DEPARTMENT OF CHEMICAL ENGINEERING

Within the body of Selçuk University Institute of Science and Technology, the Department of Chemical Engineering began its graduate education activities with the graduate programmes opened in the 2004-2005 academic year and the doctorate programmes opened in the 2006-2007 academic year. With the establishment of Konya Technical University in May 2018, our department was transferred to Konya Technical University, Institute of Graduate Studies and is now continuing its postgraduate education activities there.

The objective of the chemical engineering programme is to give students both theoretical and practical training in areas like applying the findings of chemistry to industry, designing the facilities that will produce chemicals, assessing the construction of the facilities in terms of suitability for the task, and carrying out evaluation, inspection, improvement, and development studies in the process from the processing of chemicals to the finished product. Given the department's and institution's primary responsibilities as well as our duty to educate modern chemical engineers, the program's educational goals have been established as follows:

Master Degree

The department's goal is to train chemical engineers msc who are:

• capable of designing and carrying out experimental studies that can provide appropriate solutions to contemporary problems;

- capable of analysing the results;
- capable of presenting research findings at national and international scientific conferences;
- capable of actively participating in the realisation and implementation of research projects;
- capable of managing teams;
- preferred in the industry with the skills they have acquired.

Doctorate

The department's mission is to educate Ph.D. chemical engineers who can:

- make contributions to general science through original research findings;
- plan, organise, and carry out projects;
- serve as a lecturer at colleges and universities, and
- be favoured by top institutions, groups, and R&D facilities in their fields.

Programme Description: Chemical engineering is a branch of engineering that applies knowledge of maths, physics, chemistry, thermodynamics, heat transfer, fluid mechanics, as well as physical chemistry, mass transfer, and chemical reaction, which are common subjects in all other engineering units, to the design, operation, and resolution of environmental issues.

Chemical engineering is a broad and multifaceted area of engineering that deals with the creation and use of procedures that alter the chemical composition, energy content, or physical state of materials.

Through the scientific environment, advanced courses, and thesis studies made available to students, Chemical Engineering, a thriving field of engineering that is adaptable and open to interdisciplinary work, aims to meet the present and future needs of the society. It is based on the fundamental ideas and methods of life and engineering sciences as well as the fundamental disciplines of mathematics, physics, and chemistry for this purpose.

Our department has 7 professors, 12 associate professors, and 3 doctor academicians. Many scientific research projects with a total budget of approximately 200 million TL have already been carried out by our academicians with the support of institutions such as TÜBİTAK, DPT, Ufuk2020, the European Union, and others.

Our department has been allocated 3 student laboratories, 17 research laboratories, 4 classrooms, and student study rooms within Konya Technical University's Faculty of Engineering and Natural Sciences for the use of our students and lecturers.

What courses are offered in Chemical Engineering Master's and Doctorate programmes? The Department of Chemical Engineering offer theoretical and applied basic science courses that are integrated with the engineering discipline.

What are the Career Options for Chemical Engineering Graduates?

Chemical Engineering Master's and Doctorate graduates have numerous job opportunities in the country and abroad in universities, research centres, corporate R&D departments, and senior management positions.

Research Areas

- Waste Processing Technologies
- Separation Operations
- Biotechnology
- Boron Compounds Production Technologies
- Advanced Materials: Nano-Polymeric-Carbon-Catalytic-Adsorbent-Bio-Materials
- Chemical Engineering Process Design and Optimization
- Process Control
- Reaction Engineering
- Basic Operations
- Fuel and Energy Technologies