Why Study at Sakarya University?

Sakarya is one of the most central states in Turkey. The city hosts a number of industrial companies such as Toyata Motor Manufacturing Turkey, Hyundai EURotem Train Factory and Otokar. It is surrounded by beautiful landscapes and historical places, and an economical city for students.



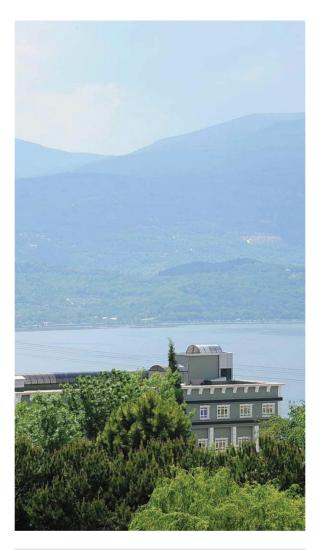
Istanbul is about one and half hour from the campus by car or bus. The capital city, Ankara, is nearly 300 km's away. The campus is fully equipped with modern buildings and overlooks the very famous Sapanca Lake.



Sakarya University has more than 60,000 students enrolled in higher-education, undergraduate and graduate studies in such areas as Engineering, Natural Sciences, Medicine, Law and Management. Each year hundreds of international students also pursue their studies individually or through some programs such as ERASMUS Student Exchange.

Sakarya University is constantly seeking for improvements in educational processes and is the first university in Turkey to start quality development and evaluation and to receive the National Quality Reward.





CONTACT US

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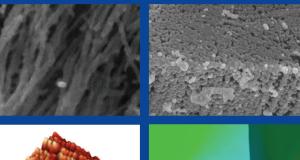


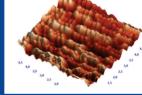


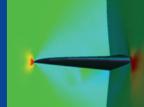
Nanosicence & Nanoengineering

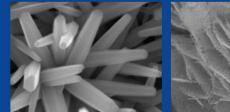
Graduate Studies

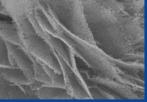








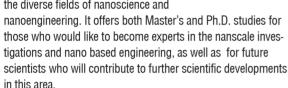






Nanoscience and Nanoengineering Graduate Program*

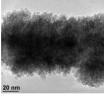
The graduate program in Nanoscience and Nanoengineering is an inter-disciplinary study and aims to develop researchers who can pursue outstanding and creative research in the diverse fields of nanoscience and



Nanoscience and Nanoengineering Focus Areas

The graduate programs provides an in depth understanding of engineering and systems in nanometer scale and present an excellent training starting from the quantum theory and atomicbasic sciences. The multidisciplinary program deals with today's high-tech nanoscience and engineering systems using both synthesis and computational analyses. The program aims at developing well-educated experts and scientists by offering a wide range of graduate courses in the following main areas:

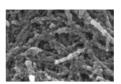




- Nanoscale chemical synthesis
- · Energy storage and alternative energy sources
- Nanocomposite, Nanomagnetic materials
- Thin films and applications
- Nano scale characterization
- · Modeling and Simulation at nano scale
- Optical and electrochemical sensors
- Antibacterial bio- materials
- Environmental nanotechnology
- Nanotechnology for Food

Graduation Requirements & Courses**

Eight courses with a total of 60 ECTS course credits, both Master's and Ph.D. programs require completion of a graduation thesis/dissertation.



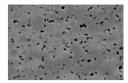
Courses**

- Advanced Engineering Mathematics
- Nano Polymer Chemistry
- Nanotechnology and the Environment
- Electrochemical Energy Storage and Li Based Batteries
- Microbial Biofuel Technologies
- Nanoscale Coating Methods
- Nanotechnology and Biosensor
- · Introduction to Nanomaterials and Technologies
- Advanced Semiconductor Physics
- Advanced Condensed Matter Physics
- Advanced Laser Physics
- Introduction to High Energy Physics
- Energy Production From Biomass and Organic Wastes
- · Wear and Friction Behaviors of Materials
- Technologic Ceramic Materials
- Methods in Molecular Biology
- Applications of Nanotechnology in Chemistry
- Introduction to Finite Element Method
- Parallel Programming
- Advanced Nanocharacterization Techniques
- Nanotechnology Applications in Foods
- Nanomagnetic Materials
- Synthesis of Nano particulates
- Introduction to Quantum Mechanics
- Nanocomposite Materials
- · Surface Physics
- Optoelectronics
- Nanostructured Materials
- Molecular Modeling and Simulations
- Numerical Methods in Engineering

**Course offerings may be subjected to change.

Why Master's or Ph.D. Degree in Nanoscience and Nanoengineering?

Current research in nanoscience and nanotechnology requires an advanced knowledge in materials science and involves design and fabrication of novel and functional nanostructures. Students who grad-



uate with a Master's degree from the program are expected to have leading scientists and engineers positions in high-tech laboratories and industries and contribute to the ever-increasing technological needs of humanity. Individuals earning a PhD degree from the program will be candidates for strong



academicians and scientists to educate tomorrow's engineers and to perform cutting-edge research and developments in nanoscience and nanoengineering.

Faculty Members

Hatem Akbulut, Prof. (PhD Istanbul Tech., Turkev) Ayşe Avcı (PhD Ankara Üniversitesi Turkey) Ali O. Ayhan, Assoc. Prof. (PhD Lehigh, USA) Ali Çoruh (PhD METU, Turkey) Mehmet İşleyen (PhD University of Colorado ,USA) Sakıp Köksal, Assoc. Prof. (PhD Conventry, UK) Süleyman Can Kurnazn (PhD Istanbul Tech., Turkey) Ali Osman Kurt (PhD University of Manchester, UK) Arzu Çağrı Mehmetoğlu (PhD Michigan State, USA) İbrahim Okur (PhD University of Exeter, UK) Sefer C. Okumuş, Assoc. Prof. (PhD Istanb. Tech., Turkey) Uğursoy Olgun (PhD Sakarya, Turkey) Ahmet Özmen (PhD University of Kentucky, USA) Hakan S. Soyhan, Assoc. Prof. (PhD Istanb. Tech., Turkey) Barış T. Tonguç, Assoc. Prof. (PhD Syracuse, USA) Hüsevin Murat Tütüncü (PhD University of Sussex, UK) Metin Yaman, Assist. Prof. (PhD Sakarya, Turkey) Suna Erses Yay (PhD Boğaziçi, Turkey)

*The program is expected to start in Fall 2013.