ABDULLAH GÜL UNIVERSITY

Graduate Schools

Third Generation University

Graduate School of Engineering and Science

Materials Science and Mechanical Engineering (Ph.D.)

Advanced Materials and Nanotechnology (M.Sc.)

The purpose of these M.Sc. and Ph.D. Programs at AGU is to promote multidisciplinary research studies in materials science, nanotechnology, and mechanical engineering, and to educate tomorrow's problem-solvers in light of next-generation technologies, increased competitiveness and global challenges. Our approach in our graduate level training is to motivate students to conduct ground breaking research in these visionary fields, which cover a wide range of projects from atomic-level manipulations to micro-scale device fabrications, and its main goal is to control the structure and properties of materials in an extremely small scale (nanometer).

Research Areas

- Materials for energy storage and conversion
- Functional nanomaterials, nanostructures and thin-films
- Theoretical and computational materials science and engineering
- Biomaterials for drug/gene delivery and tissue regeneration
- Optoelectronic devices
- Ceramic composite membranes
- Modern food technologies

Bioengineering (M.Sc.)

Bioengineering M.Sc. program at AGU offers an interdisciplinary research study that basically aims to understand, modify or control medical systems by combining material sciences and engineering. It fabricates the apparatuses that help the diagnosis and treatment of diseases, and designs the products that provide the traceability of physiological functions. Bioengineering applies basic science and engineering principles into life and living systems through laboratory and aims to perform research that helps to elongate human lifetime and improves life quality.

Research Areas

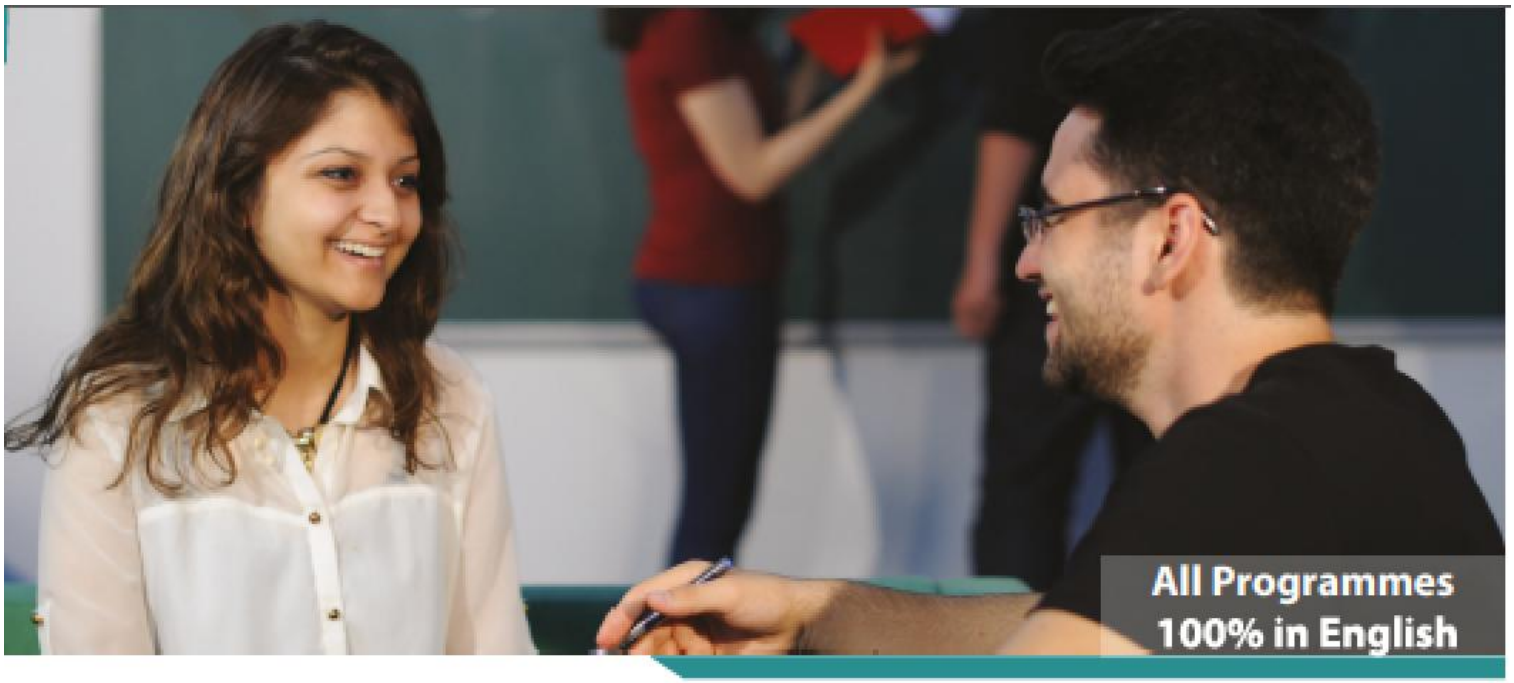
- Cancer molecular biology
- Human genetic disorders
- Bioinformatics
- Tissue engineering
- Medical imaging
- Drug delivery
- Biomicro-nano technology
- Natural products and their anticancer potentials

Electrical and Computer Engineering (Ph.D., M.Sc.)

The Electrical and Computer Engineering M.Sc. and Ph.D. Programs at AGU emphasize advanced graduate education for cutting-edge research. Our research focuses on current high-growth fields of Electrical and Computer Engineering aiming to offer sustainable solutions to the challenges of the developing world. Our program puts special emphasis to collaborations with industrial partners and governmental agencies to promote societal benefit.

Research Areas

- Information and communications technology
- Optics & photonics
- Nanotechnology
- Power systems engineering
- Biomedical and bioinformatics
- Control and automation



Industrial Engineering (Ph.D., M.Sc.)

Research in the Industrial Engineering M.Sc. and Ph.D. programs at AGU focuses on understanding, developing models and solution procedures, and providing decision support for the contemporary challenges in production and service industries as well as large-scale socio-technical systems. The programs provide a strong background in modeling, optimization, simulation, and probability/statistics.

Research Areas

- Sustainability
- Energy systems
- Manufacturing
- Disaster management
- Logistics & supply chain management
- Smart grids
- Healthcare systems
- Critical infrastructure planning

Material Science and Mechanical Engineering

The purpose of our graduate program is to inform multidisciplinary research perspective in materials science, nanotechnology, and mechanical engineering and to educate tomorrow's problem-solvers in light of increased competitiveness and new global challenges. Our approach in our graduate level training is to motivate students to conduct ground breaking research in materials science, nanotechnology, and mechanical engineering.

Research Areas

- Composite Materials
- Physics of Solids
- Biosensors
- Molecular Photochemistry

The Sustainable Urban Infrastructure Engineering

The Sustainable Urban Infrastructure Engineering Master's program is interdiciplinary and focuses on urban infrastructure engineering and sustainability. The aim of the program is to raise research-oriented graduate students who have the knowledge and skills to bring sustainable engineering solutions to the problems of the urban population which is increasing rapidly today and can handle the problems with the perspective of different diciplines.

Research Areas

- Urban Geology
- Microzonation in Urban Design
- Retrofitting and Restoration for Sustainable Structure
- Natural Disasters and Urbanization
- Advanced Steel Structures

Architecture

Architecture is a production that touches people and community and can be defined as a domain of knowledge and practice. Architecture is being interaction and communication with human and space on which based on knowledge and built environment. Architectural education is organized through all the phenomena that have created space that including the process of design, representation, practice, history, conservation- restore, renovation, material, structure, fabric-light-color etc. and producing the profession and research area. On the other hand, the organization of interdisciplinary approach in education between the architectural and engineering & social science is very important. Architectural field, planned at this view, attracts undergraduate and graduate education. Architecture education in AGU contains individualities with its innovative and flexible curriculum. Architecture maintains an applied education based on research and project oriented multidisciplinary studies mainly on history and theory of architecture, building and construction, conservation, restoration also has a close relation with informatics, environment, advanced materials, art-culture management. With this point of view AGU department of architecture determined its vision educating innovative architects with an awareness of global issues who has an interdisciplinary study and research culture.

Research Areas

- Architectural Criticism
- Urban Theory
- Perception of Space
- Kinetic Architecture, Shapes & Spaces
- Paradigms Of Architecture
- City&Literature in History

Policy Analitics in Global Issues

At the intersection of Political Science and Industrial Engineering departments, it aims to understand current problems on a global scale and to create decision support in the solution of these questions. Using the background of the Department of Political Science, the department aims to analyze global problems by focusing on the complex political power relations they involve. In the program, students who develop their knowledge of simulation and probability/statistics through modeling and optimization will have the competence to conduct research to understand the socio-technical dimensions of global problems and to offer possible solutions to decision makers and other actors. Students who graduate from this program will specialize in international migration, political economy, global environmental problems and policies, conflict and political resolution, and will be equipped to support the decision-making processes of states, civil society and organizations.

Research Areas

- Sustainability Policy
- Global Migration
- Global Development
- Modeling and Optimization

Graduate School of Social Sciences

Data Science for Business and Economics

Information explosion in recent years with the caused by developing technology has made data science a very popular concept, which is aiming to develop fundamentals of statistics science. With the understanding of the importance of data produced by people, firms and countries; the collection, processing and analysis of data for business planning, policy making and forecasting has changed the opinion of many institutions and organizations about data. In the same direction, data science aims to provide firms and policy makers with the ability to make more accurate predictions and make optimal decisions, considering market share, competitiveness, consumer preferences by integrating quantitative calculation and analysis methods.

Research Areas

- Statistics and Data Analysis
- Decision Making
- Artificial Intelligence
- Strategic Thinking
- Data Visualization and Management
- Financial Data Modelling
- Risk Modelling, Assessment and Management

A Third Generation University (1/9)

- Interdisciplinary Research and Curricula
- Strong collaborations with corporations, Institutions and Industries
- 100% English education
- Low faculty/student ratio (1/6) **How to apply**

About Kayseri

- 1.3 M inhabitants (50.000 students)
- A touristic platform: Cappadocia, Mount Erciyes Ski Center, 3 hours away from the Mediterranean seaside
- Connected to all major Turkish metropolises

How to apply

- Check our Graduate School application requirementsat
  http://fbe.agu.edu.tr/
  http://sbe@agu.edu.tr /
- Scan the required documents (full list under **sis.agu.edu.tr**)
- Apply online at sis.agu.edu.tr http://sbe.agu.edu.tr/application

Application deadlines

- For Spring term: October-November
- For Fall term: April-July

Financial Aid

All graduate students are encouraged to participate in funded research projects where they are supported as full-time research assistants. Research projects are funded by EU Framework Programs, TUBITAK, AGU-BAP, and industry. Applicants are strongly encouraged to apply for TUBITAK 2215 scholarships. Internal funded scholarships will also be available for highly qualified candidates.

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