

## **DEPARTMENT OF MECHANICAL ENGINEERING**

The Mechanical Engineering Department was established in 1970 as the “Konya Engineering and Architecture School” under the Ministry of National Education. In the beginning, the School, which had Civil Engineering and Architecture departments, was renamed as "Konya State Engineering and Architecture Academy" in 1971.

In 1973, within the body of Konya State Engineering and Architecture Academy, Mechanical Engineering and Mapping and Cadastre Engineering departments were opened in addition to Civil Engineering and Architecture departments. Konya State Academy of Engineering and Architecture was merged with the Physics, Chemistry, and Geological Engineering departments of Selçuk University Faculty of Science with Decree Law No. 41, which went into effect on July 20, 1982, and was affiliated with Selçuk University under the name Faculty of Engineering and Architecture. Since 2018, it has been continuing to provide education and research services for more than 50 years within the Faculty of Engineering and Natural Sciences of Konya Technical University.

The education period of the Mechanical Engineering Program is 4 years in total. The 4-year education period consists of 8 semesters of 14 weeks each. Course passing system is applied in the program.

Students enrolled in the program, are obliged to attend 15 working days of orientation internship to get to know the mechanical engineering profession in the summer term after completing their 1st year, 20 working days of production internship in a workplace that meets the internship conditions in order to gain knowledge and experience on production processes after the completion of their 2nd year, and to do an organizational internship for 20 working days in a workplace that meets the internship requirements in order to gain knowledge and experience in management and organization in the summer term after the completion of their 3rd year. Students who complete the Mechanical Engineering program's graduation criteria are eligible for the "Mechanical Engineering" undergraduate degree, which confers full mechanical engineering privileges.

The vision of our department is to be an active department that conducts education and training that is recognized at national and international level, aims to produce scientific knowledge and develop technology, aims to make gains permanent in this framework and contributes to the development of social welfare.

Missions of our department are determined as;

To train mechanical engineers at an international level equipped with basic engineering and mechanical engineering knowledge, gaining the skills of designing and determining the processes of transforming the design into a product, who are productive, researchers, innovative, entrepreneurial, have analytical thinking, prone to teamwork, adoptive to professional and general ethical rules, constantly learning and self-contained in undergraduate education. In addition to these features, to train mechanical engineers and scientists who are experts in their fields in postgraduate education. To contribute to the creation of safe and contemporary living environments for the society, to the dissemination of scientific thought and environmental awareness in the society, to the development of a culture of social cooperation and solidarity, to the provision of sustainable development, and thus to the improvement of the quality of life of the society.

To lead the way in increasing the quality at the international level in the machinery and manufacturing industry sector, giving priority to research and development activities, placing awareness of standards and regulations, and applying professional ethical rules.

Konya Technical University Faculty of Engineering and Natural Sciences Mechanical Engineering Department is one of the strongest Mechanical Engineering departments in our country in terms of teaching staff and teaching quality. Including all universities, it ranks 80<sup>th</sup> among the Mechanical Engineering departments of daytime education, and 41<sup>st</sup> in the ranking of state universities. As of 2022, 23 faculty members and 16 research assistants are working in our department. We have approximately 1200 students in regular and secondary education and approximately 180 students in our graduate programs.

In our department, activities are carried out on the axes of teaching, research, cooperation with public and industrial organizations. The lesson plans and curricula followed in our department are constantly updated by considering the feedback from the industry, employers, graduates, and technological developments. In the last year, our students are given the opportunity to choose from technical elective courses in many different fields. Since the students in our department are given the opportunity to choose from many elective courses, the students have the opportunity to improve themselves in the field they are interested in. Within the scope of non-technical elective courses, our students can study painting, photography, communication, literature, photography, law, psychology, etc. Students can choose two of those courses according to their choice.

The graduation projects in the final year curriculum are generally in the form of teamwork and are mostly chosen from the subjects that industrialists need. In many finishing

projects, the prototype of the designed product is produced. Thus, our students have superior qualifications and experience in design, which is the most important function of engineering, making presentations, preparing documents, project planning, teamwork, conflict management, etc. issues are developed. In addition, our students take two project courses in which the main design experience is given.

In the courses, importance is given to teaching professional software related to mechanical engineering. It is given great importance that the students learn by using many professional software in addition to office programs as AUTOCAD, SOLIDWORKS, CATIA, ANSYS- FLUENT, MATLAB, LABVIEW etc. All students graduate by gaining knowledge and experience in programming CNC machines.

Special attention is given to the students' completion of their technical, social and personal development through extracurricular activities. The students of our department take charge as administrators or members in many student societies at the university. Within the student societies some of our students are participating in such events as TEKNOFEST, solar-powered automobile races, robotic competitions, etc... Our students, who take part in the Mechanical Engineering Club, of which only the students of our department are members, improve their organizational and management skills and ensure their personal development. Our department organizes many technical and social activities to ensure the development of our students through extracurricular activities. To ensure the development of our students with extracurricular activities, The Konya Branch of the Chamber of Mechanical Engineers provides significant support to such activities as training, technical trips, social activities, etc. As a student member, our students can benefit from the facilities of the MMO Konya Branch.

Students of our department have the right to receive double major and minor programs. Our students can attend a double major program and receive a diploma in another major (For example: Civil Engineering, Industrial Engineering, Electrical and Electronics Engineering, Computer Engineering, etc.) in addition to their Mechanical Engineering diploma, provided that they meet the application requirements. Our students can continue to a minor program with a Diploma of Mechanical Engineering and have the right to get a certificate provided that they meet the application conditions, in another field (For example: Civil Engineering, Industrial Engineering, Electrical and Electronics Engineering, Computer Engineering, etc.)

It is also given importance for students to gain experience by spending 1 or 2 semesters in another university, especially in European countries with the Erasmus+ program and in our country with the Farabi exchange program.

In addition, great importance is attached to transferring the knowledge produced by the faculty members of our department within the scope of scientific research studies to public and industrial organizations. In this context, the subject of the undergraduate and graduate thesis studies conducted in our department are tried to be chosen in accordance with the needs of the industry. Many thesis studies carried out in our department are carried out in order to meet the technical needs of public or industrial organizations. Most of these studies are supported by institutions such as TUBITAK. There are many TUBITAK and BAP supported scientific research projects carried out by the faculty members of our department.

Our department is one of the departments where university-industry cooperation activities are most intense. Our region has a developed structure in terms of industry and special importance is given to cooperation between the public and private sectors.

We have a large number of graduates working as academicians, researchers, managers, bureaucrats, and technical staff. With this structure, Konya Technical University Mechanical Engineering Department is a very large family.