

BIOE4197 BIOENGINEERING GRADUATION PROJECTS (2021-2022)			
Project ID	Supervisor	Project title	Student(s)
AAU1	Prof. Ahu Altinkut Uncuoğlu	Plant Development by LED-Controlled Light Schemes	Mustafa Bayır
AAU2	Prof. Ahu Altinkut Uncuoğlu	Embryo Culture Systems for Plant Speed Breeding	Emine Gülçin Köse, Merve Uygun, Yağmur Uşar
BM1	Prof. Bülent Mertoğlu	Investigation of the toxic effects of nanoplastics on <i>Saccharomyces cerevisiae</i> using CRISPR method	Utku Yaşar
BM2	Prof. Bülent Mertoğlu	Hydrazine (rocket fuel) production by anammox bacteria	Ege Hekimoğlu, Bilgehan Bahçe, Cansel Özcan
BSA1	Prof. Berna Sarıyar Akbulut	Media optimization for increasing tyrosine yield from tyrosine producing <i>C. glutamicum</i>	Atahan Kılıçlar, Simay Öztürk, Süleyman Can Gençer
BSA2	Prof. Berna Sarıyar Akbulut	Changing the yield of an industrially valuable bioproduct using computational techniques	Selin Akpınar
BT1	Assist. Prof. Beste Turanlı	A survey and application of recent drug repositioning techniques in oncology (computational study)	Alihan Öztürk, Özge Kılıç, Funda Karacalı
BT2	Assist. Prof. Beste Turanlı	Systems biomedicine perspective on idiopathic pulmonary fibrosis (computational study)	Muhammed Fatih Kırçalı
CK1	Assist. Prof. Ceyda Kasavi	Meta-analysis of transcriptomics data to predict potential biomarkers in pulmonary arterial hypertension (computational study)	İlkem Acet, Tuğra Yazgan
CK2	Assist. Prof. Ceyda Kasavi	Linking diabetes and gynecologic cancers through systems biology perspective (computational study)	Özge Güngör, Semra Melis Soyer, Zeynep Havadır
DK1	Prof. Dilek Kazan	Production of technical enzyme from organic waste	Beritan Gökyıldız, Nur Banu Yılmaz
DK2	Prof. Dilek Kazan	Microbiom and microbial therapies	Çağla Çandır, Gizem Parım
ETO1	Prof. Ebru Toksoy Öner	Fructanogenic Biotics for the Food Industry	İrem Yeşilyurt, Bilge Aydın, Yağmur Göğebakan
ETO2	Prof. Ebru Toksoy Öner	Superabsorbent Hydrogels for Biomedical Applications	Esra Hande Yılmaz, Pürnur Yıldız
FNO1	Prof. Faik N. Oktar	Electrospun nanofibers as a wound dressing for treating diabetic foot ulcer	Aleyna Aslan, Şevval Kocaman, Özlem Çolakoğlu
FNO2	Prof. Faik N. Oktar	Use of Nanoparticles in Tissue Engineering and Regenerative Medicine	Başar Ozar, Doğa Sarısaltıkoğlu
FNO3	Prof. Faik N. Oktar	3D Bioprinting of Functional Skin Substitutes	Omar Mizher
FNO4	Prof. Faik N. Oktar	3D printed scaffolds for bone tissue engineering	Tufan Tut
FNO5	Prof. Faik N. Oktar	Ceramic Biomaterials for Tissue Engineering	Betül Uygun
KYA1	Prof. Kazım Yalçın Arğa	Comparative analysis of methods employed in the analysis of single-cell RNA-seq data (computational study)	Adile Öztürk, Özge Ören, Sümeyya Yıldız
KYA2	Prof. Kazım Yalçın Arğa	Evaluation of the biomarker potential of non-coding RNAs in cancers (computational study)	Filiz Sude Öztürk, Edanur Gürbüz, Cansu Atanak
NAS1	Assoc. Prof. N. Alpaga Sayar	Optimisation under uncertainty - Acetic acid production (computational study)	Sera Ünlüer, Melek Akbaş, Muhammet Malkoç
NAS2	Assoc. Prof. N. Alpaga Sayar	Optimisation under uncertainty - Catechins production (computational study)	Sena Aslan, Berkan Tiryaki, Eren Can Taşçı
POS1	Assoc. Prof. Pemra Özbek Sarıca	Quercetin-including drug discovery for inhibition Type 4 Pili's (T4P) in <i>P. Aeruginosa</i> (computational study, docking tools will be used to determine possible drug molecules)	Ülkü Topuoğlu
POS2	Assoc. Prof. Pemra Özbek Sarıca	Testing and improving an MD analysis tool (computational study, requires computing skills)	Bilal Gürçan