



ISTANBUL
**GELISIM
UNIVERSITY**



INSTITUTE OF GRADUATE STUDIES DEPARTMENT OF AERONAUTICAL ENGINEERING

lisansustu@gelisim.edu.tr



INSTITUTE OF GRADUATE STUDIES AND DIRECTOR'S MESSAGE



Institute of Graduate Studies

Postgraduate education by Istanbul Gelisim University has been available since the 2012 - 2013 academic year, Fall semester. It has continued to be a part of development by increasing both the number of our programs and our academic staff for more than a decade.

Mission of Istanbul Gelisim University Institute of Graduate Studies is to foster proficient, active, creative, ethical and responsible individuals by contributing to the development of modern science and technology; to be an institution based on academic ethics and high quality standards, to support the cooperation among employees and encourage clear and accountable management.

Additionally; vision of Istanbul Gelisim University Institute of Graduate Studies is to become a prestigious institution that constantly develops and provides effective service by using the latest technological improvements national wide and regionally.

INSTITUTE OF GRADUATE STUDIES AND DIRECTOR'S MESSAGE



Director's Message

Istanbul Gelisim University Institutes of Graduate Studies offers you the opportunity to improve yourself with its experienced, professional and distinguished staff. Current Master's and PhD programs of our institute gives our students the ability of thinking analytically and producing effective solutions to problems. Moreover; our university has taken it upon itself to provide international and local collaborations by new graduate programs. You will have the opportunity to highlight your qualities by improving yourself at Istanbul Gelisim University. We will be happy to see you among us.

Prof. Dr. İzzet GÜMÜŞ

Program Purpose



Aeronautical Engineering; It is a department that aims to train engineers in the design, production, testing, research and development, maintenance and repair of aircraft such as aircraft, aircraft engines, helicopters and all kinds of manned and unmanned vehicles navigating in air and space. Aeronautical engineering requires the acquisition of engineering skills in areas such as aerodynamics, flight dynamics and control, propulsion, avionics, materials science and structural analysis. In addition, it is an engineering field with a strong interdisciplinary aspect, which has a close relationship with Electrical, Electronics and Computer Engineering, as well as engineering departments that provide education in the field of mechanics such as Mechanical Engineering, Materials Engineering and Civil Engineering. Considering that the Aircraft and Space sector will continue to develop rapidly and the breakthroughs in our defense industry along with civil and military aviation will grow further, it is necessary to eliminate the shortage of engineers receiving qualified Aeronautical Engineering education and meet the needs of this sector. Department of Aeronautical Engineering; It aims to train aviation engineers who will take an active role in the design and manufacturing of new types of aircraft to be developed and produced by contributing to the technological development of the Turkish aircraft industry, where military and civil aircraft are concentrated, and will enable these engineers to create human resources to carry out research and application studies on aircraft, aircraft and general aviation; They will also be able to provide technical support in the maintenance and repair of military and civil aircraft.

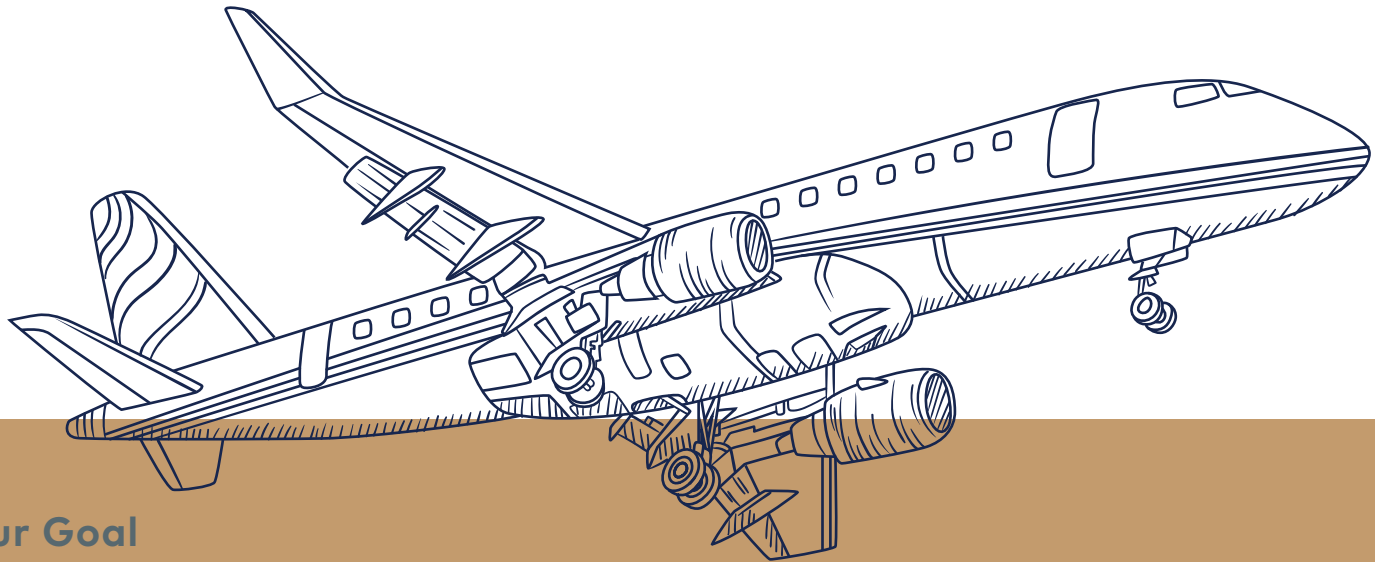


Our Goal

“ The biggest advantage of the students of this department is that aeronautical engineering is a profession that constantly develops depending on the developments in these disciplines, as aircraft technologies incorporate the most advanced technological applications in many engineering fields. With the Department of Aeronautical Engineering;

- Follows and uses the latest technologies in aviation matters,
- Able to apply knowledge in mathematics, science and engineering,
- Able to design and conduct experiments and analyze and interpret the results,
- Able to design a system, a part of a system or a process to meet desired requirements in the face of real limitations such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability,
- Able to work in multidisciplinary teams,
- Able to diagnose, formulate and solve engineering problems,





Our Goal

- Able to understand professional and ethical responsibilities,
- Able to communicate effectively,
- Have the broad education necessary to understand the impacts of engineering solutions in a global, economic, environmental and social context,
- Aware of the necessity of lifelong education and how to implement it,
- Follows and is knowledgeable about current issues related to his profession,
- To train Aeronautical Engineers who can use the techniques, skills and modern engineering tools required for engineering applications.

“Achievements

- To be highly specialized engineers in one of the fields of aerothermodynamics, aircraft structures and materials, flight control and dynamics or flight mechanics and control, in line with career goals and inclinations.
- To be able to achieve original results that can contribute to developments in the field of Aeronautical Engineering by developing a new idea, method, design and/or application.
- To be equipped with the necessary technical and academic infrastructure to use the most advanced theoretical and computational research methods used in research in the field of Aeronautical Engineering.
- Able to communicate effectively, lead, develop strategies, policies and implementation plans, develop new ideas and methods, focus on lifelong learning, adopt professional and ethical behavior and contribute to society by producing solutions to social, scientific, cultural and ethical problems. To grow up as highly specialized individuals





Career Opportunities

Aeronautical Engineering graduates; It can be employed in a wide range of fields, from the defense, aircraft and space industries to the automotive industry. Türkiye has been taking important steps in the aviation and defense industry in recent years. For this reason, the need for trained personnel in the sector is increasing. Aeronautical Engineers are employed extensively in the following fields, especially as production, design, R&D and maintenance engineers.

- Aviation and space related units of defense industry companies.
- Aircraft maintenance industry.
- Turkish Armed Forces aircraft/helicopter maintenance units.
- R&D companies, especially those in the aviation and space sector.
- Airlines operation/management.
- Automotive, machinery, energy sectors.

Those who want to do a master's degree or a doctorate can find many alternatives both in our country and abroad. They may have the chance to become one of the most sought-after academicians in their field in the world by specializing in one of the specified topics in their research fields.



Program Outputs

- Based on postgraduate qualifications, being able to develop and deepen current and advanced knowledge in Aeronautical Engineering at the level of expertise with original thought and/or research and reach original definitions that will bring innovation to the field.
- Ability to evaluate and use new information in Aeronautical Engineering with a systematic approach; By understanding the interdisciplinary interaction that Aeronautical Engineering is related to; Ability to critically analyze, synthesize and evaluate new and complex ideas and reach original conclusions.
- Being able to develop a new idea, method, design and/or application that brings innovation to Aeronautical Engineering or applying a known idea, method, design and/or application to a different field.
- To have gained high-level skills in using theoretical, numerical and experimental research methods in studies related to Aeronautical Engineering.
- Being able to research, comprehend, design, adapt and apply an original subject; and be able to contribute to progress in the field by independently carrying out this original work.
- Ability to communicate and discuss written, verbal and visual at an advanced level by using a foreign language at least at the European Language Portfolio C1 General Level.



Program Outputs

- To be able to expand the boundaries of knowledge in the field by publishing at least one scientific article on Aeronautical Engineering in national and international peer-reviewed journals or by producing or interpreting an original work; Ability to defend original views when discussing issues in the field with experts in international platforms and to establish effective communication that demonstrates competence in the field.

- Ability to lead in environments that require solving unique and interdisciplinary problems; Ability to develop new ideas and methods related to the field by using high-level mental processes such as creative and critical thinking, problem solving and decision making; Being able to critically examine social relations and the norms that guide these relations, develop them and manage actions to change them when necessary; Ability to establish functional interaction using strategic decision-making processes in solving problems encountered in Aeronautical Engineering.

- To be able to contribute to the process of the society in which one lives in becoming and sustaining an information society by introducing scientific, technological, social or cultural advances in Aeronautical Engineering; Ability to contribute to the solution of social, scientific, cultural and ethical problems encountered in matters related to Aeronautical Engineering and to support the development of these values.



CURRICULUM

Master's Degree (With Thesis) Program

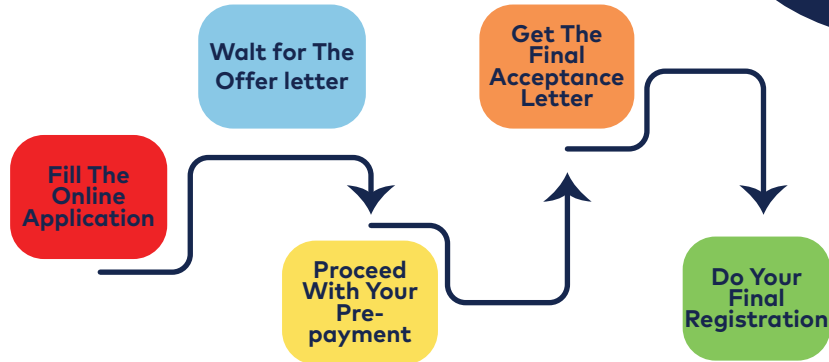
Kod	Course name	T	U	L	K	AKTS
LEE591	SCIENTIFIC RESEARCH TECHNIQUES AND PUBLICATION ETHICS	3	0	0	3	6
UMEY511	APPLIED NONLINEAR CONTROL	3	0	0	3	6
UMEY513	ADVANCED CONTROL SYSTEMS	3	0	0	3	6
UMEY515	UNMANNED AERIAL VEHICLE DESIGN	3	0	0	3	6
UMEY517	VISCOUS FLOW	3	0	0	3	6
UMEY519	NUMERICAL METHODS IN ENGINEERING	3	0	0	3	6
UMEY521	ENGINEERING MATHEMATICS	3	0	0	3	6
ESS504	INTRODUCTION TO THESIS AND SEMINAR	0	0	0	0	18
SBE501	TEZ-I	0	0	0	0	30
SBE511	TEZ-II	0	0	0	0	30

Master's Degree (Non-Thesis) Program

Code	Course name	T	U	L	K	AKTS
LEE591	SCIENTIFIC RESEARCH TECHNIQUES AND PUBLICATION ETHICS	3	0	0	3	6
UMEY511	APPLIED NONLINEAR CONTROL	3	0	0	3	6
UMEY513	ADVANCED CONTROL SYSTEMS	3	0	0	3	6
UMEY515	UNMANNED AERIAL VEHICLE DESIGN	3	0	0	3	6
UMEY517	VISCOUS FLOW	3	0	0	3	6
UMEY519	NUMERICAL METHODS IN ENGINEERING	3	0	0	3	6
UMEY521	ENGINEERING MATHEMATICS	3	0	0	3	6
LEE500	TERM PROJECT	0	0	0	0	2

APPLICATION AND REGISTRATION

Application Process



(<https://onkayit.gelisim.edu.tr/>)

International student admissions at our university are carried out by the International Student Office (<https://international.gelisim.edu.tr/en/administrative-homepage>). Before starting the application process, please make sure that you have prepared an electronic copy of the following documents in PDF format:



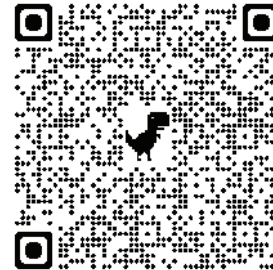
For Postgraduate Applications

- Copy of your passport (personal information page)
- Photocopy of undergraduate diploma (if you are in the last year of undergraduate, an official letter from the administration stating your status)
- Official transcript of the license.
- Maximum 1-page motivation letter (Not Compulsory)

Students who will apply for a PhD program must upload both their undergraduate and graduate documents to the system.

For Postgraduate Final Registration

To check the required documents for the final registration please scan:



The steps for international students to apply to IGU Institute of Graduate Studies

- Fill out the application form at (https://onkayit.gelisim.edu.tr/On_Kayit_Yabanci_Uyruk.aspx) and follow your application process with your passport/application number through the tracking system.
- Your conditional acceptance letter will be uploaded to the student tracking system by Istanbul Gelisim University International Student Office within 2-5 working days.
- Make the deposit of the amount specified in your conditional acceptance letter and upload the receipt to the system from the "Upload Receipt" tab in the tracking system.
- Within 5-10 business days, payment approval will be given from the Finance Department of Istanbul Gelisim University and your acceptance and visa letters will be uploaded to the same system by the International Student Office.
- Apply for a study visa at the T.C. Consulate / Embassy in your country.
- Enter Turkey with your study visa, visit the Student Affairs office in the Rectorate Building of Istanbul Gelisim University with the necessary documents for final registration and complete your registration and visit the International Student Office to apply for health insurance and residence permit.
- Take the Language Proficiency Exam.
- Check your course schedules from your OBIS System.



ACADEMIC STAFF



PROGRAM HEAD
PROF. DR.
AHMET CİHAT BAYTAŞ



PROF. DR.
ABDURRAHMAN HACIOĞLU



PROF. DR.
ALİ KODAL



PROF. DR.
BAHRİ ŞAHİN



PROF. DR.
MAHMUT ADİL YÜKSELEN



PROF. DR.
NECMETTİN MARAŞLI

ACADEMIC STAFF



**PROF. DR.
OKTAY ÖZCAN**



**PROF. DR.
OSMAN ERGÜVEN VATANDAŞ**



**ASSISTANT PROFESSOR
HADİ ERCAN**



**ASSISTANT PROFESSOR
MELTEM UZUN**



**ASSISTANT PROFESSOR
MURAT METEHAN
TÜRKÖĞLÜ**



**ASSISTANT PROFESSOR
SEVGİHAN YILDIZ BİRCAN**

ACADEMIC STAFF



RESEARCH ASSISTANT
HÜSEYİN FURKAN ÇELİK



RESEARCH ASSISTANT
MUSTAFA CEM AVCI



RESEARCH ASSISTANT
ÖZLEM YALÇIN



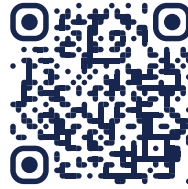






ISTANBUL
GELISIM
UNIVERSITY

INSTITUTE OF GRADUATE STUDIES DEPARTMENT OF AERONAUTICAL ENGINEERING



Address: Cihangir Mah. Şehit Jandarma
Komando Er Hakan Öner Sk. No:1
Avcılar/İstanbul
Phone: 0212 422 70 00
Fax: 0212 422 74 01
Email: Lisansustu@gelisim.edu.tr

lisansustu.gelisim.edu.tr

www.gelisim.edu.tr/en

 | [igugelisim](https://www.instagram.com/igugelisim)  | [gelisimedu](https://www.facebook.com/gelisimedu)