SAĞLIK
BİLİMLERİ
ENSTİTÜSÜ

DEPARTMENT OF PHARMACEUTICAL TECHNOLOGY GRADUATE PROGRAMS

ACADEMIC STAFF

SAĞLIK BİLİMLERİ ENSTİTÜSÜ

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- Res. Assist. Dr. Seval OLĞAÇ
- Res. Assist. Şeyma EDİSAN
- Res. Assist. Hilalnur İlayda BİÇİCİ
- Res. Assist. Gözde BEBEK

FIELDS OF RESEARCH-1

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- Development of conventional formulations for therapeutic or cosmetic purposes (solutions, suspensions, emulsions, semi-solid preparations, gels, powders, tablets, capsules, parenteral preparations, transdermals, etc.)
- Development of micro- or nano-sized drug delivery systems for therapeutic or cosmetic purposes (micro/nanosuspensions, micro/nanoemulsions, micro/nanoliposomes, solid lipid nanoparticles, nanofibers, nanotubes, micelles, etc.)
- Determination of physicochemical properties of conventional formulations and nano-sized drug delivery systems, quality control, and stability studies
- Development of sustained release dosage forms and determination of their properties (matrix structures, transdermal systems, osmotic pressure controlled systems, etc.)
- Dissolution and in vitro release kinetics of drug delivery systems
- Increasing oral drug absorption and gastrointestinal drug permeability
- Bioavailability/Bioequivalence studies
- Biopharmaceutics classification systems (BCS)
- Carrying out skin penetration studies, modeling the permeation of drugs across the skin, using artificial neural networks in skin penetration
- Dermal microdialysis and dermatopharmacokinetics
- Iontophoresis
- Carbon nanotubes as drug delivery systems and their permeation across the skin

FIELDS OF RESEARCH-2

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- Design and development of peptide/protein formulations, their quality control and efficacy tests
- Mucoadhesion and bioadhesive drug delivery systems
- Design and development of drug formulations administered via transmucosal (oral, nasal, vaginal) route
- Pharmaceutical Biotechnology
- Drug permeability studies in cell cultures (Caco-2, MDCK, MCF7, MDA231)
- Studies on blood-brain barrier
- In vitro–in vivo correlation
- Quality by design (QbD)
- Targeting – colon-specific drug systems
- Development of drug delivery systems administered via the pulmonary route
- GMP studies
- Patent (for medicines, medical devices and cosmetic products)
- Cosmetology
- Design and quality control of dosage forms used in veterinary medicine
- Regulations on pharmaceutical and cosmetic products
- Stability testing of pharmaceutical and cosmetic products
- Wound healing and wound dressing products

FIELDS OF RESEARCH-3

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- Solutions to the challenging problems in the pharmaceutical industry
- Research and Development (R&D)and Scale-up
- Quality management in pharmaceutical manufacturing
- Intellectual and industrial property rights in the pharmaceutical and chemical industry
- Drug licensing
- Analytical process technology and quality by design
- Pharmacoeconomics
- Quality control and instrumental analysis methods for pharmaceuticals
- Evaluation of Bioavailability/Bioequivalence of drug formulations

FIELDS OF RESEARCH-4

SAĞLIK BİLİMLERİ ENSTİTÜSÜ

- Structures and formulations of cosmetic products
- Manufacturing technologies
- Advanced delivery systems in cosmetics
- Dermocosmetic products
- Regulation and legislation for cosmetic products
- GMP rules, efficacy testing of cosmetic products
- Cosmetic dermatology
- Development of new delivery systems such as nanoemulsions, microemulsions, nanoparticles and liposomes for cosmetic purposes

RESEARCH FACILITIES-1 (LABORATORY INFRASTRUCTURE)

SAĞLIK BİLİMLERİ ENSTİTÜSÜ

- Tablet Pressing Machine
- Rotary Tablet Pressing Machine
- Tablet Disintegration Tester
- Tablet Hardness Tester
- Friabilator
- Granulator
- V Type Mixer
- IR Moisture Analyzer
- Distilled Water Device
- Bidistilled Water Device
- HPLC
- UPLC
- UV-Vis Spectrophotometer
- Flow-Through Cell Dissolution Tester
- Dissolution Tester
- Texture Analyzer
- Particle Size Analyzer
- Viscometer
- AFM Device
- Differential Scanning Calorimetry (DCS)
- Differential Thermal Analyzer (DTA)
- Zeta Potential and Particle Size Analyzer
- Nano Spray Dryer
- Electrospinning Device
- Lyophilizer

RESEARCH FACILITIES-2 (LABORATORY INFRASTRUCTURE)

SAĞLIK BİLİMLERİ ENSTİTÜSÜ

- Heated Water Baths
- Ultrasonic Water Bath
- Rotary Evaporator
- Ultrasonic Homogenizer
- High Pressure Homogenizer
- Air Conditioning Cabinet
- Peristaltic Pump
- Vacuum Pump
- Heating Cabinet
- Digital Precision Scales
- Mechanical Mixers
- Magnetic Stirrers
- pH meter
- Deep freeze
- Light Microscope
- Laminar Flow Cabinet
- Centrifuge
- High Speed Centrifuge
- (Ultracentrifuge)
- Rotavapor
- TEER Device

QUOTA NUMBERS AND PROGRAM ADMISSION REQUIREMENTS FOR FALL SEMESTER 2026/2027

SAĞLIK BİLİMLERİ ENSTİTÜSÜ

QUOTA			SCORE TYPE	PROGRAM TYPE	SCORE CRITERIA		
MASTER'S DEGREE	DOCTORATE	FOREIGN NATIONAL MA/DR.			ALES SCORE/ *TUS*	FOREIGN LANGUAGE SCORE	GRADUATION GRADE (UNDERGRADUATE / MA)
5			E.W./NUM.	MASTER'S DEGREE	60	60	2.5/4
	5		E.W./NUM.	DR.	60	65	2.75/4

UNDERGRADUATE PROGRAMS ADMITTING STUDENTS		
DOCTORATE	2850	PHARMACEUTICAL TECHNOLOGY
	2544	PHARMACY (5 YEARS)
MASTER'S DEGREE	2850	PHARMACY

QUOTA NUMBERS AND PROGRAM ADMISSION REQUIREMENTS FOR FALL FALL 2026/2027 INDUSTRIAL PHARMACY PROGRAM

SAĞLIK BİLİMLERİ ENSTİTÜSÜ

QUOTA			SCORE TYPE	PROGRAM TYPE	SCORE CRITERIA		
MASTER'S DEGREE	DOCTORATE	FOREIGN NATIONAL MA/DR.			ALES SCORE/ *TUS*	FOREIGN LANGUAGE SCORE	GRADUATION GRADE (UNDERGRADUATE / MA)
2	-	-	E.W./NUM.	MASTER'S DEGREE	60	60	2.5/4

UNDERGRADUATE PROGRAMS ADMITTING STUDENTS		
MASTER'S DEGREE	2544	PHARMACY
	3749	CHEMICAL ENGINEERING
	3759	CHEMIST
	2490	DENTIST
	2124	BIOLOGY
	5370	MEDICINE
	5719	VETERINARY MEDICINE

QUOTA NUMBERS AND PROGRAM ADMISSION REQUIREMENTS FOR FALL FALL 2026/2027 COSMETOLOGY PROGRAM

SAĞLIK BİLİMLERİ ENSTİTÜSÜ

QUOTA			SCORE TYPE	PROGRAM TYPE	SCORE CRITERIA		
MASTER'S DEGREE	DOCTORATE	FOREIGN NATIONAL MA/DR.			ALES SCORE/ *TUS*	FOREIGN LANGUAGE SCORE	GRADUATION GRADE (UNDERGRADUATE / MA)
2			E.W./NUM.	MASTER'S DEGREE	60	60	2.5/4

UNDERGRADUATE PROGRAMS ADMITTING STUDENTS		
MASTER'S DEGREE	2544	PHARMACY