



ISTANBUL  
**GELISIM**  
**UNIVERSITY**

APRIL 2026



ISTANBUL  
**GELİŞİM** **ÜNİVERSİTESİ**

# FACULTY OF APPLIED SCIENCES MONTHLY E-BULLETIN

*Applied Science in Gelişim, For a Change In Your Life*

[www.gelisim.edu.tr](http://www.gelisim.edu.tr)

0 212 422 70 00



/iguubf



ISTANBUL  
**GELISIM**  
**UNIVERSITY**

# Happy National Sovereignty and Children's Day on April 23



## NEWS FROM IGU

# Istanbul Gelisim University Achieves Great Success in YÖK Accessible University Awards: Blue Flag Nomination

Istanbul Gelisim University has achieved another significant success with its work in the field of accessibility and inclusion in higher education. In accordance with the decision of the Higher Education Executive Board dated December 24, 2025, it has been nominated for the Blue Flag in the "Accessibility in Socio-Cultural Activities" category within the scope of the Accessible University Awards 2025.

The Faculty of Applied Sciences of Istanbul Gelisim University became a Blue Flag candidate due to the arrangements it made in the "Accessibility in Socio-Cultural Activities" category within the scope of the Higher Education Council's Accessible University Flags Program. These efforts to increase accessibility in socio-cultural activities once again showcase the university's inclusive education approach.

The Accessible University Flags Program, conducted by the Higher Education Council, aims to increase the access of disabled individuals studying in higher education institutions to spatial, educational, and socio-cultural areas, to raise awareness in this field, and to strengthen inter-institutional cooperation. As a result of the evaluations conducted within this scope, Istanbul Gelisim University's application was approved and it was crowned with the Blue Flag candidacy. Istanbul Gelisim University continues to provide equal opportunities for all students and to implement noteworthy practices in higher education through its efforts to create an accessible and inclusive campus life.



## NEWS FROM FoAS

### Research Assistant Dr. Nuran Akdağ Participates as a Researcher in The European Scientific Collaboration Project (EUSCP)!

"Accessibility in Socio-Cultural Activities" category within the scope of the Higher Education Council's Accessible University Flags Program. These efforts to increase accessibility in socio-cultural activities once again showcase the university's inclusive education approach. The Accessible University Flags Program, conducted by the Higher Education Council, aims to increase the access of disabled individuals studying in higher education institutions to spatial, educational, and socio-cultural areas, to raise awareness in this field, and to strengthen inter-institutional cooperation.

As a result of the evaluations conducted within this scope, Istanbul Gelisim University's application was approved and it was crowned with the Blue Flag candidacy. Istanbul Gelisim University continues to provide equal opportunities for all students and to implement noteworthy practices in higher education through its efforts to create an accessible and inclusive campus life.



## NEWS FROM FoAS

# Istanbul Gelişim University Faculty of Applied Sciences (UBF) Environment Commission and Avcılar Municipality Hold Environmental-Focused Cooperation Meeting

The Environment Commission of Istanbul Gelişim University Faculty of Applied Sciences (FAS) met with Avcılar Municipality, with whom they have previously collaborated on various events, as part of their new collaborative efforts. During the meeting, details regarding the planned environmental event in May were discussed, and evaluations were made on the program content, application areas, and jointly conducted activities. The aim was to strengthen the ongoing inter-institutional cooperation with new projects.

The meeting also included an exchange of ideas on environmental awareness activities in which students can actively participate, practices supporting sustainable living awareness, and projects that will increase social sensitivity. The event planned for May is expected to be an important step in increasing environmental awareness and transforming university-local government cooperation into tangible results.



## ACADEMIC ARTICLES

### *The Article Titled “Will Technological Developments Disrupt Income Distribution in the Near Future?” Published in the ESCI-Indexed Journal Socioeconomics*

The article, co-authored by Research Assistant Dr. Nuran AKDAĞ from the Aircraft Maintenance and Repair Department and researchers from various international universities, was published in the January 2026 issue of the Journal of Socioeconomics.

**Access Link:** DOI: 10.17233/sosyoekonomi.2026.01.16

<https://dergipark.org.tr/en/pub/sosyoekonomi/article/163566>

**Sosyoekonomi**

2026, Vol. 34(67), 377-401

RESEARCH  
ARTICLE

ISSN: 1305-5577  
DOI: 10.17233/sosyoekonomi.2026.01.16  
Date Submitted: 07.02.2025  
Date Revised: 13.08.2025  
Date Accepted: 05.01.2026

#### **Will Technological Developments Disrupt Income Distribution in the Near Future?**

*Fırat Cem DOĞAN* (<https://orcid.org/0000-0002-2398-1484>), *Hasan Kalyoncu University, Türkiye;*  
[fcem.dogan@hku.edu.tr](mailto:fcem.dogan@hku.edu.tr)

*Nuran AKDAĞ* (<https://orcid.org/0000-0002-9204-5606>), *Istanbul Gelişim University, Türkiye;*  
[nakdag@gelisim.edu.tr](mailto:nakdag@gelisim.edu.tr)

#### **Teknolojik Gelişmeler, Yakın Gelecekte Gelir Dağılımını Bozacak Mı?**

##### **Abstract**

This study analyses the relationship between human factors, technological advancements, global shifts, labour structure, and income inequality across 21 selected upper-middle-income and high-income countries from 2008 to 2021. The study utilises variables such as high-tech exports, the human capital index, the misery index, the share of R&D expenditures in GDP, skilled and unskilled labour, patent counts, and the Global Innovation Index. The results from the one- and two-step GMM methods indicate that skilled and unskilled labour and the human capital index have significant positive effects on income distribution. In contrast, the misery index, high-tech exports, and patent counts are found to exacerbate income inequality. However, the global innovation index does not exhibit a significant effect in either analysis.

**Keywords** : Technological Development, Income Distribution, Gini, Skilled Workforce, Misery Index.

**JEL Classification Codes** : B22, E24, C40.

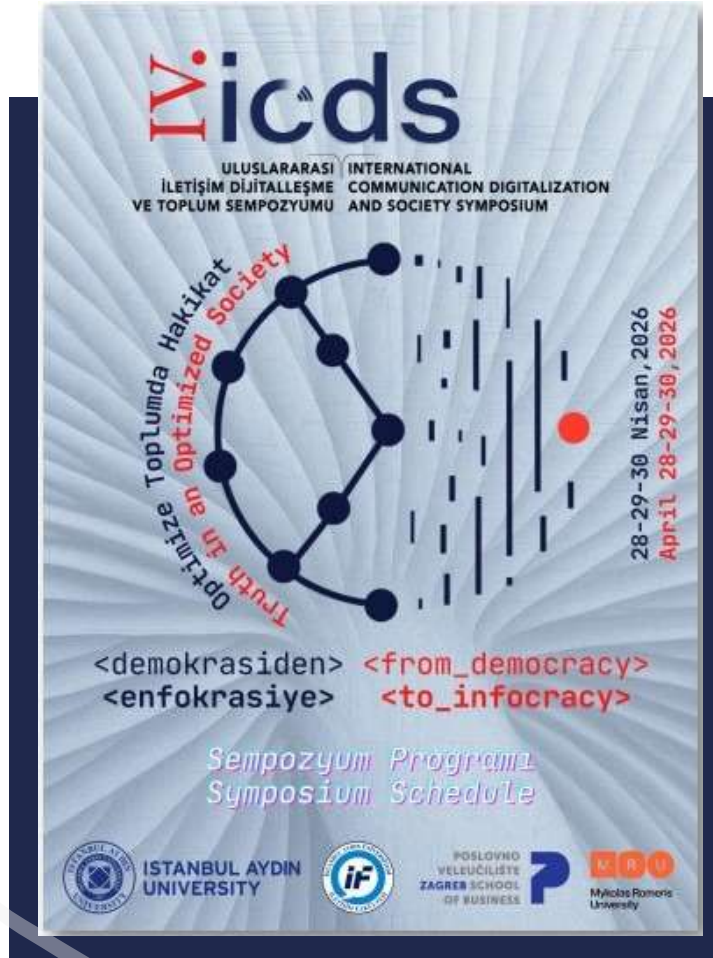


## CONGRESSES

### *Asst. Prof. Hande Ulusoy Participated in the 4th International Symposium on Communication, Digitalization and Society*

Asst. Prof. Hande Ulusoy, from the Television Journalism and Programming Department, participated in the 4th International Symposium on Communication, Digitalization and Society on April 30, 2026, with her study titled "Same Space, Same Time, Different Agendas: Algorithmic Threshold Guarding in Google News".

**Access Link:** <https://icds.aydin.edu.tr/sempozyum-programi/>



## CONGRESSES

### *Academic Contribution on the International Stage: Important Presentation on 21st Century Skills in Madrid*

Dr. Banu Kayınova, Head of the Department of Information Systems and Technologies at Istanbul Gelişim University, participated in the 10th International Congress on Modern Scientific Research held in Madrid from April 18-25, 2026, sharing her academic work with the international scientific community. Her research, titled "Development of a 21st Century Skills Scale for Generation Alpha Students," examines a scale developed to measure 21st-century skills in Generation Alpha students and offers significant contributions to the fields of educational sciences and information technology. The congress, bringing together international academics, served as an important platform for scientific collaborations and knowledge sharing. This participation strengthens Istanbul Gelişim University's internationalization vision and reflects the institution's research-oriented and innovative academic approach.



## CONGRESSES

### *Asst. Prof. Cihan Emre Tanç Participated in the 4th International Symposium on Communication, Digitalization and Society*

Asst. Prof. Cihan Emre Tanç, from the Television Journalism and Programming Department, participated in the 4th International Symposium on Communication, Digitalization and Society on April 28, 2026, with his study titled "The Impact of Algorithmic Recommendation Systems on Cultural Diversity"

**Access Link:** <https://icds.aydin.edu.tr/sempozyum-programi/>



## EVENTS

### A Technical Visit to Ayjet Flight School Organized by the Aviation Management Department!

Our technical visit to Ayjet Flight School, operating within Hezarfen Airport, was successfully completed on March 30th.

We extend our respects and gratitude to our Head of Aviation Management Department, Prof. Dr. Sezen Cihan Kesken, and our Vice Head of Department, Asst. Prof. Mehmet Emin Keke, for their contributions and support during this program.

We also thank the Ayjet team for their valuable information and experience regarding pilot training processes in the aviation sector, which significantly contributes to the professional development of our students, and wish them continued success in their work.



## EVENTS

# Live from the USA: Journalism Interview with White House Reporters Held!

On April 7, 2026, at the Television Journalism and Programming Department of Istanbul Gelisim University's Faculty of Applied Sciences, journalists working in the United States participated in a live video link, connecting with students on the "Digital Journalism in the USA: Experiences from the Field" event. Reporters connecting from the White House shared valuable insights into journalistic practices, news production processes, and field experiences in the US.

Anil Sural (Ekotürk TV) and Rona Doğan (Haberler.com), representatives from various newspapers in the US, participated as speakers. Participants offered comprehensive assessments, particularly on the dynamics of White House reporting, the workings of press conferences, and the challenges encountered in international journalism.



## EVENTS

# Environmental Awareness Project: “Nature Is Not Disposable!”

Students from the Public Relations and Advertising Department of the Faculty of Applied Sciences at Istanbul Gelişim University, in collaboration with the ÇEVKO Foundation, organized various events throughout the campus as part of their “Nature Is Not Disposable!” project to draw attention to the harm that single-use plastics cause to the environment. The project, aiming to increase awareness of sustainable living, was planned by Silanur Şahin, Rümeyşa Başar, Tayyip Göksal, Sude Çakır, Şevval Sena Uğurlu, and Yunus Emre Baysal, under the coordination of Assoc. Prof. Emel Tozlu Öztay. 84 people participated in the research conducted as part of the project, and the results revealed that students are environmentally conscious, but this awareness is not always reflected in their behavior.

In this context, at the “Plastic Exchange Point” established on campus, students handed over the plastic waste they collected and received seed-embedded pencils. Following this, in a workshop, cloth bags were designed using recycled materials. In the seminar part of the project, Fatih Arslan, Senior Project Specialist at the ÇEVKO Foundation, provided information on the effects of single-use plastics and sustainable consumption habits.



## NEWS FROM OUR ALUMNI

**Hello,  
I am İrem BULDUM,**

I graduated from Istanbul Gelişim University's Aircraft Maintenance and Repair department, where I successfully completed my 4-year education, which I started in September 2020. Throughout my university life, in addition to the comprehensive theoretical education I received, I had the opportunity to get to know the dynamics of the aviation sector closely, especially thanks to the practical courses. This process was my biggest source of motivation in shaping my professional vision and becoming a technician ready for the sector.



One of the most valuable aspects of my university for me was the guidance provided by the academic staff and their strong ties with the sector. With the support of our professors, I gained not only technical knowledge but also a safety culture and a sense of professional responsibility. Thanks to the opportunities and guidance offered by my school, I had the chance to do an internship at Be Aero, one of the important players in the sector, in my final year.

My internship period was a turning point in my career. In this process, which I started while still a student, I had the chance to put the theoretical knowledge I learned at school into practice in the hangar. Thanks to my determination and the strong foundation provided by my university, I received a job offer from the company at the end of my internship. Thanks to this, in the second semester of my final year, I was able to both continue my education and embark on a professional career, balancing education and work life.

Currently, I proudly continue my duties as an aircraft maintenance technician at Be Aero, located at Atatürk Airport. The four years I spent at Istanbul Gelişim University provided me not only with a diploma, but also with discipline, a thirst for continuous learning, and the path to the career I dreamed of. I would like to express my gratitude to all my professors, especially Professor Mehmet ATEŞ, and to my university for their contributions to this journey.

## GUEST WRITER

# In Search of Invisible Vortices: Vortex Flows in Engineering

That little dimple that forms on the surface when you stir a cup of coffee, the swirling water behind the pier of a river bridge, or the thin trails of air gliding from the tip of an airplane wing... They are all different facets of the same physical phenomenon: vortex. Vortex flows, perhaps one of the most elegant, yet also one of the most persistent concepts in fluid mechanics, are a phenomenon that engineers have tried to both utilize and manage for centuries.



Research Assistant Orhan Hizalan

### What Is a Vortex, and How Does It Form?

In its simplest definition, a vortex is the rotational motion of fluid particles around a common axis. In fluid mechanics, the intensity of this rotation is measured by the vortex vector, which is defined as the curl of the velocity field. A vortex being non-zero in a flow field indicates that the fluid elements there are not only displacing but also rotating around themselves.

Vortices generally arise through three basic mechanisms: boundary layer separation developing on a solid surface, shear between fluid layers moving at different speeds, and abrupt changes in pressure gradients. As the Reynolds number increases, a seemingly regular flow first becomes unstable, then transitions into a turbulent regime where multi-scale vortex structures intertwine. This is often where engineering truly focuses.

### Its Place and Importance in Engineering

Understanding vortex flows is often a design criterion for engineers, and sometimes a matter of survival. In aerospace engineering, aircraft wingtip vortices are both the primary source of induced drag and persist for minutes behind large passenger aircraft, directly affecting runway traffic. Delta-winged fighter jets, on the other hand, generate lift thanks to the low-pressure zones of controlled vortices formed on the upper surface of the wing at high angles of attack; in other words, here the vortex is a sought-after phenomenon, not an avoided one.

## GUEST WRITER

In the energy sector, vortices formed at the blade tips of wind turbines lead to both efficiency losses and noise, while the vortex trails left behind by the front rows of turbines in turbine areas significantly reduce the production of the back rows. In civil engineering, the periodic vortex shedding around high-rise buildings and bridges has been a critical design parameter in terms of vibration fatigue since the famous Tacoma Narrows Bridge collapse in 1940. In mechanical engineering, cavitation vortices in pumps and turbine blades are the main culprits of wear; on the other hand, horizontal and vertical vortices created inside the cylinders of internal combustion engines directly determine the homogeneity of the fuel-air mixture and therefore the combustion efficiency.

In some of these examples, we try to get rid of the vortex; in others, we want to produce, direct, and tame it. Cyclone separators, static mixers, and vortex flow meters are classic representatives of this second group.

### **Making the Invisible Visible**

Vortices are the fundamental language of how nature organizes fluids. Engineers sometimes try to silence this language, and sometimes to make it speak louder. Quieter planes, more efficient wind farms, safer bridges, and cleaner-burning engines; all depend on how well these invisible vortices are understood. For the engineers of the future, turbulent flows are not just a subject for a course, but a gateway to a multidisciplinary research field; and this gateway is opened by the dance of tiny particles illuminated by a laser beam.

Orhan Hizalan is about to complete his undergraduate education in Aeronautical Engineering at Necmettin Erbakan University in 2023 and his graduate education in Aeronautical Engineering at Istanbul Technical University. Continuing his academic activities as a research assistant at Istanbul Technical University, Hizalan is working experimentally on turbulent flow in the ITU Trisonics laboratory

## CULTURE, ART & LITERATURE

### CULTURE, ARTS EVENTS AND LITERATURE

MAY 2026



#### Theatre - 9/8 Apocalypse

- **Date:** May 9, 2026
- **Location:** Sahne Pulchérie
- The first days of the climate crisis! We are in Istanbul! A great rebellion accompanying growing hunger and famine! A conservative movement turning the crisis into an opportunity: Izan! A mysterious girl who changes the whole story of Diyar: Leyla!
- [Tickets and Details](#)



#### Exhibition - On the Edge of the Water: The Life and Art of Halil Pasha

- **Date:** until August 23, 2026
- **Location:** Pera Museum
- Exhibition of the life and works of Halil Pasha, an important painter of the Ottoman-Republic period. (Event: Exhibition tour organized on May 14th)
- [Tickets and Details](#)



#### Opera - Lucia di Lammermoor (Donizetti)

- **Date:** May 21, 23, 30, 2026
- **Venue:** AKM Türk Telekom Opera Hall
- As part of the 17th Istanbul Opera & Ballet Festival, Donizetti's opera will be presented to the audience. The performance, with a libretto from Will Scott's novel, is famous for its dramatic "madness scene" with a female soloist.
- [Tickets and Details](#)



#### Istanbul Libraries - Rami Library

- **Opening Hours:** Open 24/7
- **Location:** Eyüpsultan/Istanbul
- Rami, the first library in Turkey to have the "Biosphere Sustainable Museum Certificate," stands out with its green spaces, energy-efficient infrastructure, and environmentally friendly restoration techniques.
- [Details](#)

## ERASMUS +

### *Erasmus Experience at Viseu Polytechnic Institute in Portugal*

My time in Viseu, Portugal, as part of the Erasmus educational mobility program, was a highly enriching experience both professionally and personally. During this period, I not only observed academic collaborations but also had the opportunity to get to know Portugal's economic structure, educational philosophy, and city life more closely.

The meetings and trainings held at the University's International Office demonstrated how systematically European higher education institutions approach internationalization processes. The planning of student and academic mobility, the sustainability of inter-institutional collaborations, and the professional management of these processes were particularly noteworthy.

The meetings we had with academics from different departments revealed how strongly the relationship between the business world and education is established. Discussions on student internships, post-graduation employment opportunities, and the shaping of educational programs according to sector needs were very productive. In this regard, the emphasis on practice-based education in Portugal ensures that students are better prepared for working life.

In our conversations about the Turkish and Portuguese economies, we had the opportunity to evaluate the similarities and differences between the two countries. Employment opportunities, youth participation in the workforce, and economic sustainability were particularly highlighted. Portugal's efforts to establish a more balanced and planned economic structure were noteworthy, and this approach was clearly reflected in its education system.

The city of Viseu stands out with its calm, orderly, and livable structure. Although smaller in scale compared to large metropolises, it gives the impression of being a city with developed infrastructure, clean, and safe. The pace of life in the city is more balanced, and the stress level is quite low. In addition, the abundance of green spaces and the orderly city planning are among the important factors that increase the quality of life.



## ERASMUS +

Another important point that caught my attention was the widespread use of electric vehicles in the city. This shows that Portugal has adopted environmentally friendly policies and attaches importance to sustainable transportation solutions. Overall, the fact that the cost of living is more affordable compared to other European Union countries also makes the country attractive for both students and workers.

My observations outside the academic program also made this experience more meaningful. The Money Museum I visited was quite impressive in terms of understanding Portugal's economic history and how it managed its financial system. The country seems focused on using its economic resources in a more controlled and sustainable way. This approach is not limited to the economy; it is also integrated with the preservation of cultural heritage.

Portugal's rich cultural structure progresses in harmony with its economic activities. The preservation of historical fabric, its support through tourism, and the conscious management of this process strengthen the country's understanding of sustainable development. This shows that economic growth should be considered not only in terms of numerical data but also in conjunction with cultural values.

Overall, this experience provided an opportunity to observe the education system and economic approach of a different country firsthand. It also contributed to developing new perspectives by making comparisons with my own country. I realized once again that the Erasmus process is not only an academic mobility but also a multifaceted learning experience.

**Dr. Research Assistant Nuran Akdağ**



## NEWS FROM SECTOR

### **E-commerce in the Age of Artificial Intelligence**

Speaking at The TECH Summit, organized in collaboration with Marketing Türkiye and Deloitte, Trendyol Data Science Leader Nezir Alp described Trendyol's 9-year artificial intelligence ecosystem. Stating that every click and screen scroll in the customer, seller, and operations triangle transforms into a massive behavioral data set, Alp emphasized that they do not use artificial intelligence merely as a technology trend.

**Access Link:**

<https://www.marketingturkiye.com.tr/haberler/yapay-zeka-caginda-e-ticaret/>

### **The New Route of Shopping: Artificial Intelligence**

ConsumerWise research shows that artificial intelligence tools are now being used in purchasing decisions rather than traditional search engines.

**Access Link:**

<https://www.pazarlamasyon.com/alisverisin-yeni-rotasi-yapay-zek>

### **Sofralar Exhibition Takes Stage in London**

Born in Istanbul, the Sofralar Exhibition moved to The Savoy London in its fifth year, holding its first international edition. Bringing together art, design, and business around the same table, the event left a strong impression in London.

**Access Link:**

<https://www.gastronomiturkey.com/haber/sofralar-sergisi-londra-da-sahne-aldi-h17629>.

### **Türkiye Shifts Gears in the “Supercomputer” Race**

At the “Superpower Shaping the Future” session held at The TECH Summit, Lenovo Türkiye CMO Banu Soyak and TÜBİTAK ULAKBİM Institute Director Mehmet Mirat Satoğlu emphasized that supercomputers form the foundation of the artificial intelligence ecosystem. In the session; It was stated that the ARF infrastructure, implemented in cooperation with Lenovo and TÜBİTAK, has brought Türkiye to the top ranks in the high-performance computing league; and it was emphasized that it has accelerated the transformation in a wide range of areas, from industry to science, from cybersecurity to energy efficiency.

**Access Link:**

<https://www.marketingturkiye.com.tr/haberler/turkiye-super-bilgisayarlar-yarisinda-vites-yukseltili/>



ISTANBUL  
GELISIM  
UNIVERSITY

# FACULTY OF APPLIED SCIENCES MONTHLY E-BULLETIN

APRIL 2026 - ISSUE 04

## MASTHEAD

### ADMINISTRATION

**Prof. Dr. Kamil Kaya**  
Dean of the Faculty of Applied Sciences

**Assist. Prof. Dr. Görsev Bafralı**  
Vice Dean of the Faculty of Applied Sciences

**Assist. Prof. Dr. Muzaffer Çakmak**  
Vice Dean of the Faculty of Applied Sciences

### COORDINATOR

**Assoc. Prof. Dr. Şebnem Gürsoy Ulusoy**  
sgursoy@gelisim.edu.tr

### ASSISTANT COORDINATOR

**Assist. Prof. Dr. Hande Ulusoy**  
hulusoy@gelisim.edu.tr

### EDITOR

**Assist. Prof. Dr. Hande Ulusoy**  
hulusoy@gelisim.edu.tr

### TRANSLATION

**Res. Assist. Nıger Hacı**  
nihaci@gelisim.edu.tr

## WRITING AND GRAPHIC DESIGN

**News from IGU**  
**News form FoAS**  
**Academic Articles**  
**Academic Books**  
**Congres**

**Assist. Prof. Dr. Onur Türker**  
oturker@gelisim.edu.tr

**Res. Assist. Esmâ Göktaş**  
egoktas@gelisim.edu.tr  
**Res. Assist. Dr. Naim Göktaş**  
ngoktas@gelisim.edu.tr

### Events Pages

**Assist. Prof. Dr. Onur Türker**  
oturker@gelisim.edu.tr

### Guest Writer/Interview of the Month

**Res. Assist. Rabia Şentürk**  
rsenturk@gelisim.edu.tr

### Erasmus+

**Res. Assist. Dr. Naim Göktaş**  
ngoktas@gelisim.edu.tr  
**Res. Assist. Rabia Şentürk**  
rsenturk@gelisim.edu.tr

### News From Our Alumni

**Res. Assist. Mehmet Kayın**  
mkayin@gelisim.edu.tr

### News from Sector

**Res. Assist. Esmâ Göktaş**  
egoktas@gelisim.edu.tr

### Culture, Art & Literature of the Month

**Res. Assist. Mehmet Kayın**  
mkayin@gelisim.edu.tr



ISTANBUL  
GELISIM  
UNIVERSITY

# FACULTY OF APPLIED SCIENCES MONTHLY E-BULLETIN

**APRIL 2026 - ISSUE 04**

*Copyright Notice: All rights reserved.*

*All photos and visuals in the monthly e-bulletin of Faculty of Applied Sciences may not be reproduced without permission, except the news and academic studies for quotations.*



/ iguubf

**ISTANBUL GELISIM UNIVERSITY**

Cihangir Mahallesi Şehit Jandarma Komando Er Hakan Öner Sk. No: 1  
Avcılar / İstanbul

[www.gelisim.edu.tr](http://www.gelisim.edu.tr)

0 212 422 70 00