

Earthquake Monitoring and Research Center (EMARC)



SAÜ-1 SEISMIC STATION

SAU-1 was established jointly by the Sakarya University, Department of Geophysical Engineering and the Boğaziçi University, Kandilli Observatory and Earthquake Research Institute.

The SAU-1 Seismic Station is equipped with one broadband seismometer and one strong ground motion accelerometer.

Station Code : SAUV (Broadband) SAUA (Accelerometer)
Coordinate : 40.74010 N - 30.32710 E
Altitude : 165m
Formation : Limestone (Akveren Formation)

DATA PROCESSING LABORATORY



TECTONIC MODELING LABORATORY



Academic Staff

Department Head



Prof.
Murat UTKUCU

Deputy Heads of Department



Assist. Prof.
Şefik RAMAZANOĞLU



Assist. Prof.
Ayhan KESKİNSEZER



Prof.
Gündüz HORASAN



Assist. Prof.
Günay BEYHAN



Assist. Prof.
Mahir IŞIK



Assist. Prof.
M. Dinçer KÖKSAL



Res. Assist.
Emrah BUDAĞOĞLU



Res. Assist.
Ali ŞİLAHTAR



Res. Assist.
Hasan KARAASLAN



Res. Assist.
Ertuğrul GÜRBÜZ

CONTACT

Tel : +90 264 295 57 06

Fax : +90 264 295 56 01

E-mail : jfm@sakarya.edu.tr

Address: Department of Geophysical Engineering
Esentepe Campus M1 Building 54187
Serdivan, SAKARYA - TURKEY



Geophysical Engineering Program

Graduate Studies



jfm@sakarya.edu.tr

Department of Geophysical Engineering

Geophysics is an earth sciences branch that uses principles of physics (seismic, electric, magnetic, gravity etc.) to image and to characterize the material properties of the subsurface. The exploration of earth resources such as oil, natural gas, coal, ore deposits, industrial minerals and underground water can be accomplished by using geophysical techniques. Thus, geophysics can contribute greatly to the economic prosperity and well being of nations.

Since Turkey is located along a seismically active belt, the study of earthquakes is very important for us. Seismology is a sub-branch of geophysics. The study of earthquakes, volcanoes, landslides, ground properties, non-destructive testing of structures, delineation of buried archeological sites are among many topics that geophysics encompasses.

The program was established in 1997 and we have both undergraduate and graduate (MSc & PhD) programs. We have a total of 11 faculty members and researchers.

Mission and Vision

Our Mission is

- to educate individuals who are capable of advancing and applying knowledge and technology,
- to create a contemporary educational culture that is participatory, sharing, novel and equipped with aesthetic values,
- to educate individuals who have professional excellence and respect for social values.

Our Vision is to become a Geophysics Department that is

- well-known and highly respected not only in Turkey, but also around the World in research as well as in education,
- creating an environment that encourages team work, values participation and contribution,
- carrying out research that aims to solve local, regional, national and global issues,
- fostering collaboration between the university, industry and the society,
- providing effective and exemplary online educational services,
- embracing the principals of total quality management,
- improving continuously
- respectful for Universal values.

Graduation Requirements

In order to complete the Graduate Program (MSc or PhD) students have to take courses that add to a minimum of 60 ECTS credit. Also a thesis, that makes an original contribution to science, has to be successfully completed.

Courses

- PROJECT WRITING TECHNIQUES I
- PROJECT WRITING TECHNIQUES II
- SEMINAR
- ADVANCED GRAVITY INTERPRETATION
- MODELLING IN GRAVITY
- PALEOMAGNETISM
- GEOPHYSICS OF ENGINEERING
- MINING GEOPHYSICS
- ADVANCED INTERPRETATION OF MAGNETIC
- SEISMIC REFLECTION METHOD
- GEOPHYSICS AND PLATE TECTONICS
- ADVANCED STRUCTURAL GEOLOGY
- ADVANCED STRATIGRAPHY
- NATURAL DISASTERS AND RISK MITIGATION APPROACHES
- ENGINEERING STRUCTURES AND EARTHSCIENCES
- ADVANCED COMPUTER APPLICATIONS IN GEOPHYSICS
- SPECIAL TRANSFORMS IN GEOPHYSICS
- MICROZONATION METHODS
- ADVANCED ARCHEO GEOPHYSICAL
- SPECIAL TOPICS IN WELL LOGGING
- ELECTROMAGNETIC METHODS IN GEOPHYSICS
- INFORMATION SYSTEMS IN GEOPHYSICS
- THEORETICAL AND APPLIED SEISMOLOGY
- INDUSTRIAL RAWMATERIALS
- PLANNING AND PROJECT DESIGN IN ENGINEERING GEOLOGY
- SEISMIC SOURCE AND SPECTRUM CHARACTERISTICS
- INTERPRETATION OF EARTHQUAKE SEISMOGRAMS
- EARTH STRUCTURE AND GEODYNAMICS
- EARTHQUAKE WAVEFORM MODELLING
- SEISMOTECTONICS OF STRIKE-SLIP FAULTS
- SEISMIC MIGRATION METHODS
- SEISMIC DATA INTERPRETATION
- SEISMIC MODELING
- SELECTED TOPICS IN SEISMOLOGY
- CURRENT ISSUES IN GEOPHYSICS

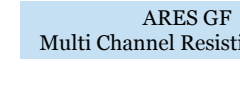
Employment Opportunities

Our graduates are employed in universities, industry, government (MTA, TPAO, DSI, etc.), private sector and municipalities.

Instruments



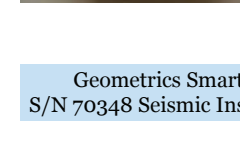
Guralp CMG-6TD
Broadband Seismometers



ARES GF
Multi Channel Resistivity Meter



Scintrex-envi
Proton Magnetometer



Geometrics Smartseis
S/N 70348 Seismic Instrument



Single-channel, 4-electrode
Electrical Equipment

SSBH 3/5 Channel Borehole Geophone

