



ACADEMIC DEPARTMENTS & PROGRAMS



Academic Departments & Programs

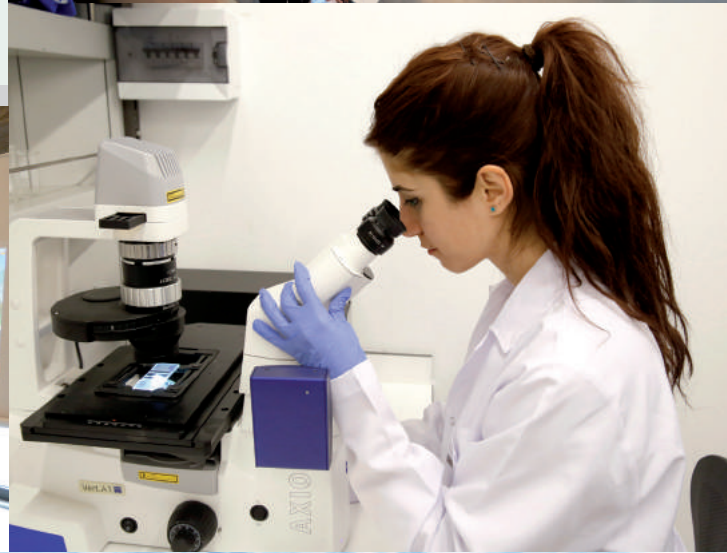


ABDULLAH GÜL
UNIVERSITY

Abdullah Gül University

AGU is a young, dynamic top-quality Turkish University, which aims to produce Graduates who can shape the future, equipped with the best skills for today's globalized society.

AGU is the first State University in Turkey with legal provision for support by a philanthropic foundation, solely dedicated to the University and its objectives.





Blended University Functions

While Societal Impact, Education and Research are often considered separately, AGU sets out to design the multiplicative rather than additive effect of these three interactive elements. By breaking down the walls between disciplines, the opportunity arises for real world subjects to become the work in the University's programs.



Message From The Rector

AGU is a research-oriented University embracing multi-disciplinary research and innovative approaches to meet global challenges and, to date, ranked among the best Turkish Universities in terms of research performance. All our Programs are offered in English and students are taught in a multicultural environment promoting social awareness and inclusion for all, by renowned professors with international experience. As part of our hands-on training approach, they systematically have the opportunity to apply their newly acquired knowledge within the frame of research projects.

With this in mind; we, at AGU, look forward to broadening our and our Students' horizons through the creation of strong international collaborations and partnerships and welcome the opportunity to work with you for the benefit of higher education.

Prof. Dr. İhsan Sabuncuođlu
Rector

AGU; A Pioneer of New Generation Universities

AGU, the first state university supported by a philanthropic foundation in Turkey, is a pioneer of a new generation of universities. AGU defines itself as a state-of-the-art institution of higher education which, as well as transmitting accepted knowledge, generates new knowledge via innovative education and research to benefit society.

AGU seeks to transform this concept by eliminating the alienation that historically exists among various departments and faculties of the traditional university. This transformation requires multi- and transdisciplinary work that renews the mutual dependency of education and research.

The AGU vision

“To become the pioneer of Third Generation Universities”

The AGU mission

“AGU, as a research university seeking solutions to global challenges through partnerships and learner-centered approaches, aims to develop citizens who can shape the future by converting knowledge into personal and social values.”

AGU has embraced the vision of becoming a pioneer of Third Generation Universities. It is being structured as an institution of innovation and entrepreneurship with the support and contribution of the ideas of more than six hundred national and international academicians, representatives of business and industry, and stakeholders from various NGOs and public institutions. The AGU concept of the Third Generation University focuses on redefining the functions of research and education as a form of societal impact. AGU is, itself, an innovative research and development project supported by the Turkish Ministry of Development as a pilot university. AGU is an original outcome of social cooperation and shared dream. The resulting innovative university design is a source of inspiration to many institutions of higher education in Turkey.





Third Generation University Principles at AGU

1. A university with a focus on societal impact

With its mission focusing on societal impact, AGU targets global challenges, which will also stimulate students' professional careers and ambitions. The global challenges—chosen according to world order and our regional and local agenda—include: (i) sustainability, (ii) economic order, (iii) population and urbanization, (iv) health and food, (v) democratic order, (vi) innovation, (vii) peace and security.

AGU aspires to the ways of engagement with global challenges through the provision of qualified human resources, development of technology, production of patents, founding of new start-up companies, running of industrial projects, development of economic and social policy, contribution to cultural life, and the dissemination of knowledge to the society.

2. A new education and research paradigm with a solid basis in the real world

Besides focusing on the production of knowledge to benefit society, AGU addresses real-world issues and problems in education and research. Real world issues do not only feed naturally into transdisciplinary studies, but also highlight the impact of education. The education and research environments at AGU are designed to converge on real life problems. Thus, students find opportunities within new learning and research experiences to develop their careers.





3. Blended university functions

Although giving individual emphasis on education, research, and societal impact, contemporary universities are significantly lacking in the degree to which they integrate these three functions into their systems. While these requirements are often considered separately, AGU sets out to design the multiplicative rather than additive effect of these three interactive elements. By breaking down the walls between disciplines, the opportunity arises for real world subjects to become the work in the university's programs.

With these principles, AGU has adopted an approach of continuous research and development.





AGU Produces Personal and Social Value

AGU redefines the basic functions of the university, education and research, through its approach based on societal impact. With an integrated education and research approach, AGU cultivates skilled professionals who meet global challenges.

AGU emphasizes scientific contribution to society and to the dissemination of knowledge through research and publications. AGU prioritizes transformation of scientific research into commercial value through patenting and licensing.

AGU works for the development of its host city Kayseri and cooperates and designs collateral projects with various organizations, including local administrative authorities, the organized industrial zone, and chambers of commerce and industry.

AGU increases Kayseri's national and international recognition by attracting scientists and policy makers from different cultures to work at the university.

AGU Awards and Honors

AGU faculty members have degrees from nationally and internationally acclaimed universities, and have worked at prestigious research institutions as qualified doctoral and post-doctoral fellows. AGU also employs a large number of international academics.

The academic achievements of the faculty are evident in the scientific awards they have received.

2013

Prof. Dr. Yusuf Baran, Ph.D.; World Economic Forum, 2013 Young Scientist Award

Prof. Dr. Yusuf Baran, Ph.D.; Worldwide Federation of Young Leaders and Entrepreneurs (Junior Chamber International), Outstanding Young Person of Turkey in Scientific Leadership

Assoc. Prof. V. Çağrı Güngör, Ph.D.; TÜBA (Turkish Academy of Sciences) Outstanding Young Scientist Award

Assoc. Prof. Zübeyir Çinkır, Ph.D.; TÜBİTAK (The Scientific and Technological Research Council of Turkey) Incentive Award

Assist. Prof. Hümeysra Çağlayan, Ph.D.; TÜBA (Turkish Academy of Sciences) Outstanding Young Scientist Award

2014

Prof. Yusuf Baran, Ph.D.; Science Heroes Association, Outstanding Young Scientist of the Year Award

Prof. Yusuf Baran, Ph.D.; FABED (Feyzi Akkaya Fund for Supporting Scientific Activities) Eser Tümen Excellence Award

Assoc. Prof. Hakan Usta, Ph.D.; BAGEP (The Science Academy Young Scientists Award Program) Outstanding Young Scientist Award

Assist. Prof. Evren Mutlugün, Ph.D.; FABED Eser Tümen Excellence Award, BAGEP (The Science Academy Young Scientists Award Program) Outstanding Young Scientist Award

Assist. Prof. Ahmet Erdem Tozoğlu, Ph.D.; METU (Middle East Technical University) Graduate School of Social Sciences Doctoral Dissertation of the Year

2015

Prof. Yusuf Baran, Ph.D.; Dr. Nejat F. Eczacıbaşı Medical Science Award

Prof. Yusuf Baran, Ph.D.; Ankara Guven Hospital, Young Scientist Project Support Award

Assoc. Prof. Zübeyir Çinkır, Ph.D.; Sedat Simavi Award

Assoc. Prof. Hakan Usta, Ph.D.; TÜBA (Turkish Academy of Sciences) Outstanding Young Scientist Award

Assist. Prof. Hümeysra Çağlayan, Ph.D.; L'Oréal & UNESCO Turkey National Women in Science Award

2016

Prof. Yusuf Baran, Ph.D.; Outstanding Young Scientist Award, Turkish Experimental Hematology Association

Prof. Yusuf Baran, Ph.D.; Honor of election for Science and Diplomacy Program, by The World Academy of Sciences and American Association for the Advancement of Science

Assoc. Prof. Dr. Vehbi Çağrı Güngör, Ph.D.; Science Heroes Association, Outstanding Young Scientist of the Year Award

Assist. Prof. Dr. Hümeysra Çağlayan, Ph.D.; Science Heroes Association, Outstanding Young Scientist of the Year Award

Assist. Prof. Dr. Evren Mutlugün, Ph.D.; Honor of election for Global Young Academy Membership





AGU As A Brain-Gain Destination

Since its foundation in 2010, AGU has attracted the best talents from Turkey and around the world to promote the creation of a vibrant and diverse academic society that fuels innovation and prosperity to address today's most pressing global issues. AGU has been establishing a globally focused, collaborative, friendly and enthusiastic academic family in central Turkey, which aims to include only high-caliber faculty recognized internationally. Many of them have won highly prestigious national and international awards. Academic

success is more than just a matter of being in the right environment and working hard; AGU's vitality depends on its selection of the best academicians and providing them the finest academic environment that nurtures a culture of achievement. AGU faculty members are strongly encouraged to focus on global issues and to provide their best to the university, society, and the world to find innovative solutions to global challenges. Faculty members are also encouraged to attain strong national and international ties with the top-

Stress in Two Force Members



ranked institutions always searching for new collaborative opportunities, which is important to become a key player in the big game of global advancement. In the past several years, many faculty members with academic and industrial experiences in the top-ranked institutions of Turkey, US, Europe and Eastern Asia have decided to become a member of this family. As recently reported by TÜBİTAK (The Scientific and Technological Research Council of Turkey), AGU is among the top three universities in Turkey, having been preferred

as a reverse brain-drain destination by the researchers trained internationally for the years of 2013-2015. Within the scope of TÜBİTAK programs, more than 15 academicians have joined the AGU family from various countries including the US, South Korea, Singapore, France and Belgium. On becoming a member of this family, AGU believes in its faculty members realizing that their perspectives, ideas, innovations, and network are the capital of the future.



SCHOOL OF ENGINEERING

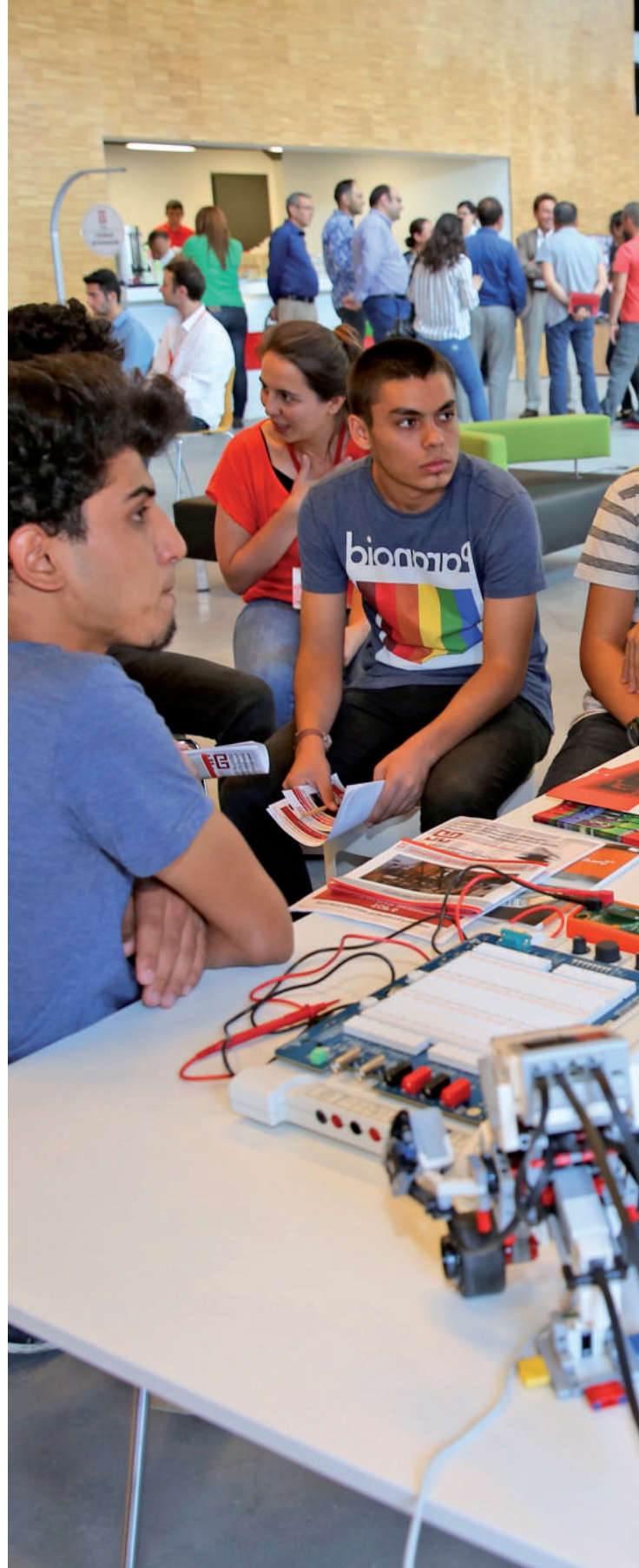
■ School of Engineering has the following programs along with their core research topics and the associated faculty members:



Department of Electrical and Electronics Engineering

The Electrical and Electronics Engineering (EEE) department aims to become a center of excellence in education and research with its internationally experienced faculty members. The research focuses on currently fast growing fields including nanotechnology, information and communication technology, biotechnology, display technology, power electronics, laser systems, control and automation, image processing and microwave systems, of which results are published in prestigious journals. In Technopark, companies are established based on research results that have potential to become commercial products beneficial for the entire society.

- İrfan ALAN, Ph.D.; University of Wisconsin at Madison, USA
- Bülent YILMAZ, Ph.D.; University of Utah, USA
- İbrahim T. ÖZDÜR, Ph.D.; University of Central Florida, USA
- Sergey BORISENOK, Ph.D.; St. Petersburg State University, Russia
- İsa YILDIRIM, Ph.D.; University of Illinois, USA
- Kutay İÇÖZ, Ph.D.; Purdue University, USA, Post Doc.; Harvard University, USA
- Evren MUTLUGÜN, Ph.D.; Bilkent University, Turkey, Post Doc.; Nanyang Technological University, Singapore
- Dooyoung HAH, Ph.D.; KAIST, Korea, Post Doc.; University of California, Los Angeles, USA
- Ahmet ÖNEN, Ph.D.; Virginia Tech, USA
- Hümeyra ÇAĞLAYAN, Ph.D.; Bilkent University, Turkey, Post Doc.; University of Pennsylvania, USA
- Günyaz ABLAY, Ph.D.; The Ohio State University, USA
- Hakan AKSEBZECİ, Ph.D.; Erciyes University, Turkey, Post Doc.; Drexel University, USA







Department of Civil Engineering

The core mission of our department is to educate inside the classroom and laboratory as well as on the job site applications. In other words, a majority of departmental courses will be educated in laboratories and on job site to show, tangibly, the civil engineering theories to the students. Furthermore, to be an important part of the fabric of AGU, CE at AGU emphasizes not only having civil engineering based research studies but also collaborative synergies and research areas among a range of different departments. With these studies, CE at AGU aims to overcome some social research



challenges on several important global issues (such as sustainability, population and urbanization, and economic problems). The Department offers five major areas of concentration: Structural Engineering, Geotechnical Engineering, Construction Engineering and Management, Transportation and Hydraulics Engineering.

- Burak UZAL, Ph.D.; Middle East Technical University, Turkey, Post Doc.; Georgia Institute of Technology, USA

- Cihan ÇİFTÇİ, Ph.D.; University of Massachusetts, USA

- Niğmet UZAL, Ph.D.; Middle East Technical University, Turkey, Post Doc.; Georgia Institute of Technology- USA

- Müge AKIN, Ph.D.; Middle East Technical University, Turkey, Post Doc.; University of Washington, USA

- Ayşegül AKYOL, Ph.D.; Bilkent University, Turkey

Department of Industrial Engineering



Industrial engineers streamline business processes; help non-profit organizations to be more effective; improve the delivery of health care services; give quantitative support for enterprise risk management; provide analysis for strategic consulting; position, route and schedule humanitarian relief supplies; and help structure organizations to make effective use of the expertise of their employees; plan and improve manufacturing

and production systems. Industrial engineers figure out how to do things better. Industrial engineers are the only engineering professionals trained specifically to be productivity and quality improvement specialists. They work to eliminate waste of time, money, materials, energy and other commodities. This is why many industrial engineers end up being promoted into management positions.

Industrial Engineering Department raises engineers of the future with its young, dynamic, and highly qualified academic staff. The department offers undergraduate and graduate curricula designed to meet the needs of the 21st century and determined by consulting stakeholders in the business world and academia; has strong ties with service and manufacturing sectors; offers long term internship programs starting from the



first year; has an education infrastructure suitable for a third generation university. Our students will have practical and theoretical competence in main areas such as optimization, simulation, probability/statistics, decision/risk analysis, and computer programming. Moreover, they will have the chance of specializing in the fields of energy/healthcare systems, disaster management, manufacturing, and logistics.

- İhsan Sabuncuoglu, Ph.D.; Wichita State University, USA
- İbrahim AKGÜN, Ph.D.; Bilkent University, Turkey
- Selçuk GÖREN, Ph.D.; Bilkent University, Turkey, Post Doc.; Laboratoire d'Informatique de Modélisation et d'Optimisation des Systèmes (LIMOS)-France, Université Blaise Pascal, France
- Lale ÖZBAKIR, Ph.D.; Erciyes University, Turkey

- Erhan KUTANOĞLU, Ph.D.; Lehigh University, USA, Post Doc.; The University of Texas at Austin, USA
- Muhammed SÜTÇÜ, Ph.D.; University of Illinois Urbana Champaign, USA

Department of Mechanical Engineering

Mechanical engineering is an interdisciplinary engineering field, which is one of the oldest and the most comprehensive engineering disciplines that comprises developing, designing, controlling, and testing processes of products varying from very small scale devices (such as micro/nano-robots that transport medicine in veins) to larger scale devices (spacecrafts, vehicles) including mechanical parts and systems. Mechanical engineering education in AGU contains fundamental engineering education followed by a graduation project and long term internship. Students are free to choose among many free elective courses in other fields such as economics and social sciences. AGU-ME offers many different branches to focus, such as machine design and material mechanics, automotive, mechatronics and robotics, automation and control, biomechanics and energy.

- M. Tarık ATAY, Ph.D.; Middle East Technical University, Turkey
- Mehmet N. TOMAÇ, Ph.D.; Ohio State University, USA
- Hatice S. ŞAŞ, Ph.D.; University of Delaware, USA
- Ramazan ÜNAL, Ph.D.; University of Twente, Netherland, Post Doc.; Vrije Universiteit, Belgium
- Burak BAL, Ph.D.; Koç University, Turkey, Post Doc.; Purdue University, USA



Department of Computer Engineering

The Computer Engineering Department's vision is to be a national and international leading and innovative computer engineering department in both research and education as well as societal impact dimensions. The department offers comprehensive education and research facilities to meet the ever-increasing demands of today's information and technology driven society. With this motivation, the department provides students a wide range of knowledge, skills and opportunities that will enable them to be successful engineers throughout their careers. In Technopark, start-up companies were also formed by the faculty members of Computer Engineering to commercialize their inventions. Wireless and mobile communication, cloud computing, computer networks, smart grid, wireless sensor networks, artificial intelligence, machine learning, pattern recognition, data mining, bioinformatics and computational biology, computer architecture are amongst the research areas of the department.

- V. Çağrı GÜNGÖR, Ph.D.; Georgia Institute of Technology, USA
- Zafer AYDIN, Ph.D.; Georgia Institute of Technology, USA
- Burcu GÜNGÖR, Ph.D.; Georgia Institute of Technology, USA and Sabancı University, Turkey
- Şükrü KURAN, Ph.D.; Boğaziçi University, Turkey, Post Doc.; Telecom Paris Tech, France
- Gülay YALÇIN, Ph.D.; Universitat Politècnica de Catalunya, Spain
- Kasım TAŞDEMİR, Ph.D.; Queen's University Belfast, UK







Department Of Materials Science And Nanotechnology Engineering

AGU Materials Science and Nanotechnology Engineering Program offers graduate level degree as well as supporting the undergraduate core curriculum with its high ranked faculty members. The department follows multidisciplinary research perspective in materials science and nanotechnology, and to educate tomorrow's problem-solvers in light of increased competitiveness and new global challenges.



- Murat DURANDURDU, Ph.D.; Ohio University, USA, Post Doc.; University of Michigan, USA

- Kevser KAHRAMAN, Ph.D.; Hacettepe University, Turkey

- Erkin AYDIN, Ph.D.; Middle East Technical University, Turkey Post Doc.; Massachusetts Institute of Technology, USA

- İlker ERDEM, Ph.D.; Izmir Institute of Technology, Turkey

- Ali CANLIER, Ph.D.; Tokyo Institute of Technology, Japan, Post Doc.; Korea Advanced Institute of

Science and Technology, Korea

- Hakan USTA, Ph.D.; Northwestern University, USA, Post Doc.; Polyera Corporation, Illinois Science & Technology Park, USA

- Mehmet ŞAHİN, Ph.D.; Selcuk University, Turkey, Post Doc.; University of Sheffield, UK, Post Doc.; Bilkent University, Turkey, Post Doc.; University of Arkansas, USA

- Aysun Cebeci AYDIN, Ph.D.; Middle East Technical University, Turkey, Post Doc.; Massachusetts Institute of Technology, USA



SCHOOL OF LIFE AND NATURAL SCIENCES

■ School of Life and Natural Sciences has the following programs along with their core research topics and the associated faculty members:



Department of Molecular Biology and Genetics

Molecular biology and genetics (MBG) represent key disciplines of modern life sciences aimed at understanding the molecular basis and mechanisms of living organisms under normal and pathological conditions. The Department of Molecular Biology and Genetics uses a spectrum of integrated scientific strategies and modern technologies to address key questions in molecular biology, genetics, cell biology, biochemistry, microbiology and bioinformatics. Our department introduces major topics including genetics, molecular biology, cell biology, development, neurobiology, behavior, evolution, and many others. The mission of our department is to provide excellent training for our students and conduct cutting-edge multidisciplinary research to solve basic and translational questions in life sciences ranging from genetic and developmental diseases, cancer, aging and stem cell research. In addition to that we aim to develop entrepreneurial, creative, and solution-oriented researchers with strong theoretical and practical backgrounds. Our commitment to train the next generation of young scientists is reflected by significant investments in world-class research facilities, modern laboratory space, and the recruitment of international faculty members and experts in their respective fields.

- Yusuf Baran, Ph.D.; Middle East Technical University, Turkey
- Mona El Khatib, Ph.D.; Hannover Medical School, Germany, Post Doc.; Tübingen Medical University, Germany
- Aysun Adan, Ph.D.; Izmir Institute of Technology, Turkey
- Sebiha Çevik Kaplan, Ph.D.; University College Dublin, Ireland





Department of Bioengineering

As the Department of Bioengineering at AGU, we provide an multidisciplinary study that integrates the principles of the life sciences and fundamental engineering in order to create life sciences-based technologies by understanding and modifying biological and medical systems for the broad needs of the society. Our educational program possessing different branches such as biomaterials, tissue engineering and regenerative medicine, nanocarriers and drug delivery, biomedical instrumentation and molecular biology enables to create knowledge and develops approaches that helps the prevention, diagnosis and treatment of diseases, and designs the products that provide the traceability of physiological functions. With the visionary guidance of the faculty members of the Bioengineering Department, we empower our students to become leading practicing bioengineers who apply basic science and engineering approach into the living systems and work for improving the life quality.

- Sevil Dinçer İšođlu, Ph.D.; Hacettepe University, Turkey, Post Doc.; The University of Michigan, USA
- Alper İšođlu, Ph.D.; Hacettepe University, Turkey, Post Doc.; The University of Michigan, USA

Department of Bioinformatics

- Zenmei Ohkubo, Ph.D.; The University of Michigan, USA, Turkey, Post Doc.; University of Illinois at Urbana-Champaign, USA



SCHOOL OF ARCHITECTURE

School of Architecture has the following programs along with their core research topics and the associated faculty members:





Department of Architecture

Research Interests

Architectural Design

Documentation

Conservation, Restoration and Adaptive Re-Use

History of Architecture and Urban Development

Building Biology

Building Physics

Kinetic Architecture



Transportation Planning

Fabrication and Simulation

Urban Policies and Administration

- Arzu Erdem
- Ahmet Erdem TOZOĞLU, Ph.D.; Middle East Technical University, Turkey
- Asutan SARP YALCIN, Ph.D.; Yıldız Technical University, Turkey
- Burak ASILISKENDER, Ph.D.; Istanbul Technical University, Turkey

- Beniamino POLIMENI, Ph.D.; University of Florence, Italy, Post Doc.; Massachusetts Institute of Technology, USA

- Cinzia TAVERNARI, Ph.D.; Sorbonne University of Paris, France, Post Doc.; Massachusetts Institute of Technology (Cambridge), USA

- Asım Mustafa AYTEN, Ph.D.; Ankara University, Turkey

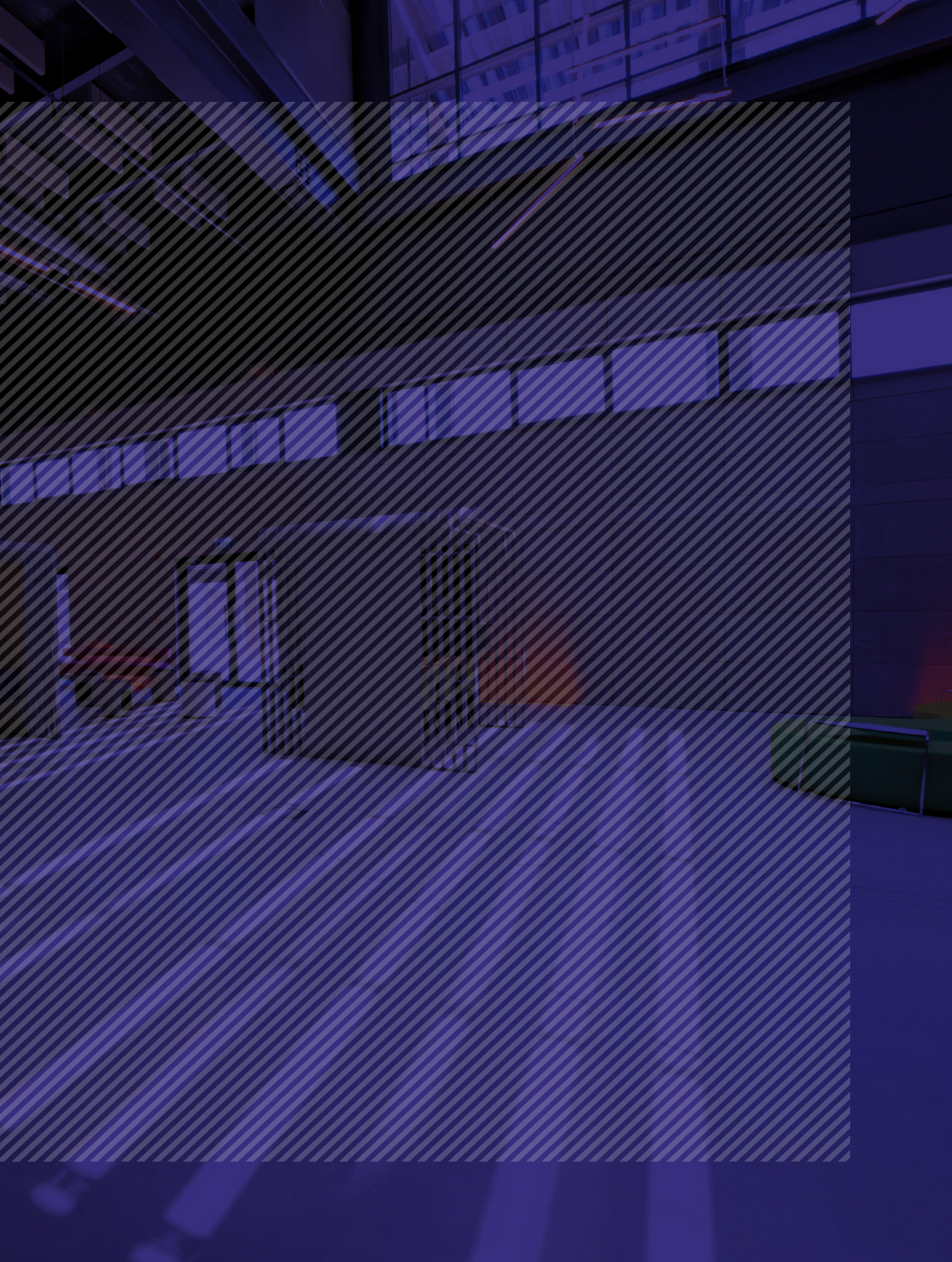
- Nilüfer BATURAYOĞLU YÖNEY, Ph.D.; Istanbul Technical University, Turkey, Post Doc.; Université du Québec à Montréal, Canada

- Valentina BEATINI, Ph.D.; University of Parma, Italy, Post Doc.; Izmir Institute of Technology, Turkey



SCHOOL OF MANAGEMENT SCIENCE

School of Management Science has the following programs along with their core research topics and the associated faculty members:





Department of Business Administration

The mission of the Department of Business Administration at AGU is to provide high quality management and leadership education to a diverse student body and prepare them as ethical and innovative business leaders by means of an active learning and learner centered educational philosophy. The Department aims to educate the leaders of future; equip them with state of the art knowledge and arm them with an entrepreneurial and innovative spirit. Management education is both special and unique in many aspects. Here at AGU we do understand the critical importance and idiosyncratic nature of management



education and research, and do our best to keep our selves and our students competitive in the global arena. Specific research and education focus of the Department concentrates on four critical areas: (1) Innovativeness and Entrepreneurship, (2) SMEs and Institutionalization, (3) Services Management, and (4) Sustainable Development.

- Ali İhsan ÖZDEMİR, Ph.D.; Erciyes University, Turkey, Post Doc.; York University, Canada

- Ebru GENÇ, Ph.D.; Temple University, USA

- Erk HACIHASANOĞLU, Ph.D.; Hacettepe University, Turkey, Post Doc.; Middle East Technical University, Turkey

- Hülya ÇELEBİ, Ph.D.; University of Innsbruck, Austria

- Ömer Faruk GENÇ, Ph.D.; Temple University, USA

Department of Economics

- Eyüp DOĞAN, Ph.D.; Clemson University, USA
- Heiko SCHUSS, Ph.D.; Friedrich-Alexander-University Erlangen-Nuremberg, Germany







SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

■ School of Humanities and Social Sciences has the following programs along with their core research topics and the associated faculty members:





Department of Sociology

Sociology Department at AGÜ aspires to be a well-rounded, dynamic and vibrant community dedicated to preparing and training students, producing cutting edge research, and communicating our scholarship to diverse audiences at AGU, amongst colleagues in our fields, as well as with policy makers and a broader public. As the societies around the world struggle with the complex environmental, economic, political and social issues, sociology as a discipline has much to offer. AGU Sociology Department offers advanced training in sociological theory, research methods (qualitative and quantitative), as well as substantive areas including political sociology, social anthropology, gender studies.

• Dilek CİNDOĞLU, Ph.D.; State University of New York at Buffalo, USA



Department of Political Science and International Relations

Political Science and International Relations Department at AGU aims to prepare graduate and undergraduate students for the many important political questions of contemporary world with conceptually strong, empirically grounded and policy-oriented scholarship. The major inquiry areas that our faculty focuses on war, peace and conflict studies, migration, gender politics and Turkish Politics. We welcome international academic visits and exchanges.

- Derya BÜYÜKTANIR, Ph.D.; Ankara University, Turkey, Post Doc.; Georgetown University, USA
- E. Burak ARIKAN, Ph.D.; Exeter University, UK



GRADUATE SCHOOL OF ENGINEERING AND SCIENCE



Graduate School of Engineering and Science

The AGU Graduate School of Engineering and Science offers 7 graduate (MSc and PhD) degrees in 5 different programs. There are currently around 100 students enrolled in our graduate programs. The graduate education is carried out with an interdisciplinary research focus and curricula in English language, and the student/academic ratio is kept low to promote an effective graduate education. The mission is to produce high quality and internationally recognized research, which forms a strong basis for collaborations with corporations, institutions and industries around the world. The dynamic, high caliber, and internationally renowned graduate school faculty consists of more than 25 faculty members, including the recipients of numerous prestigious national and international academic awards. The main motivation of the faculty is to train highly qualified individuals who are entrepreneurs well integrated with the world, and to convert knowledge into value through a solution seeking research focus on global challenges. The graduate level research studies carried out at AGU focus on converting knowledge into social, economic, and scientific value to contribute to societal development and global issues. Research projects at AGU are funded by EU Framework Programs, TUBITAK, AGU-BAP, and industry. All graduate students are encouraged to participate in funded research projects where they can be supported as full-time research assistants, while internal funded scholarships are available for highly qualified candidates as well.







Advanced Materials and Nanotechnology (MSc)

Materials Science and Mechanical Engineering (PhD)

The purpose of these MSc and PhD Programs at AGU is to inform multidisciplinary research perspectives 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 graduate level training is to motivate students to conduct ground breaking research in these visionary fields covering a wide range of projects from atomic-

level manipulations to micro-scale device fabrications, the main goal of which is to control the structure and properties of materials in an extremely small scale (nanometer).

Head of the Program

Assoc. Prof. Murat Durandurdu,
murat.durandurdu@agu.edu.tr

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



Faculty Members

- Murat DURANDURDU, Ph.D.; Ohio University, USA
- Hakan USTA, Ph.D.; Northwestern University, USA
- Mehmet ŞAHİN, Ph.D.; Selçuk University, Turkey
- Ali CANLIER, Ph.D.; Tokyo Institute of Technology, Japan
- Aysun CEBECİ AYDIN, Ph.D.; Middle East Technical University, Turkey

- Niğmet UZAL, Ph.D.; Middle East Technical University, Turkey
- Burak UZAL, Ph.D.; Middle East Technical University, Turkey
- Erkin AYDIN, Ph.D.; Middle East Technical University, Turkey
- Evren MUTLUGÜN, Ph.D.; Bilkent University, Turkey
- Hümeysra ÇAGLAYAN, Ph.D.; Bilkent University, Turkey
- İlker ERDEM, Ph.D.; Izmir Institute of Technology, Turkey

- Kevser KAHRAMAN, Ph.D.; Hacettepe University, Turkey
- Mehmet Nazım TOMAÇ, Ph.D.; Ohio State University, USA
- Mehmet T. ATAY, Ph.D.; Middle East Technical University, Turkey
- Hatice Sinem ŞAŞ, Ph.D.; University of Delaware, USA

Electrical and Computer Engineering (Ph.D.; MSc)

The Electrical and Computer Engineering Department's MSc and PhD 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 provoke societal benefit.

Head of the Program

Assoc. Prof. Bülent Yılmaz, bulent.yilmaz@agu.edu.tr

Research Areas:

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

Faculty Members

- İrfan ALAN, Ph.D.; University of Wisconsin, USA
- Bülent YILMAZ, Ph.D.; University of Utah, USA
- V. Çağrı GÜNGÖR, Ph.D.; Georgia Institute of Technology, USA
- İsa YILDIRIM, Ph.D.; University of Illinois, USA
- İbrahim T. ÖZDÜR, Ph.D.; University of Central Florida, USA

- Sergey BORISENOK, Ph.D.; St. Petersburg State University, Russia
- Alireza KAZEMIPOUR, Ph.D.; Telecom-Paris Tech, France
- Kutay İÇÖZ, Ph.D.; Purdue University , USA
- Ahmet ÖNEN, Ph.D.; Virginia Tech, USA
- Evren MUTLUGÜN, Ph.D.; Bilkent University, Turkey
- Günyaz ABLAY, Ph.D.; Ohio State University, USA
- Kasım TAŞDEMİR, Ph.D.; Queen's University, US.
- Hümeysra ÇAGLAYAN, Ph.D.; Bilkent University, Turkey
- Şükrü KURAN, Ph.D.; Boğaziçi University, Turkey
- Burcu BAKIR-GÜNGÖR, Ph.D.; Georgia Tech/ Sabancı University, , Turkey
- Dooyoung HAH, Ph.D.; KAIST, Korea
- Zafer AYDIN, Ph.D.; Georgia Tech, USA
- Gülay YALÇIN, Ph.D.; Universitat Politècnica de Catalunya, Spain



Industrial Engineering (Ph.D.; MSc)

Research in the Industrial Engineering MSc and PhD 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, upon which the students have an opportunity to take courses in interdisciplinary research areas, e.g., sustainability, disaster management, and healthcare systems. The department has strong ties with the industry and local authorities and emphasizes collaborations with the industry and government agencies in thesis studies as well as in course projects. The qualified students can participate in student exchange program through the department's Erasmus partnerships.

Head of the Program

Assoc. Prof. İbrahim Akgün, ibrahim.akgun@agu.edu.tr

Research Areas

- Sustainability
- Disaster management

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

Faculty Members

- İhsan SABUNCUOĞLU, Ph.D.; Wichhita State University, USA
- İbrahim AKGÜN, Ph.D.; Bilkent University, Turkey
- Ahmad Reza POURGHADERI, Ph.D.; National University of Singapore, Singapore
- Lale ÖZBAKIR, Ph.D.; Erciyes University, Turkey
- Selçuk GÖREN, Ph.D.; Bilkent University, Turkey
- Muhammed SÜTÇÜ, Ph.D.; University of Illinois Urbana Champaign, USA



vision traps
training
of-box

	Estimate	
Stomach cancer	40%	20
Traffic Accidents	60%	80

Bioengineering (MSc)

Bioengineering M.Sc. program at AGU offers an interdisciplinary research study that basically aims to understand, modify or control biological and medical systems by integrating life sciences and engineering principles. It creates knowledge and develops approaches that helps the prevention, 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 system through laboratory and aims to perform research that helps to elongate human lifetime and improves life quality. A very broad area of study, AGU Bioengineering includes biomaterials, tissue engineering and regenerative medicine, nanocarriers and drug delivery, biomedical instrumentation, bioinformatics, transgenic animals, cancer biology and rare genetic diseases. Students at AGU Bioengineering gain perspective on how to translate scientific knowledge to clinical practice by applying engineering design and principles in order to meet society's needs.

Head of the Program

Assoc. Prof. Sevil Dinçer İšođlu,
sevil.dincer@agu.edu.tr

Research Areas

Biomaterials, tissue engineering and regenerative medicine, nanocarriers and drug delivery, biomedical instrumentation, bioinformatics, molecular modelling, transgenic animals, cancer biology and rare genetic diseases.

Faculty Members

- Yusuf Baran, Ph.D.; Middle East Technical University, Turkey
- Sevil Dinçer İšođlu, Ph.D.; Hacettepe University, Turkey

- Bülent Yılmaz, Ph.D.; The Utah University, USA
- İ.Alper İšođlu, Ph.D.; Hacettepe University, Turkey
- Mona El-Khatib, Ph.D.; Hannover Medical School, Germany
- Aysun Adan, Ph.D.; İzmir Institute of Technology, Turkey
- Sebiha Çevik Kaplan, Ph.D.; University College Dublin, Ireland
- Y. Zenmei Ohkubo, Ph.D.; The University of Michigan, USA
- Kutay İçöz, Ph.D.; Purdue University, USA
- İsa Yıldırım, Ph.D.; The University of Illinois, USA
- Erkin Aydın, Ph.D.; Middle East Technical University, Turkey
- Aysun Cebeci Aydın, Ph.D.; Middle East Technical University, Turkey





Application Requirements and How to Apply

1. Check our Graduate School application requirements from <http://fbe.agu.edu.tr/>
2. Scan the required documents
3. Apply online at <http://sis.agu.edu.tr>

Application Deadlines

- for Spring; January
- for Fall (1st call): May
- for Fall (2nd call): September

AGU prioritizes research and development focused university-industry collaborations.

AGU is a research-oriented university embracing multi-disciplinary research and innovative approaches to meet global challenges and, to date, ranked first among Turkish universities in terms of research performance.

All students at AGU acquire project-based real life experience by working at prominent companies in inter- and transdisciplinary teams, contributing to product and process design.

The faculties are focused on applied and strategic areas in various sectors, such as health, energy, telecommunication, nanotechnology, smart and

sustainable cities, in their interdisciplinary research projects.

Selected University-Industry Collaboration Projects

- Damage inspection and monitoring on buildings and bridges via wireless sensors (Supporting Institutions: TURKCELL and TÜBİTAK – The Scientific and Technological Research Council of Turkey)
- Plasma Technologies - Thrust Engines (Supporting Institutions: TSK – Turkish Armed Forces, MSB – Turkish Ministry of Defense and Roketsan)
- Color Enrichment in Liquid Crystal Displays (Supporting Institutions: Arçelik and TÜBİTAK – The Scientific and Technological Research Council of Turkey)
- 5th generation (5G) Wireless Communication (Supporting Institutions: AVEA and the European Union)
- Power Fraud Detection (supporting Institutions: Alcatel-Lucent and TÜBİTAK – The Scientific and Technological Research Council of Turkey)
- Cyber-attack Detection (Supporting Institutions: TurkNet and TÜBİTAK – The Scientific and Technological Research Council of Turkey)





Research-Development (R&D) and Innovation Office at AGU

At AGU, it is important to transform the results of studies made within the university into economic values by commercializing them and thus making them useful for society. The university uses interfaces such as Techno Park and the Technology Transfer Office (TTO).

While most universities in Turkey attach importance to such steps long after their foundation, AGU instituted the Research-Development and Innovation Office at the time of its establishment. The main aim of this office is to promote the university's Techno Park and TTO services.

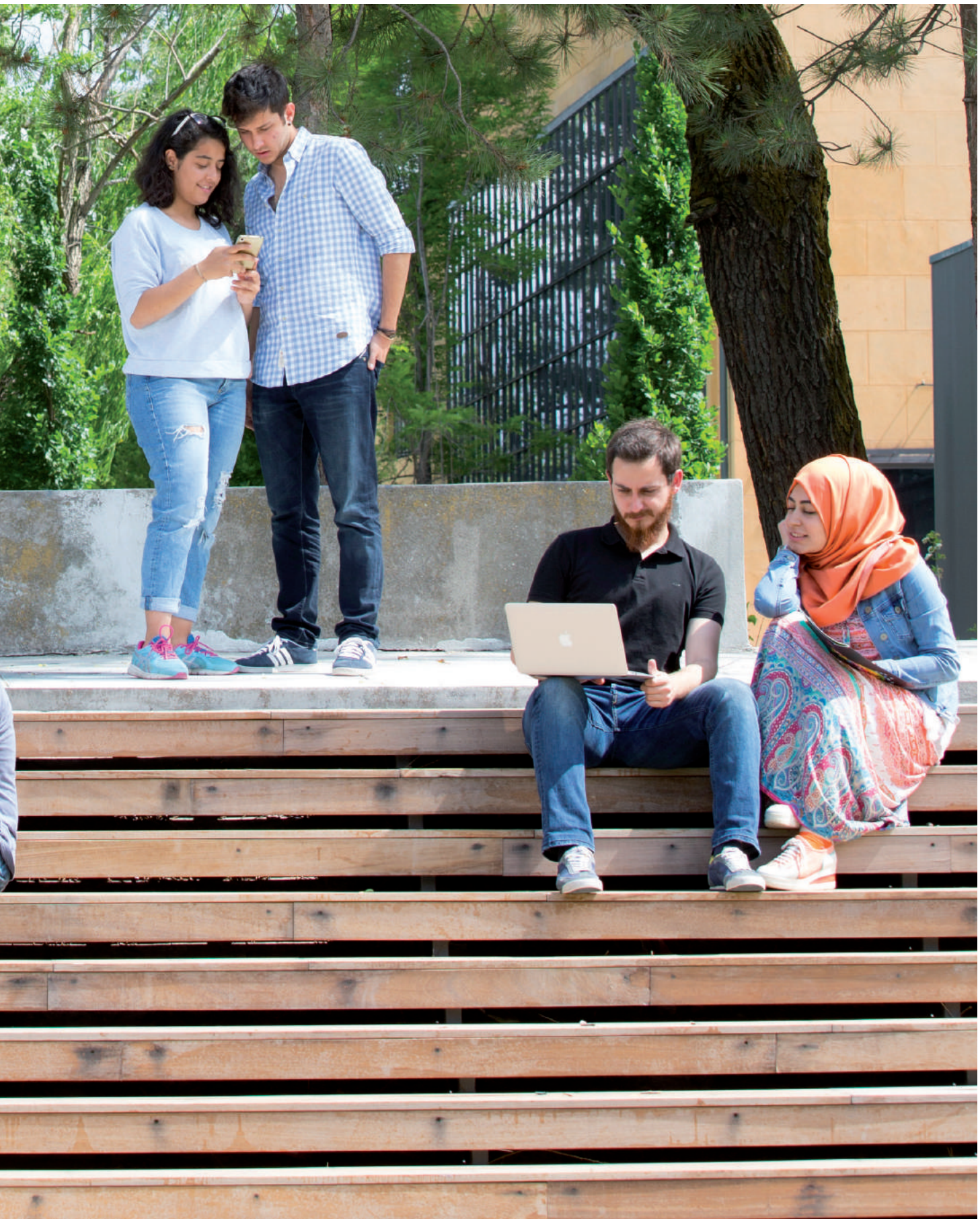
To provide researchers with techno-park services, the university partnered with the existing techno-park in the city. Eight spin-off companies founded and run by AGU faculty carry on their activities.

A national and international program of R&D provides services to researchers to write proposals, find research partners and prepare project applications to get funding. It also organizes information and training sessions for researchers to raise awareness about funds, support programs, intellectual property rights and entrepreneurship. Visits to prominent industrial enterprises in Kayseri and Turkey are carried out to promote collaboration between the faculty and industry partners. In the last two years, more than 100 companies have been contacted and joint projects have been started. With the outstanding efforts of the faculty and R&D and Innovation Office, the university ranked 17th in the 2015 edition of the Entrepreneurial and Innovative Universities Index. This is all the more remarkable as it was the first time AGU made the list, becoming the only state university in the top 20 among 130 universities founded in the last twenty years to do so.

Life at AGU

The AGU campus lies in the heart of the city in a remarkable green space, providing a healthy environment for its residents. The guesthouse for faculty members and short-term visitors, food court, cafés, student dorms and library are all located within walking distance inside the campus. With its fully WIFI accessible campus and smart buildings, AGU provides its faculty and students valuable and enjoyable amenities. AGU also provides its community with opportunities to join sports activities. High quality exercise and training programs help participants acquire sports skills, but also aid their physical, social, emotional and intellectual development. With this aim in mind, AGU provides direct and indirect access to facilities for skiing, snowboarding, ice-skating, horseback riding, tennis, table tennis, modern dance, Turkish folk dancing, orienteering and step/aerobics.







Life at Kayseri

Kayseri is a large and industrialized city in central Anatolia, Turkey. The city is served by Erkilet International Airport. The airport is a short distance from the city center. There are many flights per day to Istanbul, Eurasia's premier transit hub. Since the air transportation industry in Turkey is growing rapidly, new flights from Kayseri to other cities inside and outside Turkey are expected. As the city is located in central Turkey, car and bus transportation are highly efficient. It takes approximately 4 hours to reach Ankara, approximately 4 hours to Mediterranean shores and 45 minutes to Cappadocia. The symbol of the city, Mt Erciyes, a notable ski center in winter and trekker's paradise in summer, is only 30 minutes away from the city center. The transportation within the city relies mainly on buses and personal vehicles. The city also boasts KAYSERAY, a light rail system, as another efficient means of public transit.

Kayseri is also a higher education center that is home to two public and two private universities. The universities in Kayseri employ more than 3000 academicians as well as administrative staff and enroll more than 50,000 students.

Kayseri has the feel of a modern and busy city but also has a historical and natural atmosphere. For an extraordinary evening in Kayseri, there are many things to do. Firstly you can savor delicious regional foods in a high quality restaurant. Then you can have tea or coffee at one of many authentic historical places: Ancient Madrasahs of Hunat, Sahabiye, Avgunlu, Kayseri Neighborhood, Cumhuriyet Square, Ottoman Street. Afterward you can attend one of the shows organized by local art groups. Kayseri Municipality Conservatoire organizes about 300 events each year. Furthermore, you can participate in its night courses, which are in music, theatre, painting and dance. Five movie theaters are another alternative activity for evening or weekend in Kayseri, all located in modern malls that provide familiar options for shopping.

There are many places in and near Kayseri to spend the weekend. Kapuzbaşı Waterfall, Kiranardı City Forest, Gesi Vineyards, Sultan Reed Field Bird Sanctuary, Aladağlar National Park, Beştepeler, and Ali Dağı are great places to have a picnic. If you prefer a more natural picnic, Yamula and Sarımsaklı Dams are suitable for fishing. Cappadocia is the best place to ride a balloon and see its fairy chimneys from the sky.

Life at Kayseri

If you're interested in sports; you can ski Erciyes Mountain. The total length of the tracks at Erciyes Ski Centre is about 12 km long, and there are eight mechanical lifts where you can enjoy the delights of powdery snow and skiing. Ski season runs from November to March at the Erciyes Ski Centre.

Of course sports activities are not limited only for the winter season in Kayseri. At summer, you can go to Mazakaland (which is the greatest Themed Entertainment Park of Anatolia) and have fun ice-skating or water-skiing.

If you want more of watersports in Kayseri, you can go to rafting. Zamantı River is one of the favored rafting spots in Turkey, particularly in its section around the town of Yahyalı, rated 3rd degree in the international scale from 1 to 6.

For those who love extreme sports and want more adrenalin, paragliding would be the best choice. Ali

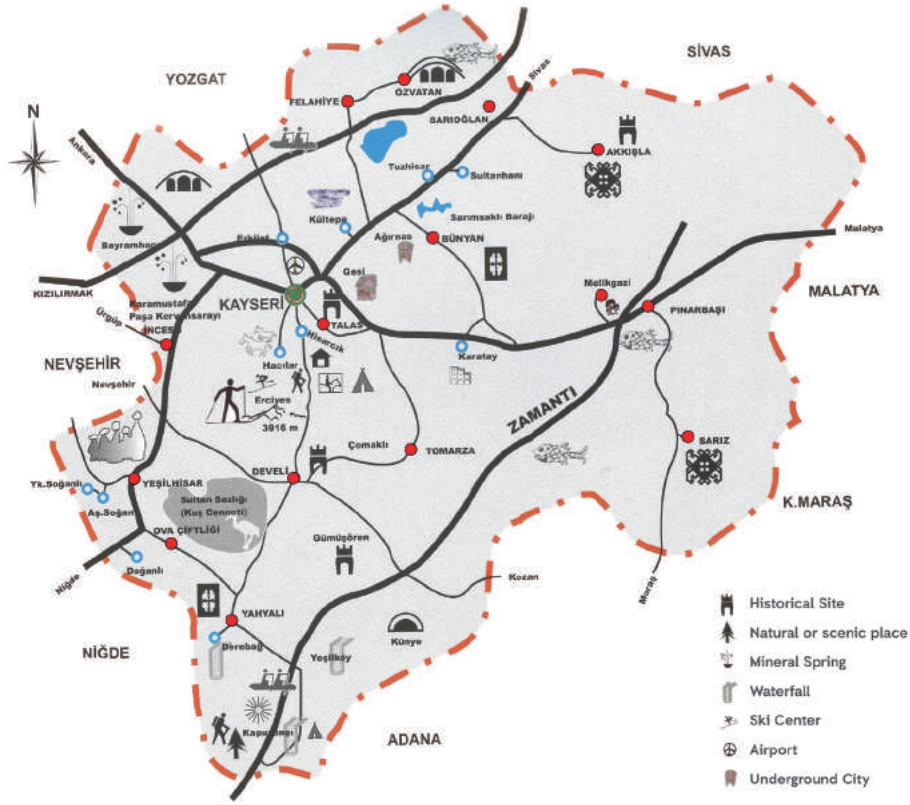
Mountain is one of the most popular paragliding take offs in Turkey. A perfect flying site is regular host to several competitions including World Cup series and dozens of minor paragliding events. The ideal flying season for this mountain is in summer but the place is flyable throughout the year.

As more alternative outdoor activities, you can also consider trekking to Hisarcık, Derevenk Valleys and Lifos Mountain, or you can go to Endürlük for horseback riding. If somebody prefers sports from an audience perspective, he/she can watch the national/international soccer games in Kadir Has Stadium and basketball games in Kadir Has Sports Hall.

Consequently, a qualified societal life is waiting for you in Kayseri, with social, cultural, entertainment, and sporting activities to complement your productive academic life at AGU.



Kayseri Social Life Map



Turkey



Kayseri

Frequently Asked Questions

What are the support areas of Abdullah Gul University Foundation?

Abdullah Gül University Foundation (AGUV) established on 13 July 2011 with the sole purpose of supporting Abdullah Gül University on its path to become a world university, brings together the leaders of Turkish industry and business.

In addition to providing financial support, AGUV is a model of cooperation, focused on mutual vision and mission statements with the university for the achievement of its goals.

The primary support areas of AGUV include,

- Scholarship support of successful students,
- Support for the economic, social and cultural expectations of the faculty members and the administrative staff,
- Developing the educational and technological capacity of the university and enhancing its research infrastructure.

What is the third generation university model at AGU?

AGU, the first State university with an educational foundation in Turkey, is a pioneer of a new generation of universities. AGU defines itself as a state-of-the-art Institution of higher education which, as well as transmitting accepted knowledge, generates new knowledge via innovative education and research to benefit society.

Today the concept of the traditional university is being re-defined. AGU seeks to transform this concept by eliminating the alienation that historically exists among various departments and faculties of the traditional university. This transformation requires multi- and transdisciplinary work that renews the mutual dependency of education and research.

Facts Sheet

- The first State University in Turkey supported by a private philanthropic foundation.
- The forerunner of Third Generation Universities.
- One of the five universities in Turkey teaching 100% in English.
- State-of-the-Art campuses with international architectural awards.
- Sümer Campus: the city campus with a total area of 340,000 m².
- Mimar Sinan Campus: the suburban campus with a total area of 3 million m².
- The highest-ranking University in Turkey founded in the last 10 years.
- Most AGU undergraduate programs are ranked among the top five in Turkey.
- A leading University in Turkey using learner-centered approaches.
- A leading University in Turkey reversing the brain drain.
- Prestigious standing in terms of the number of scientific papers published in international indexed journals and citations per faculty member.
- One of the best-ranked universities according to the Entrepreneurial and Innovative Universities Index in Turkey.
- All faculty members with international academic experience.
- Ratio of faculty to students is 1/6.
- A multicultural campus with over 35 nationalities represented.
- A university library open everyday to everyone.

Academic Departments & Programs



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UNIVERSITY



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