DEPARTMENT OF MINING ENGINEERING

Konya Technical University, Faculty of Engineering and Natural Sciences, Mining Engineering Department was established within Selcuk University in 1992 and transferred to the newly established Konya Technical University in 2018. Our department, which opened master's with thesis in 1996 and doctorate programs in 2001, graduated 85 students from the master's program and 21 students from the doctoral program as of the end of the 2021-2022 academic year.

There are currently 39 students in our master's program and 10 students in our doctorate program. There are master's and doctorate programs in “Mining Engineering” and a master's program in "Industrial Explosives and Blasting Design" in our department.

In order to produce graduate students with high analytical thinking skills, our academic staff offer 82 different graduate courses devotedly. Our students take 7 courses and 1 seminar course in master's and doctorate programs in order to increase their professional knowledge and skills. In their theses, they analyze a problem encountered in the industry through laboratory and field studies, they design their study and defend their theses in the presence of the jury.

Our graduate students have job opportunities in public and private mining enterprises in our country such as mining (mine design, planning, economic analysis, equipment selection, etc.), tunneling (tunneling and design, fortification design, tunnel effect on buildings, subway tunnels, etc.), mineral processing (identification and enrichment methods of ore and coal), cement industry (aggregate, determining the chemical content compatibility of cement), waste management (recovery of mining waste), natural stones (analysis, cuttability, selection, etc. of natural stones such as marble, etc.), building materials, ceramics, blasting design (blasting design in mining and construction works), building demolition, occupational health and safety (risk analysis, emergency plans, consultancy, etc.), mining machinery, drilling (detection of drilling points, selection of drilling machine and performance analysis, evaluation of drilling data, etc.), solution mining, space mining, emergency management (preparation and training of emergency plans), project preparation, technical support and marketing of equipment and software used in mining.

Research, project and analysis services are offered in our department. In addition, specialization and expertise services are carried out with the cooperation of faculty and industry. The projects that can be carried out in our department are as follows: determination of mechanical and physical properties of aggregates; determination of mechanical behavior of

rock; determination of rock mass parameters; mine planning; tunneling design; design, selection and performance analysis of tunnel boring machine,; selection of mining equipment; design and performance analysis of mining machine, design and stability analysis of rock slopes in open pits; fortification design and stability analysis in underground mines and tunnels; blast design; ventilation design in mines; determination of rock excavability; enrichment of metallic ores; enrichment of industrial raw materials; design of mineral processing facilities; coal preparation and enrichment; recovery of precious metals from industrial waste; bringing in natural stones and mine wastes to the mining and construction sector, etc.

In our department, there are many laboratory tools for educational and research purposes in the laboratories of Sample Preparation, Mining, Mineral Processing and Mine Mechanization and Technology. In addition, there are some land measurement devices that allow on-site measurements in mines. In our department, licensed computer software is available for solving mining problems (rock discontinuity analysis, reserve determination, facility designs, etc.). These programs are 2D numerical analysis programs (Phase2, C-Pillar, Plaxis) and 3D numerical analysis programs (Examine, Flac, Surpac, Netpromine).

Participation of graduate students in international and national education projects such as Erasmus+ and Farabi is supported. We continue our cooperation with higher education institutions in 5 different countries within the framework of the Erasmus+ student exchange program. Our students can study abroad for one semester within the framework of the student exchange program and benefit from an internship program between 3 months and 1 year.

In our department, education, research and development activities are still carried out with 8 Professors, 4 Associate Professor Doctors, 1 Assistant Professor Doctor and 8 Research Assistants. TÜBİTAK, SANTEZ, KOSGEB, BAP projects and revolving fund projects are carried out by our academic staff in the department. In addition, consultancy services are provided by our academic staff.

The Department of Mining Engineering aims to train graduate students who have the abilities and characteristics as follows:

- using basic sciences in the field of mining engineering,
- designing and practicing overground and underground mining,
- providing solutions by thinking analytically to engineering problems that may be encountered in all areas of mining,
- coming up with new ideas from their prior knowledge.
- being self-confident,

- following technological developments and applying them to their own field,
- having sufficient awareness of mineral resources,
- following the developments in mining in the world and country;
- having awareness of teamwork
- expressing their ideas clearly with self-confidence,
- having successful communication skills.

The vision of our department is to,

- be a program that meets the needs of the national and international mining industry,
- to train students who can provide solutions to all kinds of professional problems and discuss them open-mindedly,
- to contribute to science at national and international level with its academic studies,
- to become an internationally well-known and respected department.