DEPARTMENT OF METALLURGICAL AND MATERIALS ENGINEERING

Metallurgical and Materials Engineering graduate education aims to catch up with world standards, to follow the latest technology research and to strive for excellence, to ensure that our students receive an education of high quality blended with theory and practice, to provide our graduates starting their profession by creating a successful and safe career and to contribute to society. Graduates of this program have advanced skills in academia and industry. Postgraduate students take their education in Turkish and complete the program with a dissertation.

Two programs, Master of Science (M. Sc.) and Philosophy of Doctorate (Ph. D.), in the field of Metallurgical and Materials Engineering are carried out in the department. It is necessary to have at least 70 points from the ALES exam for the application to M. Sc. Program in terms of registration and admission. For the application to Ph. D. program, 70 points from ALES and at least 50 points from either YDS or YÖKDİL exams are required. In order to graduate from the Metallurgical and Materials Engineering M. Sc. program, it is required to successfully complete courses with a total of 21 credits, 1 of which is compulsory and 6 of which are elective, a research seminar and to present a completed written dissertation in front of a scientific jury. For the doctorate program, it is required to complete a total of 21 credits, 1 of which is compulsory and 6 of which are elective, a research seminar, to be successful in the doctoral proficiency exam, and to present a completed written dissertation in front of a scientific jury. The courses and their contents in graduate education are designed to include theory and practice in a balanced way, and they also encourage students to take elective courses from different departments within the university or from other departments in other Universities. Students who graduate from our graduate programs achieve superior skills in project, report and article writing, material characterization and device employment.

In addition to research studies in academic fields, many thesis studies that deal with the problems of the industry are carried out by our graduate academic staff and students with project support (Tubitak, Teybed, San-Tez, etc.). Academic staff of the department work in different areas such as casting, heat treatment, powder metallurgy, surface coating technologies, composite material production, super and high entropy alloys, nano material production and characterization, photovoltaic applications, thin film coating technologies, waste recovery, piezoelectric applications, advanced ceramics, solar panel production and characterization, corrosion behavior of materials, tribology, and wear. Our department has been successfully continuing its graduate education for 10 years with sufficient laboratory and other facilities.

Within the department, our faculty members aim to train engineers who are culturally equipped, prone to teamwork, can take authority and responsibility in their field, do not compromise on professional ethics, can produce solutions to engineering problems, equipped with sufficient knowledge and skills in the field of Metallurgical and Materials Engineering, support university-industry cooperation, carry out scientific and applied research studies that will respond to the problems of the industry of the region and the country, publish the scientific data emerging from these studies and transfer them to the industry. There are many national and international supported projects carried out or being carried out by the faculty members of the Metallurgical and Materials Engineering department. In these projects, graduate students are financially supported, and they complete their education with various publications and papers at the end of the project. Our graduate education students are supported with thesis and research projects by the Scientific Research and Project Coordinator (SRP) within our university.

In terms of laboratory facilities, postgraduate students continue their education in a flexible and productive environment. They have many devices and raw materials that they can use in metallographic studies, along with sample preparation and microstructure examination instruments, equipped to continue casting studies. Both the Konya industry and the Central Research Laboratory within Konya Technical University provide support to research and researchers on issues such as characterization and raw material supply. Our material laboratories within the department contain devices with different technologies that will enable the production of material types such as thin film and nanomaterial production.