DRILLING TECHNOLOGY

Program Introduction:

Drilling Technology Program of Dokuz Eylul University was founded in 1993 in Torbali Vocational school to train skilled drilling technicians. The program is founded as Drilling Program and got its current name in 2009. In recent years, our country have very important ground recourses such as, geothermal, metallic mine, groundwater, oil exploration. In this context, main goal of this department is to train the science-based technical staff and to fine some solution of problems in Drilling sector. Approximately 40 students are admitted each year. Our program covers formal education and the education language is Turkish Academic studies concentrated on geothermal, environmental pollution, mining and drilling technology in our department. The Department of drilling technology has practical trained technicians on geothermal, petroleum, mining, ground water exploration and soil survey.

The Aims of Our Program:

- To be a department whose competence is recognized in the world, which trains technicians who are
 equipped to serve at an international level by utilizing science, technology and personal experience in
 the light of universal values, leading in the creation and implementation of contemporary education and
 research strategies.
- To provide technicians with technical skills in drilling technology, to provide preliminary information on the realization of drilling, protection of the environment and natural life, increasing efficiency in drilling, reducing drilling costs, and educating dynamic technical staff who base drilling activities on scientific foundations.

Within these aims, the fundamental lectures are Information of Topography and Geological Maps, Geology and Rock Information, Rock Mechanics, Hydrogeology, Drilling Application, Drilling Muds, Pump Information, Drilling Techniques, Underground Geology, Fishing. Within the scope of laboratory based lectures, micro structural, physical and mechanical properties of rocks are teached in rock mechanic laboratory and soil mechanic laboratory. Drilling applications are done by using related apparatus and machines. Programme is performing enhancements and self evaluations under the scope of Bologna procedures.

Key Learning Outcomes:

- 1. Applies mathematics, science and analytical knowledge to the relevant drilling.
- **2.** Knows the basic concepts about the drilling technology.
- 3. Drilling machines and equipment, recognize and use machines.
- **4.** Identifies the drilling problems and knows solution related to drilling problems.
- **5.** Manages to select suitable drilling equipment for formation.
- **6.** Performs the relevant field test.
- **7.** Manages to understand a drilling Project and perform it.
- **8.** Knows and applies the precautions about the labor safety, human health and environmental protection.
- **9.** Use information technologies and communication tools.
- **10.** Prone to teamwork, creative studies.

Infrastructure of the Program at the School

Our Drilling Machines

Drilling Technology Program



Our Drilling Mud Laboratory



- Fann viscometer
- Marsh funnel
- Sand kit
- mud level

Drilling Technology Program

- pHmeter
- Active Solid Determination (methylene blue)
- Water Loss Experiment Setup

Drilling In the World



Occupational Profiles of Graduates with Examples:

Graduates of Programme of Drilling Technology are employed in a wide range of positions in both the private and public sectors. Graduates work in private sector and government engineering projects about geothermal, petroleum, mining, ground water exploration and soil survey.

Drilling Technology Programme graduates may apply to geophysics engineering, geology engineering, mining engineering, petrol and natural gas engineering departments via Vertical Transfer Examination.

Drilling Technology Program Instructors			
Title, Name, Surname	E-Mail	Telephone (Internal)	Expertise
Asst. Prof. Zülfü DEMİRKIRAN	zulfu.demirkiran@deu.edu.tr	146	Water and Mineral Drills
Asst. Prof. Yıldızay AYYILDIZ SELİMOĞLU (Program Başkanı)	yildizay.ayyildiz@deu.edu.tr	129	Chemistry and Science Education
Instructor Feride ÖZYOL	feride.ozyol@deu.edu.tr	159	Drilling Muds