 |
| 6 | BIOE7007 | Basic Techniques in Molecular Biology | 3 | 0 | 8 | 8 |
| 7 | BIOE7008 | Plant Biodiversity and Genetic Resources | 3 | 0 | 8 | 8 |

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Biyomühendislik (İngilizce) - Dönemlik

Biyomühendislik (İngilizce) - Lisansüstü - Biyomühendislik - Biyomühendislik (İngilizce) - Tezli Yüksek Lisans - 2014

| | | | | | | |
|----|----------|---|---|---|---|---|
| 8 | BIOE7009 | Downstream Processing | 3 | 0 | 8 | 8 |
| 9 | BIOE7010 | Plant Molecular Cytogenetics | 3 | 0 | 8 | 8 |
| 10 | BIOE7011 | Fermentation Technology | 3 | 0 | 8 | 8 |
| 11 | BIOE7012 | Recent Advances in Plant Biotechnology | 3 | 0 | 8 | 8 |
| 12 | BIOE7013 | Bioengineering Fundamentals | 3 | 0 | 8 | 8 |
| 13 | BIOE7014 | Introduction to Biomechanics | 3 | 0 | 8 | 8 |
| 14 | BIOE7018 | Biotechnology | 3 | 0 | 8 | 8 |
| 15 | BIOE7019 | Biomaterial Science and Engineering | 3 | 0 | 8 | 8 |
| 16 | BIOE7023 | Biopolymers | 3 | 0 | 8 | 8 |
| 17 | BIOE7024 | Tissue Engineering | 3 | 0 | 8 | 8 |
| 18 | BIOE7029 | Cell Culture Methods | 3 | 0 | 8 | 8 |
| 19 | BIOE7030 | Advanced Cell Biology | 3 | 0 | 8 | 8 |
| 20 | BIOE7039 | Advanced Molecular Biology | 3 | 0 | 8 | 8 |
| 21 | BIOE7040 | Cellular Engineering | 3 | 0 | 8 | 8 |
| 22 | BIOE7045 | Chemical Immunology | 3 | 0 | 8 | 8 |
| 23 | BIOE7047 | Protein Engineering | 3 | 0 | 8 | 8 |
| 24 | BIOE7050 | Chromosome Biology and Cytogenomics | 3 | 0 | 8 | 8 |
| 25 | BIOE7055 | Biostatistics | 3 | 0 | 8 | 8 |
| 26 | BIOE7057 | Biomedical Signal Processing | 3 | 0 | 8 | 8 |
| 27 | BIOE7059 | Neural Network | 3 | 0 | 8 | 8 |
| 28 | BIOE7061 | Eucaryotic Biotechnology | 3 | 0 | 8 | 8 |
| 29 | BIOE7063 | Immuno Biotechnology | 3 | 0 | 8 | 8 |
| 30 | BIOE7065 | Introduction to Environmental Bioengineering | 3 | 0 | 8 | 8 |
| 31 | BIOE7066 | Advanced Biotransport | 3 | 0 | 8 | 8 |
| 32 | BIOE7067 | Structural Dynamics of Proteins | 3 | 0 | 8 | 8 |
| 33 | BIOE7070 | Metabolism and Cellular Adaptation | 3 | 0 | 8 | 8 |
| 34 | BIOE7071 | Sterilization | 3 | 0 | 8 | 8 |
| 35 | BIOE7072 | Protein Interactions | 3 | 0 | 8 | 8 |
| 36 | BIOE7075 | Motion Biomechanics | 3 | 0 | 8 | 8 |
| 37 | BIOE7076 | Immobilization | 3 | 0 | 8 | 8 |
| 38 | BIOE7077 | Biomedical Instrumentation and Measurements | 3 | 0 | 8 | 8 |
| 39 | BIOE7078 | Biosafety | 3 | 0 | 8 | 8 |
| 40 | BIOE7079 | Biological Control Systems | 3 | 0 | 8 | 8 |
| 41 | BIOE7081 | Enzyme Technology | 3 | 0 | 8 | 8 |
| 42 | BIOE7085 | Bioanalytical Techniques | 3 | 0 | 8 | 8 |
| 43 | BIOE7086 | System Biology | 3 | 0 | 8 | 8 |
| 44 | BIOE7089 | Engineering Medicine | 3 | 0 | 8 | 8 |
| 45 | BIOE7095 | Special Topics in Bioengineering I | 3 | 0 | 8 | 8 |
| 46 | BIOE7096 | Special Topics in Bioengineering II | 3 | 0 | 8 | 8 |
| 47 | BIOE8001 | Metabolomics | 3 | 0 | 8 | 8 |
| 48 | BIOE8002 | Functional Glycomics | 3 | 0 | 8 | 8 |
| 49 | BIOE8003 | Structural and Functional Genomics | 3 | 0 | 8 | 8 |
| 50 | BIOE8004 | Agricultural Biotechnology | 3 | 0 | 8 | 8 |
| 51 | BIOE8005 | Molecular Plant Breeding | 3 | 0 | 8 | 8 |
| 52 | BIOE8016 | Advanced Biochemistry | 3 | 0 | 8 | 8 |
| 53 | BIOE8018 | Functional Genomics | 3 | 0 | 8 | 8 |
| 54 | BIOE8023 | Environmental Bioengineering | 3 | 0 | 8 | 8 |
| 55 | BIOE8024 | Biochemical Engineering and New Bioprocess Challenges | 3 | 0 | 8 | 8 |
| 56 | BIOE8025 | Drug Delivery Systems I | 3 | 0 | 8 | 8 |
| 57 | BIOE8026 | Drug Delivery Systems II | 3 | 0 | 8 | 8 |
| 58 | BIOE8028 | Advanced Molecular Dynamics of Proteins | 3 | 0 | 8 | 8 |
| 59 | BIOE8029 | Two Dimensional Electrophoresis and Mass Spectrometry | 3 | 0 | 8 | 8 |
| 60 | BIOE8030 | Statistical Bioinformatics | 3 | 0 | 8 | 8 |
| 61 | BIOE8035 | Nanomaterials and Applications | 3 | 0 | 8 | 8 |
| 62 | BIOE8038 | Computational Molecular Biology | 3 | 0 | 8 | 8 |
| 63 | BIOE8039 | Metabolic Engineering | 3 | 0 | 8 | 8 |
| 64 | BIOE8040 | Bioprocess Optimization | 3 | 0 | 8 | 8 |

Fen Bilimleri Enstitüsü

Biyomühendislik (İngilizce) - Dönemlik

Biyomühendislik (İngilizce) - Lisansüstü - Biyomühendislik - Biyomühendislik (İngilizce) - Tezli Yüksek Lisans - 2014

| | | | | | | |
|----|----------|--|---|---|---|---|
| 65 | BIOE8043 | Advanced Biomaterials | 3 | 0 | 8 | 8 |
| 66 | BIOE8047 | Biological Networks Theory | 3 | 0 | 8 | 8 |
| 67 | BIOE8050 | Modern Control Theory | 3 | 0 | 8 | 8 |
| 68 | BIOE8053 | Mutagenesis and Gene Therapy | 3 | 0 | 8 | 8 |
| 69 | BIOE8055 | Methods in Biotechnology | 3 | 0 | 8 | 8 |
| 70 | BIOE8057 | Physiology for Bioengineers | 3 | 0 | 8 | 8 |
| 71 | BIOE8058 | Regulation of Gene Expression | 3 | 0 | 8 | 8 |
| 72 | BIOE8061 | Molecular Genetics | 3 | 0 | 8 | 8 |
| 73 | BIOE8063 | Signal Transduction | 3 | 0 | 8 | 8 |
| 74 | BIOE8066 | Proteins: Structure and Function | 3 | 0 | 8 | 8 |
| 75 | BIOE8067 | Appraisal and Application of Life Sciences | 3 | 0 | 8 | 8 |
| 76 | BIOE8070 | Computational Structural Biology | 3 | 0 | 8 | 8 |
| 77 | BIOE8072 | Human Genetics | 3 | 0 | 8 | 8 |
| 78 | BIOE8074 | Biodegradable Polymers | 3 | 0 | 8 | 8 |
| 79 | BIOE8076 | Advanced Biotechniques | 3 | 0 | 8 | 8 |
| 80 | BIOE8079 | Bioprocess Design and Implementation | 3 | 0 | 8 | 8 |
| 81 | BIOE8082 | Bioprocess Validation | 3 | 0 | 8 | 8 |
| 82 | BIOE8086 | Management of Bioprocess Ventures | 3 | 0 | 8 | 8 |
| 83 | BIOE8089 | Planning and Management of Research | 3 | 0 | 8 | 8 |
| 84 | BIOE8095 | Advanced Topics in Bioengineering I | 3 | 0 | 8 | 8 |
| 85 | BIOE8096 | Advanced Topics in Bioengineering II | 3 | 0 | 8 | 8 |