

Istanbul Technical University Sustainability Development Goals Progress Report 2025

by ITU Sustainability Office





Content

Sustainability Development Goals

1. No Poverty.....
2. Zero hunger.....
3. Good health and well-being.....
4. Quality education.....
5. Gender equality.....
6. Clean water and sanitation.....
7. Affordable and clean energy.....
8. Decent work and economic growth.....
9. Industry, Innovation, Technology and Infrastructure.....
10. Reduced inequality.....
11. Sustainable cities and communities.....
12. Responsible consumption and production.....
13. Climate action.....
14. Life below water.....
15. Life on land.....
16. Peace, justice and strong institutions.....
17. Partnerships for the goals.....



Financial assistance for research

A signing ceremony was held for the delivery of the Sermet Research Vessel, donated to MATAM (The Marmara Active Fault Hazard and Risk Application and Research Center) through the contributions of Chairman of the Board of Dearsan Shipyard Aziz Yıldırım and the Yaltrak Family.



ITU Rector Prof. Dr. Hasan Mandal met with graduates who have guided the development of ITU Faculty of Maritime Sciences, the ITU Faculty of Maritime Sciences Alumni Social Aid Foundation, and industry representatives at an event organized specifically for the construction of the Denizati Education Building.



A donation protocol was signed by the Board of Directors of Aydın Holding, for the construction of the Central Laboratory and Research Dean's Office Building at the ITU Ayazağa Campus.



Local assistance

EELISA European University, of which ITU is a founding member, has announced its 6th Joint Call, which encourages international collaborations. Under this call, a total of €150,000 in funding is targeted for innovative and high-impact projects.



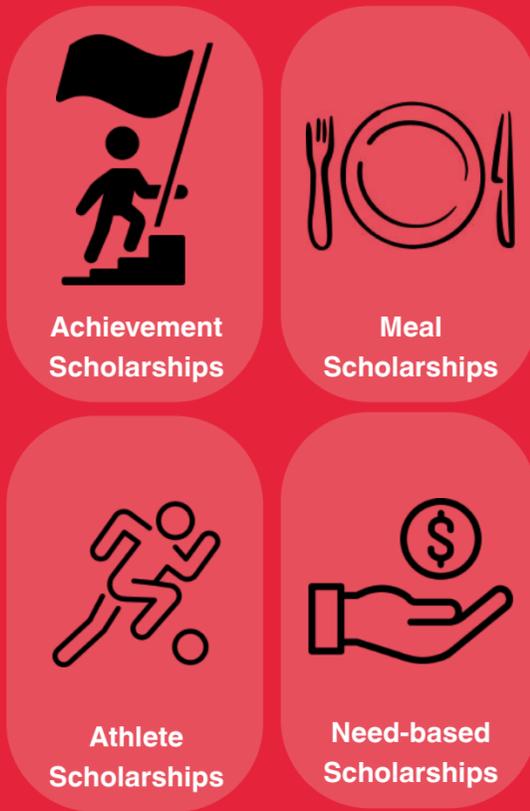
Experts from ITU evaluated many topics, including the expected Marmara earthquake, climate crisis, drought, and floods, from all angles. During the program broadcast live on our university's social media accounts on May 8, 2025, viewers asked our faculty members questions about topics they were curious about.

Scholarship opportunities

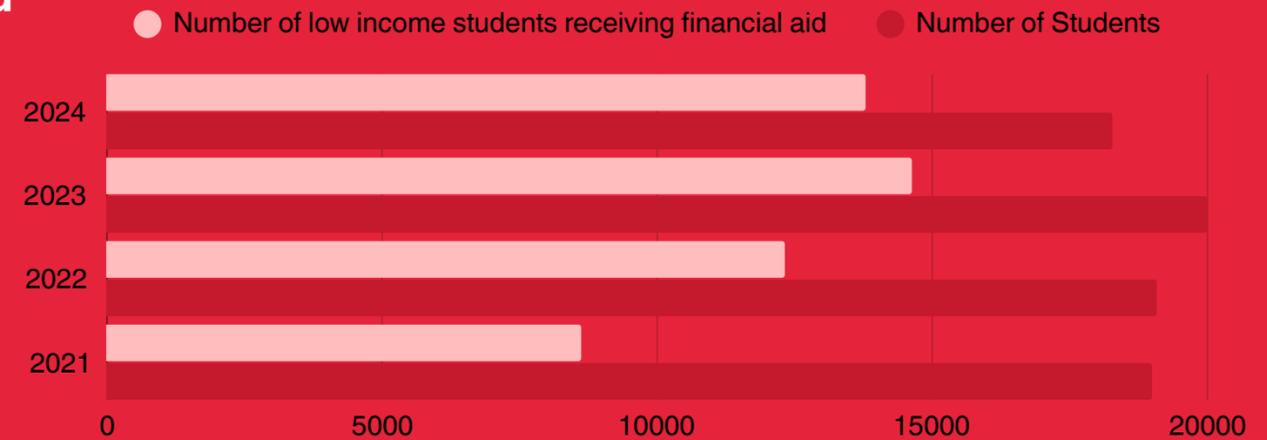
ITU, which attracts great interest from students who has to make their choices based on national exam results every year, was the choice of 97 students from the top 1000 according to last year's placement results.

As a research university focused on responsibility and impact, ITU offers scholarships, accommodation, and international opportunities for candidates who choose it from the top 1000.

ITU offers many opportunities under the "ITU Achievement Award" to students who rank in the top 10, 100, 500, and 1000 based on their YKS 2025 AYT placement scores and are admitted to the university's undergraduate programs.



Financial Aid for Students



183

no poverty publications



Research on Food Security

Local Probiotic Culture Prototype

The interdisciplinary project aimed at developing a local probiotic culture prototype was deemed worthy of support under the scope of TÜBİTAK. The project supports the third objective, “Healthy and Quality Life,” by contributing to public health through the positive effects of probiotics on the immune system, digestive health, and pathogen resistance. By developing domestic probiotic culture production technology, it also connects to the 9th Objective, “Industry, Innovation, and Infrastructure,” in terms of creating an innovative infrastructure in the field of biotechnology.

Improve Urban Food Security and Livelihoods in Türkiye and Jordan

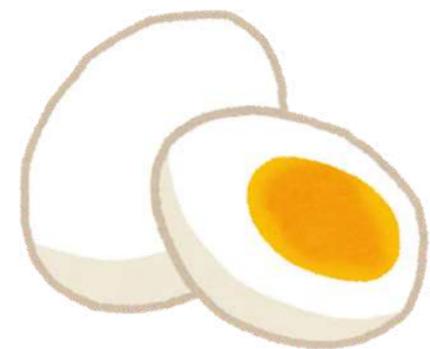
The “Memfood” Project, which will make a significant contribution to water and food security and raise awareness in Türkiye and Jordan, has been awarded funding under a call for proposals launched by TÜBİTAK and the Jordan National Center for Research and Development (NCRD). The project offers an innovative and sustainable approach to solving both water scarcity and food security issues, 2nd Goal: End Hunger (Ensuring food security by increasing agricultural productivity and sustainable agricultural practices) and Goal 6: Clean Water and Sanitation (Managing water sustainably and making healthy conditions accessible to everyone).

In line with the collaboration between ITU and Şenpiliç Gıda Sanayi A.Ş., the launch of three new sustainability-based research projects within the framework of ITU BAP Special Call for General Research Projects was announced at a meeting held at the Ayazağa Campus on August 26, 2025. Within the framework of cooperation, three projects were selected for funding under the call for proposals titled “Problems encountered in the poultry sector and innovative solutions” launched university-wide by the ITU Scientific Research Projects (BAP) Unit.



Enhancement of Bee Products

The project titled “BEE-TECH: Biotechnological Enhancement of Bee Products for Sustainable and Functional Foods in Well-Aging” has been awarded Horizon Europe Marie Skłodowska-Curie Actions (MSCA) funding. Within the scope of the project, the effects of bioactive compounds obtained from bee products on health will be investigated, and the goal will be to transform these products into new-generation functional foods that contribute to healthy aging. Natural products such as propolis, pollen, royal jelly, and bee bread will be sourced from different geographical regions and analyzed using scientific methods to determine their nutritional values, compositions, and bioavailability.



Local Education For Food Producers

The 2nd Food Microbiology Congress, organized in collaboration between the Food Engineering departments of ITU and YTU, brought together representatives from academia, the public sector, and the private sector at our Ayazağa Campus between September 4-6, 2025.

ITU Rector Prof. Dr. Hasan Mandal stated that the conference sought answers to questions such as “How can more reliable production be achieved in the food sector? How can access to healthy food be expanded? How can scientific outputs be transformed into social benefits?”

Two panels titled “Risks and Opportunities in the Food Sector” and “Practices and Future Expectations for Ensuring Food Safety” were held at the congress.



The European Union project titled “IoT Supported Electronic Geotextiles for Sustainable and Smart Precision Agriculture (I-TEXGEO)” has been awarded funding for a period of 48 months.



27

zero hunger publications

Industry Partnership For Sustainable Food

Research on health and well-being

A faculty member of the ITU Department of Computer Engineering has won the 2024 Research Incentive Award presented by the Parlar Education and Research Foundation.

Our academic, who conducts research in medical image analysis, machine learning, and particularly the automatic processing of cardiac MR images, makes significant scientific contributions in this field. He also continues to develop projects as the founder and director of the Predictive Intelligence and Medical Imaging (PIMI) Laboratory, which combines artificial intelligence and medical imaging technologies.

Textile-Based Soft Robotics for Virtual Reality Applications

Our faculty member at the Department of Textile Engineering and recipient of an ERC Starting Grant, became the only researcher from our country to be awarded support under the ERC 2024 Proof of Concept call with his project titled "TexSoRVA: Textile-Based Soft Robotics for Virtual Reality Applications."

Project Crucial for Surgery and Intensive Care

Under the supervision of our faculty member and coordinated by our doctoral student, the research project "Development and Coating Studies of Oxygenator Membranes for Heart-Lung Machines" conducted at ASELSAN Academy has received TOHUM Project Support.



International Collaboration For Youth Technology Addiction

ITU-Led TechWell Project Published Reports on Youth Technology Addiction in France, Italy, and Türkiye



<p>Erasmus+ Project TechWell</p> <p>Report on screen "addiction" in France: Trends, Challenges and Solutions</p> <p>June 2025</p>	<p>Erasmus+ Project TechWell</p> <p>Report on Smartphone and Technology Addiction in Italy: Trends, Challenges, and Solutions</p> <p>June 2025</p>	<p>Erasmus+ Project TechWell</p> <p>Report on Smartphone and Technology Addiction in Türkiye</p> <p>June 2025</p>
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TECHWELL

Funded by the European Union

Student Projects

Three undergraduate students from ITU have been awarded funding under the 2025 TÜSEB Group A Emergency R&D Project Call (A1) for undergraduate students launched by the Turkish Health Institutes Presidency (TÜSEB).

Mental Health Support for Students & Outreach

High school guidance counselors gathered at the Süleyman Demirel Cultural Center on June 26, 2025, at the invitation of ITU. At the meeting, which was also attended by ITU students, guidance counselors shared information and experiences about ITU as a part of ITU Information and Preference Days.

3 student projects



Sports-Friendly Campus Award

In addition to academic excellence, ITU embraces a sustainable lifestyle culture and provides a campus environment that supports students' physical and social development. ITU sport facilities are also shared.

Following evaluations conducted by the Council of Higher Education (CoHE) and the Ministry of Youth and Sports, ITU was granted the Sports-Friendly Campus Award for its Ayazağa Campus.



1310

good health and well-being publications



International Partnership for Education

Erasmus+ Blended Intensive Programme
 ITU Faculty of Aeronautics and Astronautics students participated in the Erasmus+ Blended Intensive Programme in Italy. Within the program, hosted by the University of Naples Federico II, our students transformed their theoretical knowledge of composite materials and sustainable production processes into practical skills through technical training and facility visits.

Co-Learning Lab/ Artificial Intelligence Event

First organized in 2024, ITU Co-Learning Lab's first thematic application, ITU Co-Learning Lab/ Artificial Intelligence, aims to explore the transformative role of Artificial Intelligence (AI) in education. It aims to promote the integration of AI into pedagogical processes by highlighting best practices and success stories. Co-Learning Lab/ Artificial Intelligence Event event provided an interdisciplinary platform for academics, students, researchers and alumni to interact and share knowledge and experience on AI-enabled learning and teaching.

ITU CEE aims to turn this event into an international organization through networks such as EELISA European University, European Society for Engineering Education (SEFI), European Schools of Advanced Engineering Education and Research (CESAER) and International Engineering Managers (T.I.M.E. Association).

Our Rector Prof. Dr. Hasan Mandal Attended the CESAER Annual Meetings 2025



At the the First Forum of Rectors of Türkiye and Poland, where he was among the keynote speakers, ITU Rector Prof. Dr. Hasan Mandal discussed the internationalization potential of Turkish higher education and how it can be enhanced through collaborative projects in education and research between Türkiye and Poland. As part of the event, Prof. Dr. Mandal also signed memoranda of understanding between ITU and two Polish universities.

Collaboration for Regional Impact

The visits to the Türkiye–Azerbaijan University and Karabakh University, led by CoHE President and Azerbaijan's Minister of Science and Education and attended by ITU Rector have strengthened higher education collaboration between the two brotherly countries on the basis of science and education.



New Courses, Research Center and Programmes

ITU Space Support Systems Application and Research Center will directly support Türkiye's operational capabilities in space in collaboration with Turkish Space Agency (TUA).

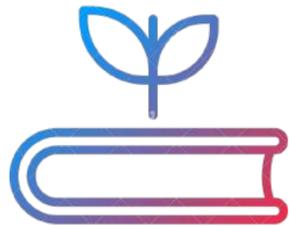
Master's Degree Program in Defense Industry Management (MBA) Without Thesis, Second Education, has been launched.

Türkiye's First Industry-Focused Artificial Intelligence Master's Program Begins with MESS and ITU Collaboration



ITU has launched innovative minor programs in seven different fields. These minor programs, which ITU has pioneered and which are designed to be certificate programs that go beyond the diploma and respond to the needs of the future, are:

1. Sustainability,
2. Nuclear Engineering,
3. Defense Technologies,
4. Oceanography,
5. Fire Engineering,
6. Information Technology Applications and Computational Sciences,
7. Earth Systems, and Global Change.



Three online courses, "Driving Dynamics and Comfort Analysis in Electric Vehicles," "Distance Education: Theory Research and Practice," and "Statistical Learning and Simulation," were opened for all graduate students at technical universities during the Fall Semester of the 2025-2026 Academic Year under the umbrella of the Union of Technical Universities (TU11).

International Accreditations

Our master's programs in Earthquake Engineering, Coastal Science and Engineering, and Textile Engineering have received EUR-ACE (European Accredited Engineer) certification, following MÜDEK accreditation, making them the first of their kind in our country!

Innovative Education with the Learning Station Model

The ITU Center for Excellence in Education (ITU MEM) held the second and third sessions of its learning station training on "Science and Engineering Communications: communicating research through news stories."

Staff Training on SDGs

The ITU Personnel Department's sustainability training sessions continue. In the first session the Coordinator of the Sustainability Office held a training titled "Sustainability Work and Sustainable Development Goals at ITU." The second session was titled "Sustainable Consumption and Food Waste".



Education outreach activities

The World Bank, DASK, and Insurance Development Forum jointly organized the Disaster Risk Finance Academy: Affordable Disaster Risk Insurance through Public-Private Partnerships training program. ITU faculty member from the Department of Industrial Engineering contributed to the program with his practical training and ITU faculty member from the Institute of Disaster Management, who was the closing speaker at the program, conveyed the highlights and key messages of the sessions and content shared within the scope of the program to the participants.



Public events for prospective students

- For prospective students and their families making university choices,
- Obtaining information at department information desks,
 - Attending general information presentations held twice daily,
 - A tour of the Ayazağa Campus,
 - The opportunity to meet with project teams and clubs formed by ITU students

The 2025 ITU Information and Preference Days took place at the ITU Ayazağa Campus.

1160

quality education publications

Women in Underrepresented Subjects

Research on Gender Equality

International Day of the Girl Child



The event “March 8 International Women's Day: The Power of Women in Earth Sciences” highlighted the power and importance of women in the mining sector.

Mimoza Magazine

The 10th issue of Mimoza magazine, prepared by the ITU Women in Science, Engineering and Technology Research and Application Center (ITU BMT KAUM) and published by ITU Press, has been released.



Inclusive Approaches in Disaster Management: Women and Children

The panel featured our ITU BMT KAUM Advisory Board Member Prof. Dr. Nilgün Okay as a speaker. It addressed inclusive approaches to empowering women and children in disaster management.



She-Tech Roundtable: Female Tech Entrepreneurs

The “She-Tech Roundtable: Female Tech Entrepreneurs” event was organized as part of the DE-TECH (Deep Tech European Venture Builder) Project, supported by the European Institute of Innovation and Technology (EIT HEI Initiative), with the aim of increasing the visibility and influence of women in the fields of technology and entrepreneurship.



Within the scope of World Girls' Day on October 11, ITU organized a special event titled “Girls Shaping the Future” to raise social awareness and strengthen the position of girls in science, technology, and engineering.

Women's progress

Türkiye's Top 10 Women Leaders in Global Product and Marketing Leadership Roles for 2025

Our 2010 graduate from the Department of Control and Automation Engineering at ITU's Faculty of Electrical and Electronics Engineering was selected by Global Woman Leader as one of “Türkiye's Top 10 Women Leaders in Global Product and Marketing Leadership Roles for 2025.” Our graduate's contributions to accelerating business transformation through digital marketing played a significant role in this achievement.



“Science, She Says!” Award

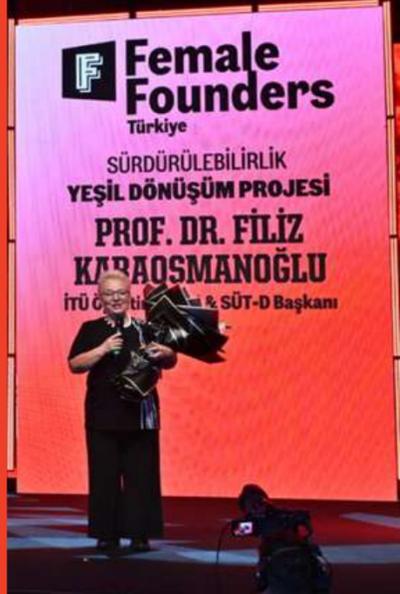
“Science, She Says!” Award

The “Science, She Says!” award is presented to outstanding young international women scientists who have made significant contributions to the advancement of science and technology. The award call is coordinated by the Italian Embassy and supported by the Italian Ministry of Foreign Affairs and International Cooperation (MAECI).

Our faculty member was deemed worthy of the “Science, She Says!” award for her innovative contributions and pioneering research in the field of environmental engineering and sustainable water/wastewater treatment technologies, exemplifying scientific leadership.

Female Founders Green Transformation Award

Professor Filiz Karaoğlu, Faculty Member of the Department of Chemical Engineering at ITU, received an award from Female Founders in the “Green Transformation Project” category.



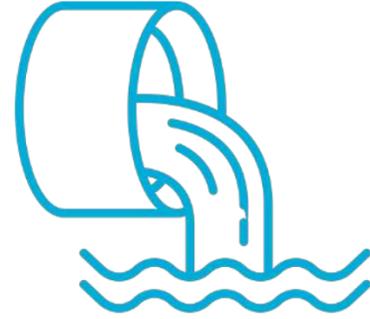
129

gender equality publications

Research on sustainable water

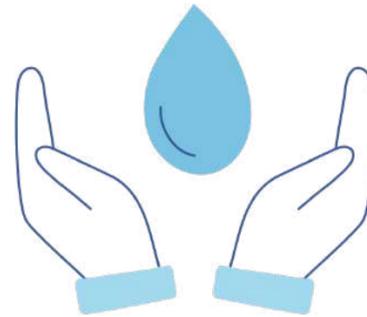
Wastewater Treatment

ITU faculty member was deemed worthy of the “Science, She Says!” award for her innovative contributions and pioneering research in the field of environmental engineering and sustainable water/wastewater treatment technologies, exemplifying scientific leadership.



Memfood: Water Scarcity

The project, developed under the leadership of a faculty member from the Department of Environmental Engineering at ITU's Faculty of Civil Engineering, which will provide large-scale gray water treatment, has been awarded funding under the 2024 call for proposals launched by TÜBİTAK and the Jordan National Center for Research and Development (NCRD). The project contributes directly to the United Nations Sustainable Development Goals (SDGs) by offering an innovative and sustainable approach to solving both water scarcity and food security issues.



Water in the community

ITU Memtek (Membrane Technologies Application-Research Center)

ITU Memtek supports Türkiye on the development of membrane science and technology in water, wastewater, gas separation and resource recovery systems in order to combat global climate change and support economic development.



Cooperation on water security

AQuatic Urban ecosystems Alive Project

ITU has been awarded funding under the European Commission's Horizon Europe Program's Driving Urban Transitions Partnership (DUT 2024) call for proposals.

The project titled AQUAlive (AQuatic Urban ecosystems Alive), led by The University of Antwerp and coordinated by a faculty member from ITU's Faculty of Architecture, stands out as an international initiative that aims to create a new paradigm for urban water cycles, protect biodiversity, and encourage the transition to a circular model that will revitalize urban areas. The AQUAlive Project aims to create a new paradigm for urban water cycles, protect biodiversity, and develop a circular model that will revitalize urban areas.

Promoting conscious water usage on campus

Our personnel received training session titled “The Present and Future of Water,” which covered the global water cycle and Türkiye’s water realities, the impacts of climate change on water resources, pollution risks and water security, the measures that individuals, society, and institutions can take, as well as sustainable solutions for the future.



543

clean water and sanitation publications

Low-carbon Innovation with Industry



Sustainable Energy Technology Cooperation
 ITU signed a letter of intent with Kendal Elektrik to develop university-industry collaboration in line with its innovative and sustainable future goals. Opportunities for collaboration between our university and Kendal Elektrik, a leading company in the lighting and electrical equipment sector, were evaluated with a focus on science-based technology development and human resource training. A project was launched with the goal of establishing Türkiye's first domestic LED chip production infrastructure as part of the collaboration.

Protocol for Energy Efficiency and Digital Transformation
 A cooperation protocol has been established between ITU and EÜAŞ, aiming to create the critical technical infrastructure for Türkiye's Energy Efficiency 2030 Strategy and the 2nd National Energy Efficiency Action Plan, and to contribute to the digital transformation of the sector through R&D projects. Alongside the protocol, R&D projects will be developed in key areas such as digital twins, artificial intelligence applications, digitalization of business processes, sensor systems, advanced materials, and energy conversion technologies, thereby contributing to the transformation within the sector. Through the partnership under the protocol, graduate students will be provided with opportunities to participate in research and development activities, as well as internships and mentoring opportunities, enabling them to develop themselves academically and professionally.

Clean Energy Technology Efforts

“A Smart and Flexible Thermal Energy Storage Solution for Concentrated Solar-Powered Industrial Process Heat Supply” is one of the projects accepted under the Technical Universities Cooperation TU11 BAP. The project will be coordinated by the ITU academic from the ITU Energy Institute.

ITU is a partner in the HYDRAGON project. HYDRAGON “From Light to Energy: Synergetic Multifunctional Materials Driving Photoelectrochemical Hydrogen Generation”) unites leading research teams from Spain, Czech Republic, Turkey, and Korea. The consortium combines expertise in chemistry, materials science, and engineering to deliver scalable, sustainable solutions for a climate-neutral future.



Student Innovation

The ITU Electric Vehicle Team (ITUEV) held a Vehicle Presentation Event at the Süleyman Demirel Cultural Center on April 25, 2025, to mark the 10th anniversary of its founding. The presentation of three different vehicles developed by ITUEV at the same event was a first in ITU history.



International Research Collaboration

Within the scope of a new collaboration between ITU and Konkuk University (South Korea), an intelligent framework will be developed that integrates artificial intelligence, secure blockchain, and Digital Twin technologies to adaptively optimize energy usage in smart campus building environments. The system will also facilitate the cost-effective utilization of excess energy, supporting real-time, scalable, and sustainable energy planning.



“Multifaceted Performance Improvement in Multipurpose Research and Training Reactors through a 3D Digital Twin” project is planned to be completed in 24 months with a budget of approximately 5 million TL.

629

affordable and clean energy publications



Students with Work Placements

İŞKUR Youth Program

The first concrete application of the İŞKUR Youth Program, organized by the Ministry of Labor and Social Security with state universities as a partial employment model, came to life with the signatures at ITU.

Offering ITU students internship, part-time, and full-time work opportunities

The collaboration with FEV Türkiye, which produces engineering solutions for the automotive industry, aims to contribute to both student development and our country's innovative production capacity through an innovative model that brings together learning, research, and production culture.

National Internship Program

The early career program, which aims to enable ITU students to benefit from career opportunities provided by public institutions and private sector organizations within the framework of equal opportunity and merit-based principles, has begun. The National Internship Program, conducted under the auspices of the Presidency's Human Resources Office, will be an important step for our students' careers.



Employers' Choice
Kariyer.net 2024



2025 Global University
Employability Ranking

Awards & Events

Employers' Choice

Kariyer.net's 2024 "Employers' Choice" analysis revealed remarkable results reflecting the advantages that ITU departments provide to their graduates in their professional lives through the competencies they impart. ITU ranked first among technical universities in the "Employers' Choice" university index with a score of 73.4.

According to the results of the 2025 Global University Employability Ranking, ITU ranked 204th in the world and first in Türkiye.



ITU Career Summit



Future Engineers Summit 2025



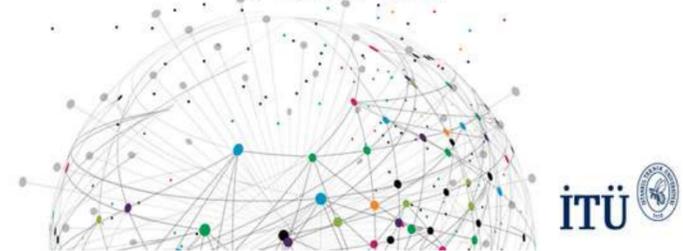
Entrepreneurship, Innovation, and Career Summit

1440

decent work and economic growth
publications

Research on industry, innovation and infrastructure

PAUSAT-1, Developed in Collaboration with Istanbul Technical University and Air University Pakistan is Now in Orbit!



PAUSAT-1, the 8th satellite made by ITU-USTTL, was designed and developed in collaboration with Air University Pakistan. It was successfully placed in its orbit at 500 km on January 14, 2025, as part of the Transporter 12 mission by the SpaceX-Falcon 9 rocket.

Important Contribution to Our Defense Industry from ITU with the ATAKAN and TORAMAN Projects

Under the leadership of the Defense Industry Presidency, a signing ceremony was held for 23 new R&D projects initiated through collaboration between public institutions, universities, and defense industry companies, with project planning activities completed as of 2024. ITU Rector signed agreements for ITU's participation in two major projects named ATAKAN and TORAMAN.



Türkiye's First Digital Twin Application and Research Center Launched in Collaboration with ITU and BTS Group!

Digital twin technologies stand out for their potential to bring revolutionary developments in areas such as 5G/6G, smart cities, sustainable energy, and aviation.

A Model Capable of Predicting the Magnitude of Devastating Earthquakes in Advance

Our faculty member's scientific study, conducted with a research team from our country and the United States and published in Nature Communications Earth & Environment, presented a slip model capable of predicting destructive earthquakes similar to the February 6 Kahramanmaraş Earthquakes using historical rupture scenarios.

TEKNOFEST 2025

The world's largest Aviation, Space, and Technology Festival, TEKNOFEST, was hosted at Atatürk Airport. ITU, which took its place at TEKNOFEST 2025 in Istanbul, was once again the center of attention with its achievements and the vehicles it exhibited.

24%

of the ITU graduates on Business Management Institute's third annual list of the "50 Most Effective Technology Leaders".

Progress in Artificial Intelligence!

AI-Enabled Computational Materials Technologies Workshop

As part of World Intellectual Property Day, the event "Artificial Intelligence Focused on Intellectual Property" was held at ITU, where the growing importance of intellectual property rights was discussed.



"Artificial Intelligence-Supported Research That Should Be Prioritized in Teaching Turkish as a Foreign Language"

İTÜ DE-TECH PROJESİ

ITU has been selected to receive funding under the European Institute of Innovation and Technology (EIT) 2024 Higher Education Initiative project call. Led by a faculty member from ITU's Faculty of Management, the project titled De-TECH (Deep Tech European Venture Builder) and spearheaded by the Universidad Politécnica de Madrid (UPM) stands out as a comprehensive initiative that encourages innovative ideas in the field of deep technology to be transformed into ventures.

The De-TECH Project aims to accelerate the transfer of advanced research developed in fields such as artificial intelligence, quantum computing, biotechnology, and health technologies to the market. In this context, **the project aims to increase capacity for technology transfer and spin-off formation at universities. The project aims to increase the rate of participation in entrepreneurship among students, researchers, and staff at participating universities from 10% to 30%.**

Expected impact (by 2027):

- Over 1,000 direct participants
- 15 high-potential projects
- 4 commercialized spin-offs
- Over 100 mentor-student matches



Astronautical Congress (IAC) 2025

ITU welcomed its visitors by taking part in IAC 2025, one of the most prestigious gatherings in the space community.

A Study Combining Knitting Technology and Robotics Engineering at ITU

Researchers at ITU Soft Sensors Lab have made a groundbreaking contribution to the field of wearable robotics.

1070

industry, innovation and infrastructure publications

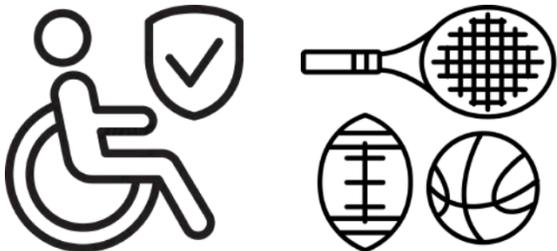
Non-discriminatory admissions

ITU's Special Call for Applications from Harvard Students
 Recent regulations affecting international students' visa processes in the U.S. have made it difficult for students studying at or admitted to Harvard University to pursue their education. In response, a remarkable initiative has emerged from Türkiye: ITU has announced a special admission process for Harvard students.



Accessible facilities

ITU Received the Sports-Friendly Campus Award
 The Sports-Friendly Campus Awards are determined through a rigorous evaluation based on 45 criteria, including "activities supporting mental health and combating addiction", "accessibility for disabled and disadvantaged individuals", "the university's sports vision and strategy", "participation in national and international sports events", "physical infrastructure" and "preservation of traditional sports and games". A total of 83 universities applied for the awards with 98 campuses.



Disability support



EELISA Joint Pedagogical Support Programme Training
 EELISA European University, of which ITU is a founding member, has announced the EELISA Joint Pedagogical Support Programme Training (JPSP). JPSP is an initiative designed to foster innovative teaching practices, support faculty development, and enhance student learning through cutting-edge methodologies and collaborative environments. This training aims to raise teachers' awareness of concepts such as inclusivity, educational differentiation, digital accessibility, disability, dyslexia and many others. It offers them a set of concrete theoretical and practical tools for adapting to the diversity of their audiences.
<https://eelisa.eu>

670

reduced inequalities publications

Student activities

Planning Development

Exhibition Welcomes Visitors

As part of a dynamic collaboration between ITU's Industrial Design Department and Braun to encourage creativity and innovation in product design, the traveling exhibition "Dieter Rams: A Look at the Past and Future," featuring Dieter Rams, who left his mark on industrial design history, opened its doors at our Faculty of Architecture on March 3.

Marmara earthquake -outreach

Experts from ITU thoroughly evaluated many topics, including the anticipated Marmara earthquake, the climate crisis, drought, and flooding. During the program, which was broadcast live on our university's social media accounts, viewers asked our faculty members questions about topics they were curious about.

Architecture and Fire -outreach

The Building Physics Association organized the "Architecture and Fire Symposium 2025" to raise public awareness about fire safety and discuss solutions on a scientific basis.



Support of arts and heritage



ITU TMDK Turns 50: "Cultural Heritage, Art, and Science"



Our ITU 250th Anniversary Turkish Music Choir performed the "Yeşilçam II Concert" at our Maçka Campus.



To mark the 80th anniversary of our Faculty of Architecture, the "ITU Faculty of Architecture 80th Anniversary Symposium" was held at our Taşköprü Campus, and the opening of the "Reconstructing Architecture: Emin Onat Exhibition" took place.



The Legacy of Karl von Terzaghi, Founder of Geotechnical Engineering, are on display at ITU



The 4th International Mosque Architecture Conference was held at our Taşköprü Campus

894

sustainable cities and communities publications

Research on Responsible Consumption and Production

Recovering lithium-ion batteries
 The project led by an academic from the ITU Energy Institute has been awarded support from the TÜBİTAK 3501 Career Development Program. Unlike existing methods, the project aims to recover lithium-ion batteries using low-cost, reusable solvents that are harmless to humans and the environment.

Waste Management of Water Reactors
 The project titled “Sorption and Diffusion Analyses in Bentonite for Waste Management of Small Modular Pressurized Water Reactors” developed under the leadership of an ITU Energy Institute faculty member, has been awarded funding by the Turkish Energy, Nuclear and Mining Research Institute (TENMAK).

Ship Recycling
 An important study is being conducted at the ITU Faculty of Maritime Sciences as part of the “Ship Recycling Risk Framework for Turkey's Safe & Sustainable Approach” project, supported by the Lloyd's Register Foundation.



Student Projects

ITU students won both first and third place at the EELISA Joint Call for Solutions for Sustainable Fashion and New Materials event held in Madrid with the practical, comfortable, and eco-friendly products they developed.



ITU) and the Zero Waste Foundation have signed an important cooperation protocol that will advance efforts in sustainability and zero waste across various areas such as scientific research, educational activities, social responsibility projects, and innovation initiatives. Prof. Dr. Mandal emphasized that through this cooperation, ITU aims to offer high-quality postgraduate education, develop advanced research projects, contribute to society, and strengthen international relations. He highlighted that projects to be designed in line with sustainability principles will provide ITU students with a more well-rounded academic and social learning environment. He also reiterated ITU's goal of becoming a leading institution in zero waste practices through projects that raise awareness both nationally and globally.

485

responsible consumption and production publications

Research on Climate Change Disasters

Antarctic Science Expedition

The 9th Antarctic Science Expedition (TAE IX) departed from Istanbul on February 6 with a research team. The National Antarctic Science Expedition Coordinator stated, "Antarctica is the black box of the planet," emphasizing that the research conducted here will shed light on the future by analyzing data from the past. As part of the expedition, the team will conduct research in many areas, including ecosystems, environmental chemistry, and biotechnology, and will carry out 19 scientific projects on the Antarctic continent.



Atmospheric rivers over Antarctica

A groundbreaking study, completed in approximately one and a half years by world-renowned researchers, including doctoral students from ITU, examining the formation dynamics, life cycle, and effects of atmospheric rivers over Antarctica, has been published in Nature Reviews - Earth & Environment, one of the world's most prestigious scientific journals.



Drought Could Increase in the Mediterranean Even If Rainfall Doesn't Decrease in the Future

A comprehensive study conducted by an international research team from ITU examined climate dynamics and rainfall patterns in the Mediterranean region. The article was published in Nature, one of the world's most prestigious scientific journals.

Environmental Education

An ITU Environmental Engineering Department faculty member provided comprehensive assessments of the causes and effects of glacial melting on our planet in a podcast broadcast with Anadolu Agency. He emphasized the importance and urgency of preparing an integrated climate action plan on an international scale.

Supporting Government

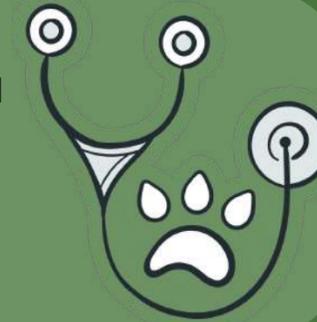
ITU and the Ministry of Environment, Urbanization, and Climate Change's General Directorate for Combating Desertification and Erosion have implemented the Soil Protection and Cooperation Against Hydrometeorological Disasters Protocol with the goal of increasing Turkey's climate resilience.

Low Carbon Energy Use



The 10th Istanbul Carbon Summit, organized by the Ministry of Environment, Urbanization and Climate Change and ITU with high stakeholder participation, was held by the Sustainable Production and Consumption Association (SÜT-D). Held at our Ayazağa Campus under the title "Sustainable Solutions on the Path to Decarbonization and the Power of Green Money," the summit recognized achievements in carbon management.

Campus Animal Guidelines published and Animal Care Volunteer program started.



The Sustainable Development Handbook, a collaborative effort by ITU faculty members, has been published digitally by ITU Press.



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climate action
publications

Research on Life Below Water

SeaWHY Project

The project titled “Advanced Sea Water Electrolysis Technologies for Production of Green Hydrogen (SeaWHY)”, approved under the Southeast Asia-Europe Joint Funding Scheme for Research and Innovation (JFS) will be coordinated by Assoc. Prof. Dr. M. Suha Yazıcı. Purifying water for the electrolysis in the production of green hydrogen is energy intensive and brings additional costs and concerns when considering limited water re-sources. The project will develop PEM, alkaline and AEM electrolysis processes that can use unlimited seawater resources to produce hydrogen, sustainable fuels and chemicals. These outputs will contribute to the UN sustainability and development goals.

Flood Early Warning System

EU supports the project focusing on AI-based flood early warning system and floodable park construction in the Black Sea Region. The project aims to establish an AI-based flood early warning system in the Black Sea Basin, taking the impacts of climate change into account.



Student Projects

TEKNOFEST Blue Homeland, which hosts many events ranging from conferences to exhibitions, concerts to competitions, ship visits to tours, where innovative marine technologies compete, also featured ITU with its teams.

Our Sungur Rocket Team made the ITU family proud by becoming the only team to successfully complete the critical mission phase of the world's first Underwater Rocket Competition.



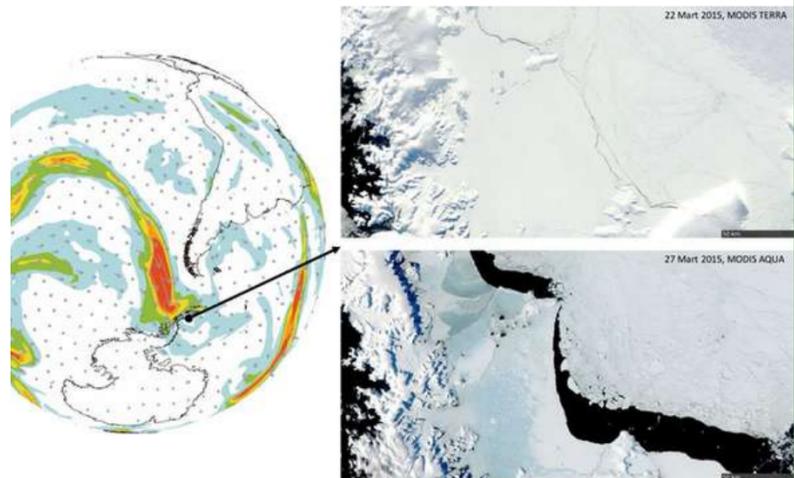
760

life below water publications

Research
Life on
Land

A Rare but Highly Impactful Weather Event

ITU continues to be at the forefront of scientific research that sheds light on better understanding the effects of climate dynamics and climate change on both a global and regional scale. Atmospheric rivers are air currents originating from subtropical and mid-latitudes, reaching thousands of kilometers in length and hundreds of kilometers in width, with a long and narrow structure, carrying dense water vapor towards higher latitudes.



These systems, which also affect Antarctica, trigger events such as extreme precipitation and sudden glacier melt in the region with the warm air and moisture they carry, and thus play a decisive role in the continent's ice mass balance and climate system. The article examines the formation, dynamics, and effects of atmospheric rivers over Antarctica, along with their unique characteristics.

The Chain of Perils Intensified by an Atmospheric River Following the February 6 Earthquakes

A scientific study led by researchers from ITU has revealed for the first time that atmospheric rivers have a significant impact by causing secondary disasters after earthquakes or amplifying their negative effects, while examining a complex chain of multiple disasters. The study was published in the journal Nature Communications Earth & Environment.



Desertification and Erosion

ITU and the Ministry of Environment, Urbanization, and Climate Change's General Directorate for Combating Desertification and Erosion have implemented the Soil Protection and Cooperation Against Hydrometeorological Disasters Protocol with the goal of increasing Turkey's climate resilience.



Government
Support

Supporting land
ecosystems
through
education



On May 22, International Day for Biological Diversity, ITU members participated in the ITU Bioblitz 2025 Event, where they observed and photographed the flora, fauna, and fungi species at Ayazağa Campus alongside expert researchers. This year marked the fourth annual occurrence of the event, which aimed to identify as many species as possible within a single day, once again showcasing the campus's rich biodiversity.

A notable example of citizen science, the ITU Bioblitz events have collectively identified approximately 1,000 species on the Ayazağa Campus. In the 2025 event alone, nearly 400 different species were recorded in just one day. By documenting and monitoring its biodiversity, ITU actively contributes to the conservation and sustainable use of biological diversity.



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life on land
publications

Provide expert advice to government

Earthquake Report

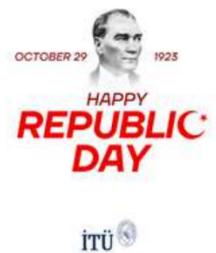
ITU academics have prepared a preliminary report titled “April 23, 2025 Central Marmara Ridge Earthquake (Mw 6.2: 12.49 - 26 km South of Silivri).” The report, which contains the initial findings, provides important information about the earthquake.

ITU Contributing to Safety and Sustainability Standards in Türkiye’s Maritime Sector

An important research project is being conducted at ITU Faculty of Maritime, supported by the Lloyd's Register Foundation, under the scope of the “Ship Recycling Risk Framework for Türkiye's Safe & Sustainable Approach” project.



The 102nd Anniversary of Our Republic Was Celebrated at ITU



Collaboration for Strong Institutions

EELISA European University Sets its Future Roadmap with Meetings at ITU

Throughout the two-day meeting, members of the Governing Board reviewed the progress achieved in line with the commitments made at their previous sessions in Paris. The meeting will also provide an opportunity to explore ways to align EELISA’s initiatives with evolving European policy priorities and to advance key strategic decisions that will shape the future of the Alliance.



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ITU had over a 100 collaborative event throughout the year. A few crucial ones are shared.

Relationships with NGOs for SDGs

ITU Hosted WAITRO's 96th Executive Board Meeting

The World Association of Industrial and Technological Research Organizations convened participants from various parts of the world at its 96th Executive Board Meeting hosted by the Rector of ITU and President of WAITRO for the 2025–2026 term, at ITU.



Cross sectoral dialogue about SDGs

A Workshop for the Mining Optimization and Planning Research Center

The MOPAM Workshop brought together the public sector, private sector, and academia in line with the vision of sustainability, digitalization, and national planning in mining.



Education for the SDGs

ATHENS Network Students Met at ITU

ITU hosted 115 international students in March 2025 as part of the ATHENS Network, which includes 15 leading technical universities in Europe. This prestigious academic cooperation network, of which ITU is the only member from Türkiye, provides students with international academic experience as well as opportunities for cultural interaction.



International collaboration data gathering for SDG

New Horizons in Technology Diplomacy in Partnership with EELISA European University at ITU

Supported by EELISA European University, of which ITU of which it is one of the founding partners, the “New Horizons in Technology Diplomacy: Challenges, Opportunities and Future Strategies Workshop” gathered leading figures in technology diplomacy from Türkiye and Europe at ITU .



CESAER Annual Meetings 2025

ITU Rector attended the CESAER Annual Meetings 2025, where the future of engineering education, innovation ecosystems, and the leading role of universities in Europe's green and digital transitions were discussed.



First Forum of Rectors of Türkiye and Poland

At the the First Forum of Rectors of Türkiye and Poland, where he was among the keynote speakers, ITU Rector discussed the internationalization potential of Turkish higher education and how it can be enhanced through collaborative projects in education and research between Türkiye and Poland.



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partnership for the goals
publications

Progress in Artificial Intelligence

ISTKA Supports ITU's Interdisciplinary Project Combining Artificial Intelligence and Materials Science

Our project titled “Artificial Intelligence-Supported Autonomous Material Microstructure Analysis Platform” has been awarded funding under the Istanbul Development Agency Artificial Intelligence Technologies Financial Support Program, coordinated by the Ministry of Industry and Technology.

EU Support for a Project Focusing on an Artificial Intelligence-Based Early Warning System for Flood Disasters and Flood-Resistant Park Construction in the Black Sea Region

The project, led by our Disaster Management Institute faculty member has been awarded EU funding under the Interreg NEXT Black Sea Basin Cross-Border Cooperation Program.

Gold Award for the World's First Robot and Artificial Intelligence Museum Designed by Our Graduate

The Seoul Robot and Artificial Intelligence Museum (RAIM), designed by a graduate of ITU Faculty of Architecture and the first of its kind in the world, was awarded the Gold Award in the cultural structures category at the Grand Prix du Design Paris design competition.

U.S. Universities and ITU Students Collaborate on Autonomous Vehicles and Artificial Intelligence

Doctoral, master's, and undergraduate students from various U.S. universities conducted research at ITU's E-Mobility and Autonomous Vehicles Laboratory for two months as part of a project supported by the U.S. National Science Foundation (NSF). This research collaboration resulted in two publications.

On the Transformative Role of Artificial Intelligence in Education with ITU CEE

ITU Center for Excellence in Education continues to support innovative approaches in education. ITU Co-Learning Lab/ Artificial Intelligence Event took place on May.

Turkey's First Industry-Focused Artificial Intelligence Master's Program Launches in Partnership with MESS and ITU!

The Artificial Intelligence Master's Program, launched in partnership between the Turkish Metal Industry Employers' Association (MESS) and ITU, offers professionals in the private sector, primarily MESS members, the opportunity to specialize in this field.

Advancing Smarter Energy with AI and Blockchain: New ITU – Konkuk University Collaboration

A new collaboration between ITU and Konkuk University (South Korea) has been approved under the IKIP – Bilateral Cooperation Project program, supported by ITU's BAP Coordination Unit.

A Workshop on Artificial Intelligence-Enabled Computational Materials Technologies Was Held at ITU

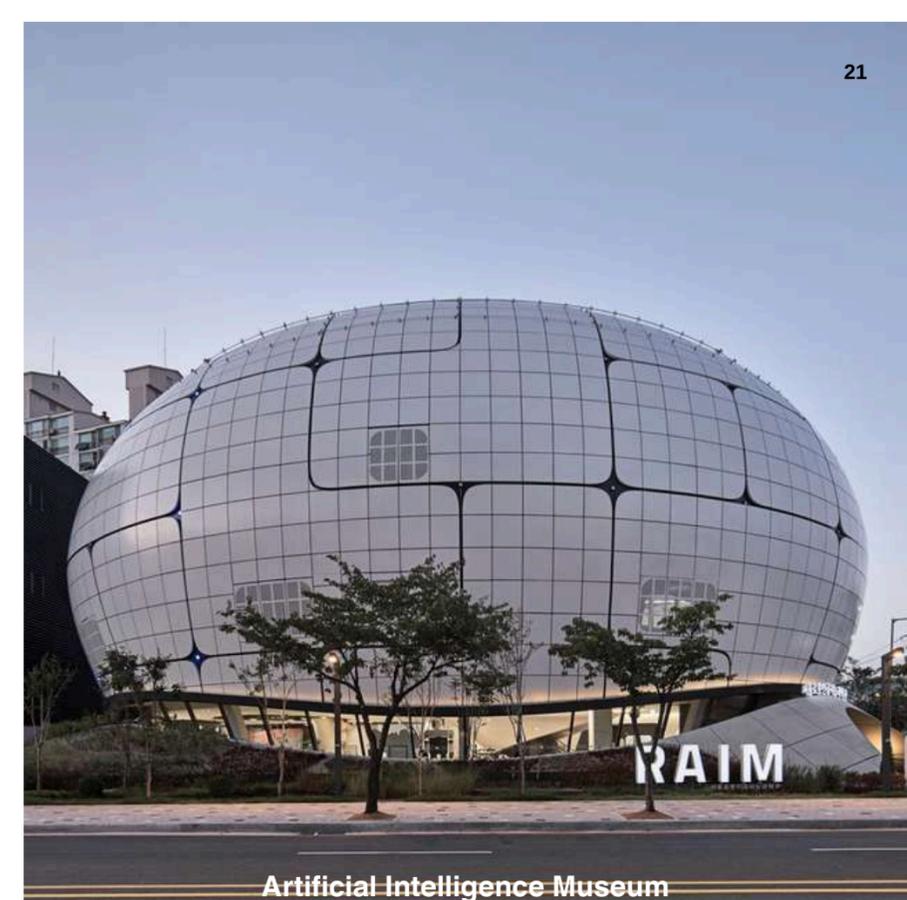
The Artificial Intelligence-Enabled Computational Materials Technologies Workshop held at our Ayazağa Campus on November 6, 2025, brought together our students, researchers, academic and administrative staff, primarily at the graduate level.

Artificial Intelligence Discussed with a Focus on Intellectual Property at ITU

On May 5, 2025, as part of World Intellectual Property Day, the event “Artificial Intelligence with a Focus on Intellectual Property” was held at ITU, where the growing importance of intellectual property rights was discussed.

Artificial Intelligence Support in Turkish Language Teaching Discussed at ITU TÖMER

At ITU's search conference titled “Artificial Intelligence-Supported Research Priorities in Teaching Turkish as a Foreign Language,” experts shared their thoughts on the current state, future, and innovative solutions for artificial intelligence-based applications in teaching Turkish as a foreign language.



Artificial Intelligence Museum

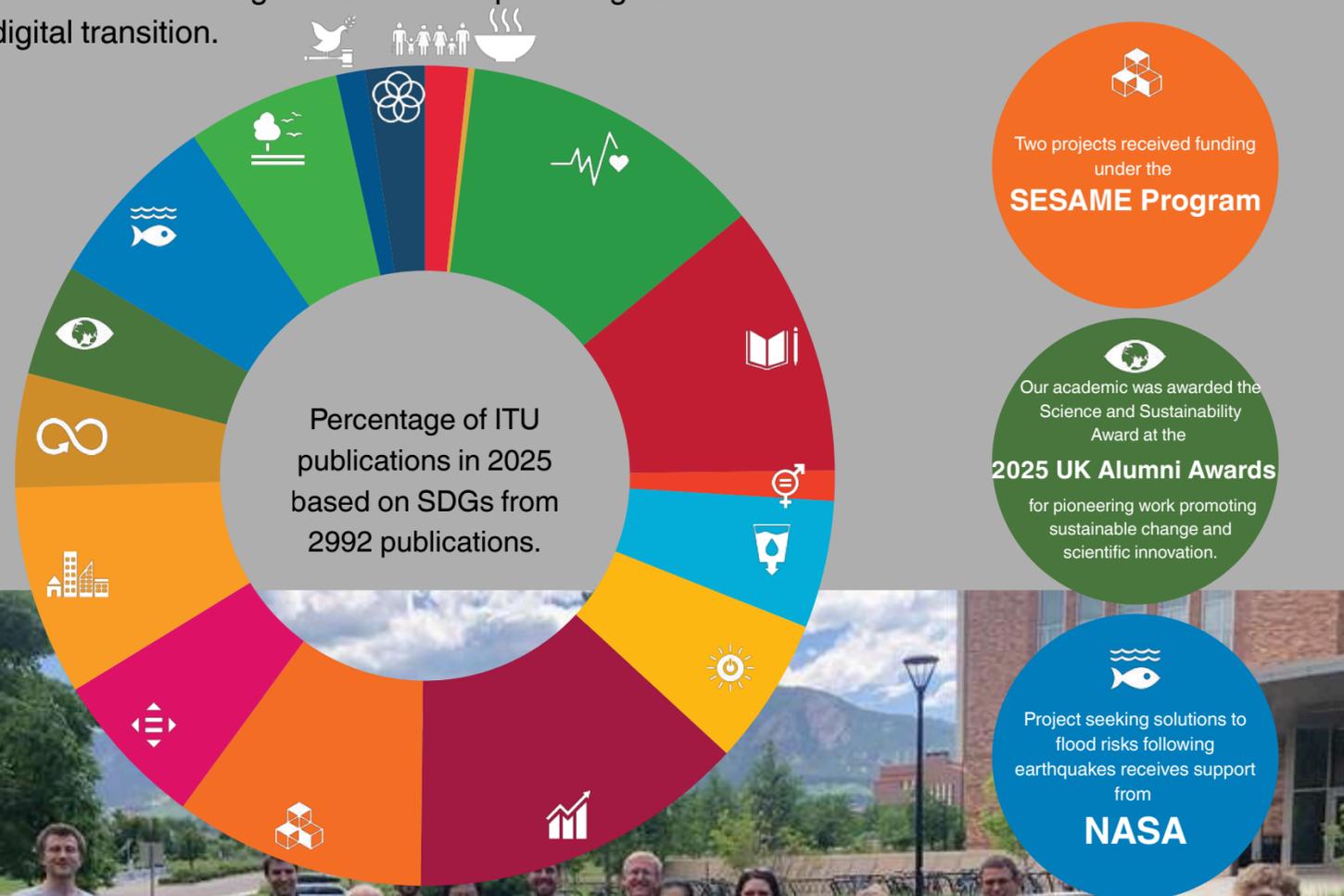


Autonomous Vehicles and Artificial Intelligence

AI-Enabled
Computational Materials
Technologies Workshop

Publications on SDGs

ITU is a partner in EELISA. The European Engineering Learning Innovation and Science Alliance (EELISA) brings together 10 institutions from 8 countries in Europe with the goal of making European higher education a driving force for an equitable green and digital transition.



Two projects received funding under the **SESAME Program**

Our academic was awarded the Science and Sustainability Award at the **2025 UK Alumni Awards** for pioneering work promoting sustainable change and scientific innovation.

Project seeking solutions to flood risks following earthquakes receives support from **NASA**

Atmospheric Rivers in Antarctica: ITU researchers, together with part of the research group they worked with in the United States, in the Rocky Mountains.

Awards on SDG Related Projects

ITU academicians and students have received national and international awards throughout 2025 on many scientific projects related to various SDGs.

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Scientific Fields Top

ITU ranked first in Türkiye in 20 fields in the University Ranking by Academic Performance (URAP) Research Laboratory 2024-2025 World Field Rankings.

50%

Increase in Nature Index

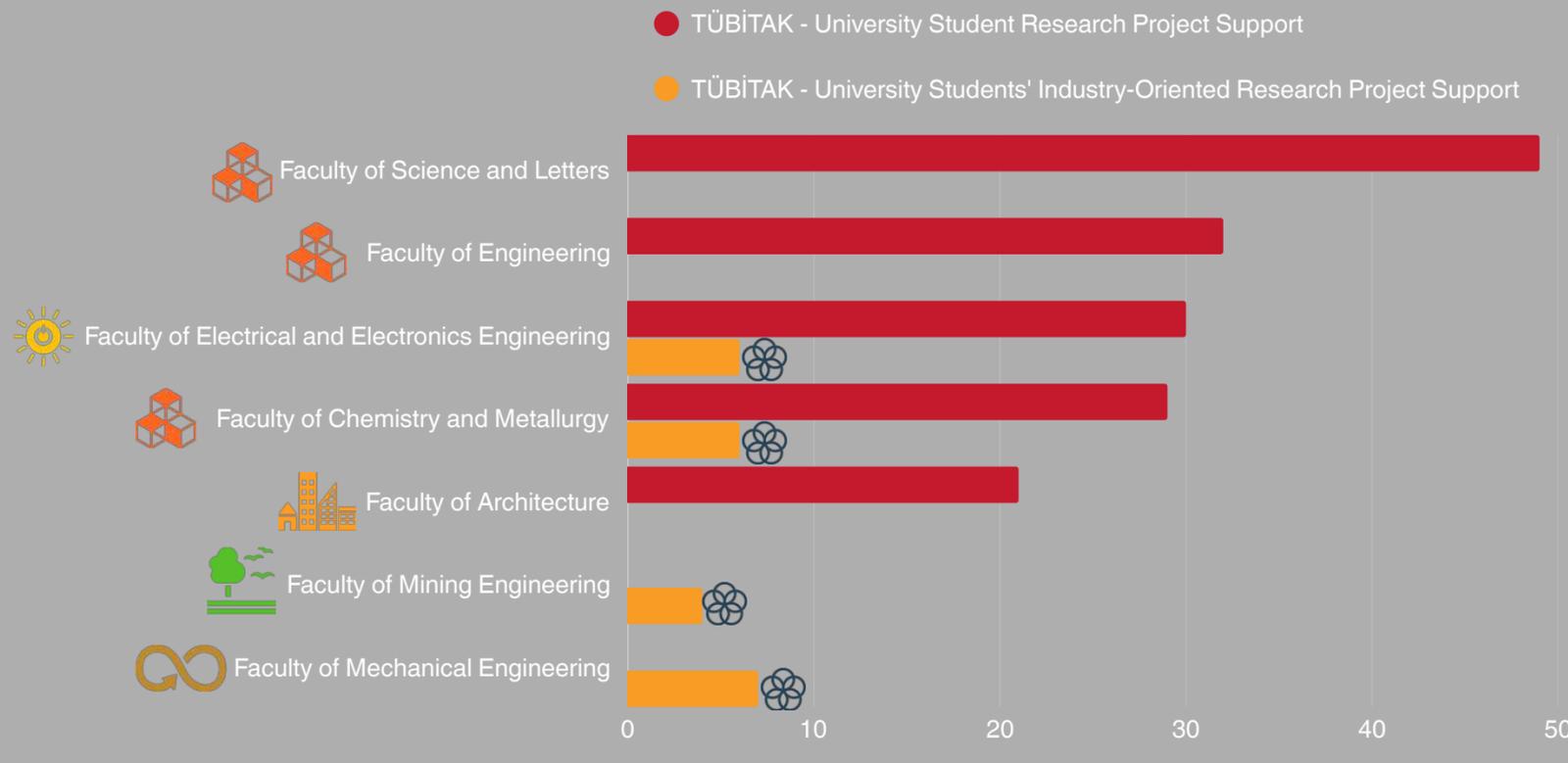
ITU has been recognized as the most successful university in Türkiye by Nature Index 2025 Research Leaders Ranking. ITU's institutional share in articles published within the scope of the Nature Index increased by 50.2%.

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New Project Grants

According to the results of the first period evaluation for 2025 by TÜBİTAK-ARDEB 1001, ITU was awarded funding for 23 projects.

Student Awards by Faculty



Istanbul Technical University Sustainability Development Goals Progress Report 2025

Published by the ITU Sustainability Office

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