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).

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

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.

Head of the Program: Prof. Yusuf Baran, yusuf.baran@agu.edu.tr

Research Areas

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

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

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.

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
Graduate School of Engineering and Science

AGU Graduate School of Engineering and Science offers 7 graduate degrees in 5 different programs. There are currently around 100 students enrolled in our graduate programs. The graduate education is carried out in English language with the goal of producing high quality and internationally recognized research. The dynamic, high caliber, and internationally renowned graduate school faculty consists of 5 professors, 14 associate professors, and 27 assistant professors, and most of the professors are the recipient 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 convert knowledge into value through a solution seeking research focus on global challenges. The graduate level research studies carried out at the graduate school focus on converting knowledge into social, economic, and scientific value to contribute to societal development and solving global challenges.

Faculty Members

Faculty Portfolios can be downloaded from the following site: http://bit.ly/1l8aLK4

İhsan SABUNCUOGLU, Ph.D., Wichita State University
Çetin ÇETINKAYA, Ph.D., University of Illinois at Urbana Champaign
Bopaya BİDANDA, Ph.D., Penn State University,
Bülent YILMAZ, Ph.D., University of Utah
Hakan USTA, Ph.D., Northwestern University
Zübeýir ÇINKIR, Ph.D., University of Georgia
İsa YİLDİRİM, Ph.D., University of Illinois
Mehmet ŞAHİN, Ph.D., Selçuk University
Sergey BORISENOK, Ph.D., St. Petersburg State University
İlker ERDEM, Ph.D., Izmır Institute of Technology
Erkın AYDIN, Ph.D., Middle East Technical University
Evren MUTLUGÜN, Ph.D., Bilkent University
Günyaz ABLAY, Ph.D., Ohio State University
Hümeýra ÇAGLAYAN, Ph.D., Bilkent University
İlker ERDEM, Ph.D., İzmir Institute of Technology
Kevser KAHRAMAN, Ph.D., Hacettepe University
Şükru KURAN, Ph.D., Boğaziçi University
Mehmet Nazım TOMAÇ, Ph.D., Ohio State University
Kutay İÇÖZ, Ph.D., Purdue University
Ahmad Reza POURGHADERI, Ph.D., National University of Singapore

İrfan ALAN, Ph.D., University of Wisconsin
Erhan KUTANOGLU, Ph.D., Lehigh University
Yusuf BARAN, Ph.D., Middle East Technical University
Murat DURANDURDU, Ph.D., Ohio University
V. Çağrı GÜNGÖR, Ph.D., Georgia Tech
İbrahim AKGÜN, Ph.D., Bilkent University
Murat ÇİTİR, Ph.D., University of Massachusetts Amherts
İbrahim T. ÖZDÜR, Ph.D., University of Central Florida
Sevil DINÇER ISOGLU, Ph.D., Hacettepe University
Lale ÖZBAKIR, Ph.D., Erciyes University
Burak UZAL, Ph.D., Middle East Technical University
Aysegün AKYOL, Ph.D., Bilkent University
Bekir Hakan AKSEBZEÇİ, Ph.D., Erciyes University
Burcu BAKIR-GÜNGÖR, Ph.D., Georgia Tech/Sabancı University
Cihan ÇİFTÇİ, Ph.D., University of Massachusetts Amherts
Dooyoung HAH, Ph.D., KAUST
Aysun Adan, Ph.D., İzmir Institute of Technology
Sabiha Çevik-Kaplan, Ph.D., University College Dublin
Mona El Khatib, Ph.D., Hannover Medical School
Mehmet T. ATAY, Ph.D., Middle East Technical University
Niğmet UZAL, Ph.D., Middle East Technical University
Selçuk GÖREN, Ph.D., Bilkent University
Zafer AYDIN, Ph.D., Georgia Tech
Muhammed SÜTÇÜ, Ph.D., University of Illinois Urbana Champaign
A Third Generation University

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

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 requirements at http://fbe.agu.edu.tr/
- Scan the required documents (full list under sis.agu.edu.tr)
- Apply online at sis.agu.edu.tr

Application deadlines

- for Spring 2016: 14 January 2016
- for Fall 2016 (1st call): 19 May 2016
- for Fall 2016 (2nd call): 1 September 2016

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.