

ISTANBUL TECHNICAL UNIVERSITY

SUSTAINABILITY REPORT 2023

This report is interactive. Click on the underlined words to reach to linked documents.

Publication

August, 2024

Istanbul Technical University

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Thank you to the following individuals for insights on the policies, practices, and performance of ITU:

Lütfiye Durak Ata

Sustainability Comissions

Istanbul Technical University, Sustainability Office has reported the information cited in this GRI content index for the period January 1, 2023 to 31 December 2023 with reference to the GRI Standards.

The contents of this report are organized according to the materiality assessment that defined the most important topics for our stakeholders. These 5 topics were finalised in the Sustainability Commission Workshop 2021. The methodology of the report and the previous versions were structured against the issues by the Sustainability Office Team in 2021.

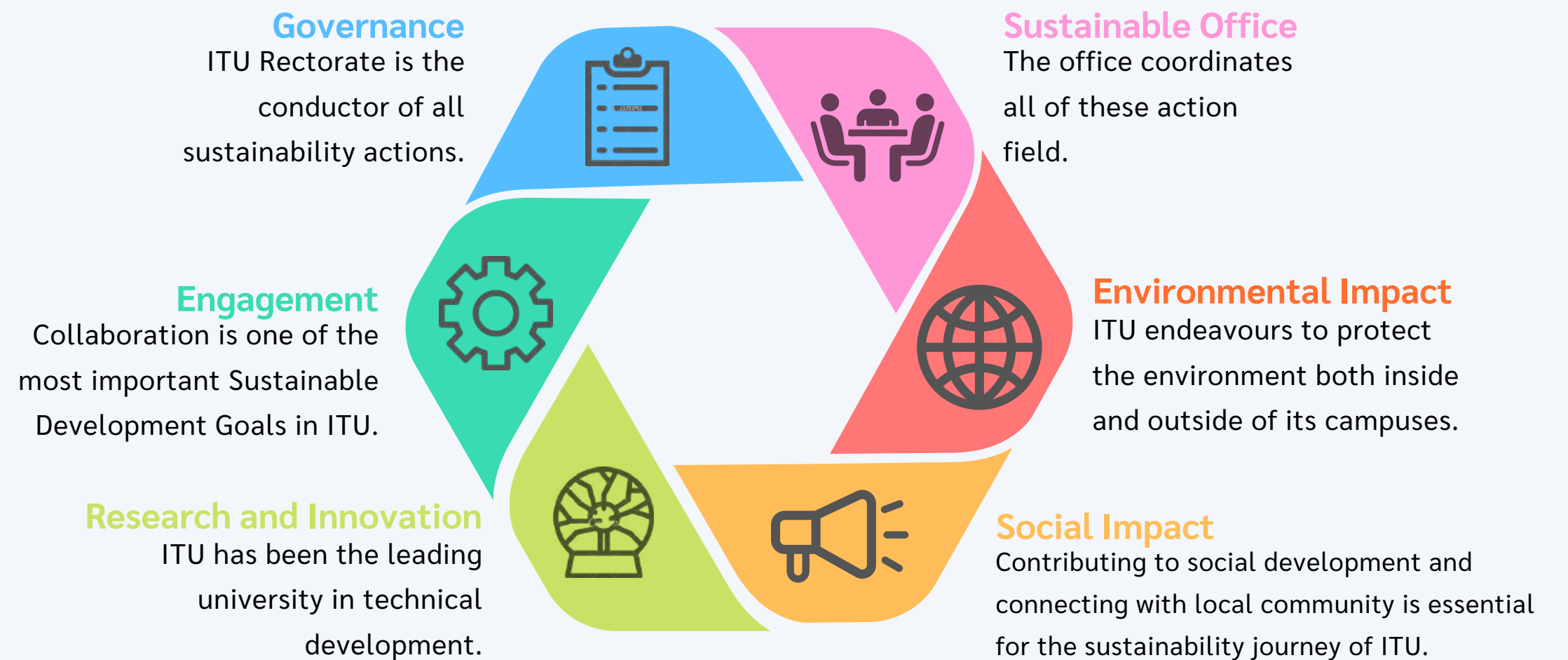




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Mission & Vision

Our mission is to integrate sustainability as a core principle throughout education, research, and management at Istanbul Technical University which is a global university that pioneers in science, technology and arts.

The purpose of existence for the Istanbul Technical University is to expand the borders of knowledge and its applications in science, technology and art for contributing to the sustainable community. Our vision is to create a culture of responsibility by integrating the values of sustainability in all units of Istanbul Technical University to serve as a local and global model.



ITU Mustafa İnan Library



INTRODUCTION



LETTER FROM THE ITU SUSTAINABILITY OFFICE

ITU Sustainability Office is delighted to share the third annual Sustainability Report of ITU. This year's report, was prepared by a team of experts from the Office based on Sustainability Commissions' efforts.

Sustainability is one of the main objectives of ITU Strategic Plan (2022-2026). ITU has a record of proposing sustainable solutions to issues of the university and society. Starting from 2020, these activities were united to establish the Sustainability Office. Along with the office, the formation of commissions concerning various Sustainable Development Goals strengthened the involvement of academicians and administrative staff, from all faculties and the Rectorate respectively, with different perspectives and professions. The sustainability Office integrates students into its team who actively take place in all of the activities and improve the visibility of the office throughout the university.

Extending beyond our university, ITU Sustainability Office has been a pioneer in advocating a culture of sustainability at other higher education institutions. Our Sustainability Office and its commissions advise our university and other universities on Sustainable Development Goals and the impact management. We also conduct activities to educate and help them in their sustainability journey. Outside the campuses, we reach local communities, businesses and the government to build sustainable relationships, collaborate to solve our common issues and transfer knowledge. ITU is concerned with ensuring that all resources are correctly managed to mitigate the impacts on society, the environment and the economy. This report presents transparent and updated information that can guide universities and stakeholders to acquire information.

ITU is actively working towards sustainability with research, education and innovation to become a leading university in Türkiye and abroad. We focus on improving the accessibility, equality and affordability of our university for our community. With positive relationships, we boost our engagement with the industry and ensure environmentally sustainable methods are used to support innovation and research.

In this report, the stance of ITU in 2023 to improve the sustainability of Türkiye and the establishment and development stages of the Sustainability Office since its beginning is shared. Our activities and commitments in environmental, social and economic sustainability and their impacts are presented. We would like to thank our commissions, the Sustainability Office team, ITU academicians and the Rectorate for all of their efforts in 2023 to advance our sustainable impacts.

We have a long way to achieve and safeguard the sustainability of our world. As ITU Sustainability Office we depend on our university staff and students to improve and continue their efforts in the future. Thank you for your interest in ITU Sustainability Report. We would like to hear your feedbacks.

Assoc. Prof. Börte Köse Mutlu
Coordinator of Sustainability Office





METHODOLOGY

The methodology was developed and adopted in the 2021. 2022 and 2023 ITU Sustainability Reports utilized this methodology, as well.

Intrinsically, higher education institutions attribute significant importance to understanding and managing their impacts to become more responsible and trustable organizations with the aim of having a more sustainable planet. Higher education and its area of influence will play a crucial role in the global sustainability transformation period. Through its reporting process, higher education can analyze and minimize risks, seize new opportunities and take specified actions in an exemplary manner. The most crucial of them is sustainable performance evaluation systems. They are based on the measurement of sustainability indicators as quantitative data under common denominators all over the world. Thus, the world is encouraged in this regard and a big step is taken for the future. Universities, where education, research and application studies are carried out for a better future, are among the institutions in which the sustainability theme is most widely used. Educational foundations which are always associated with the business world and other institutions, have brought these performance evaluation systems to their platforms. In terms of rating and evaluation systems, when international examples are examined, it is observed that there are different options used in various regions.

AASHE (The Association for the Advancement of Sustainability in Higher Education), is an inter-university sustainability platform widely used in United States of America. In addition, this formation has a rating system called STARS (The Sustainability Tracking, Assessment, and Rating System). The platform can be followed by all universities from all over the world therefore it is considerably beneficiary for such improvement purposes. A similar platform, THE (times Higher Education) Impact Rankings Methodology carries out the sustainable performance evaluation measurement of universities developed under the 17 SDG titles determined by the United Nations as Sustainable Development Goals. Connected to each SDG, there are 243 indicators particularizing all disclosures. Various universities participate in this evaluation systematic from all parts of the world, and the sustainability reports of many universities can be examined on their database. The key instrument of the above-mentioned systems can be defined as sustainability reporting which communicates institutions’ performance and how their activities impact the environment and many other aspects of society. GRI (Global Reporting Initiative) is the oldest system known in the sustainability reporting of all institutions and organizations on the international platform, with its specialized standards for diversified amounts of sectors. Although GRI Standards are the world's most widely used ones for sustainability reporting, it doesn’t have a specified standard for educational organizations. However; because of its inclusively detailed structure, reports belonging to any organization can utilize the GRI framework.

ITU Sustainability Office was established by ITU Rectorate to gather sustainability-related activities under a single common roof. Projects, events, social awareness studies, and every step of the reporting process are carried out by the office team studiously. The main shareholders of our report-writing process are the sustainability commissions and external stakeholders. With the aim of collecting correct and efficacious sustainability data of ITU, we collaborate with experienced, trustworthy institutions. In addition, environmental and social impact thematic commissions which consist of experts from the academic staff of ITU were charged by the Rectorate as an integral part of the Sustainability Office.

For each impact category, in order to provide clear, correct, and appropriately detailed data, ITU created a specialized data collection program called ‘Data Bee Hub’. Members of the above-mentioned commissions, upload data according to their fields of study to this system. Besides gathering related information systematically, it also helps to constitute integrity among various types of data which belong to many different impacts. The methodology of the ITU Sustainability Report is circled around methods that are conducted by two most known and essential standards in sustainability reporting, THE Impact Ranking Methodology and Global Reporting Initiative.

In this respect, it is ensured that provided data is comparable with their equivalents globally. Throughout a year, collected data by experts are represented according to indicators of THE Impact Ranking Methodology.

When it comes to presenting collected data properly and achieving high quality, the reporting principles of GRI were used as a guide during the process. Accuracy, balance, clarity, comparability, completeness, sustainability context, timeliness, and verifiability are the principles that we applied with care.

On the other hand, as an educational organization, reporting procedures should consist of disclosures with a meaningful order. Reporting one year's sustainability-related performance in accordance with GRI standards is possible only by following the instructions provided in GRI 2 and GRI 3. Every disclosure of our report is decided according to these extensively detailed guidelines. From governance to physical issues, while contextualizing the general circumstances of ITU, we utilized GRI 2 which has obligatory necessities and optional parts. Due to this report being written by using GRI standards, every mandatory explanation was provided transparently. Main and sub-commissions consist of our special experts who have the ability to analyze the context of our organization, firstly identified actual and potential impacts of ITU. They categorized the significance of detected impacts objectively. The prioritization process of the impacts is conducted by making a survey among our sustainability commissions, the Rectorate and the Sustainability Office. The most important ones are selected as material topics that constitute the core of this report.

They are also assessed according to indicators of THE and our progress toward delivering each of 17 SDGs is shown in the results of recent Impact Rankings. In this way, ITU’s sustainability progression is being verified by a universal system which is calibrated around indicators.

In the process of building this report, we referenced standards from GRI and THE Impact Rankings. To have a more understandable and sustainable reporting procedure, we created a matrix including THE indicators and corresponding GRI standards as a list at the end of this report.

For more information on ITU’s sustainability initiatives, please visit our [website](#) or contact us directly: sustainability@itu.edu.tr

THE Impact Methodology

ITU Sustainability Report 2022

GRI Standards



2022 in Numbers

Number of students

Undergraduate
Postgraduate



14629 students received financial aid

250.000+ alumni with
5158 graduates this year

Disabled persons



Students: 40

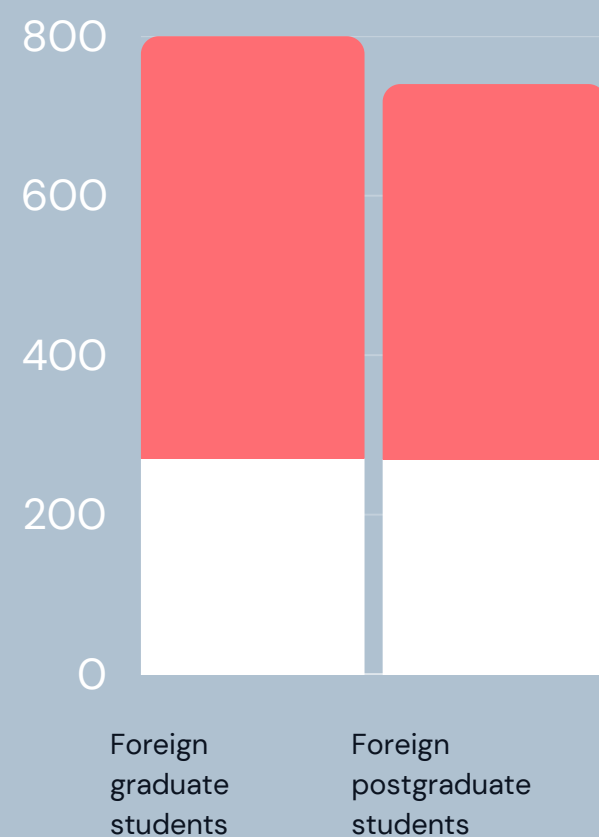


Staff: 71



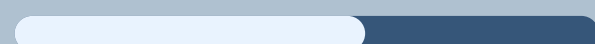
International students

Female
Male



Senior staff: 490

Male



Female



Expenditure

8000000000

6000000000

4000000000

2000000000

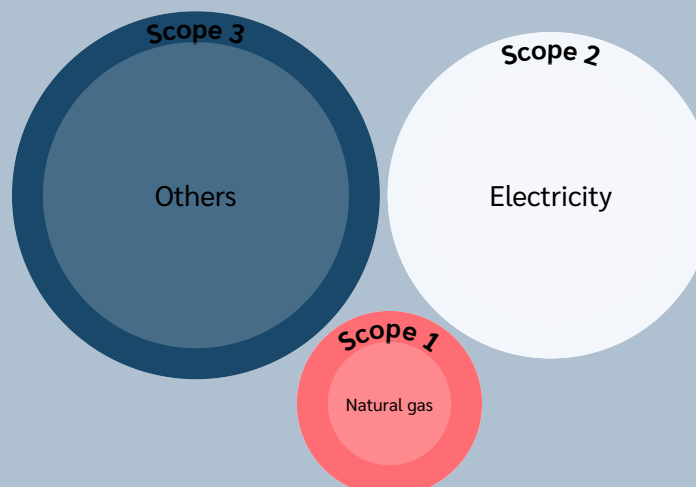
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Medicine

Arts & Humanities / Social Sciences

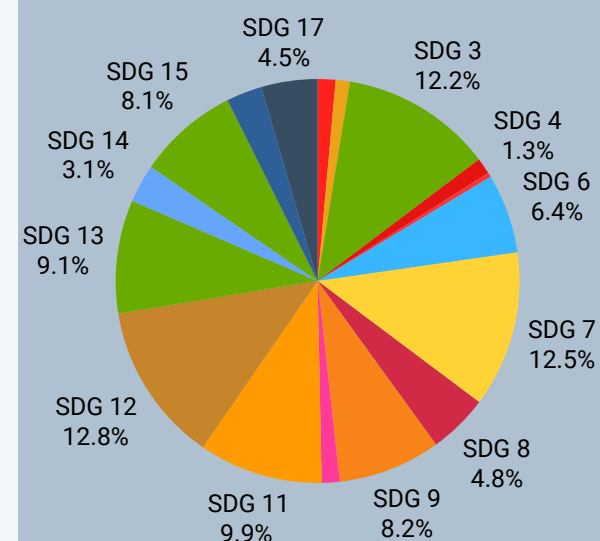
STEM

Emissions



Research

The publications, projects, theses, organized events, congress and symposium participations, journal duties, awards and lessons in 2022.



Number of university spin-offs: 60



Staff

Female Male

2500

2000

1500

1000

500

0

Academic staff

Administrative staff

Contract staff

Permanent worker

4%
refugees
in foreign
academic
staff.

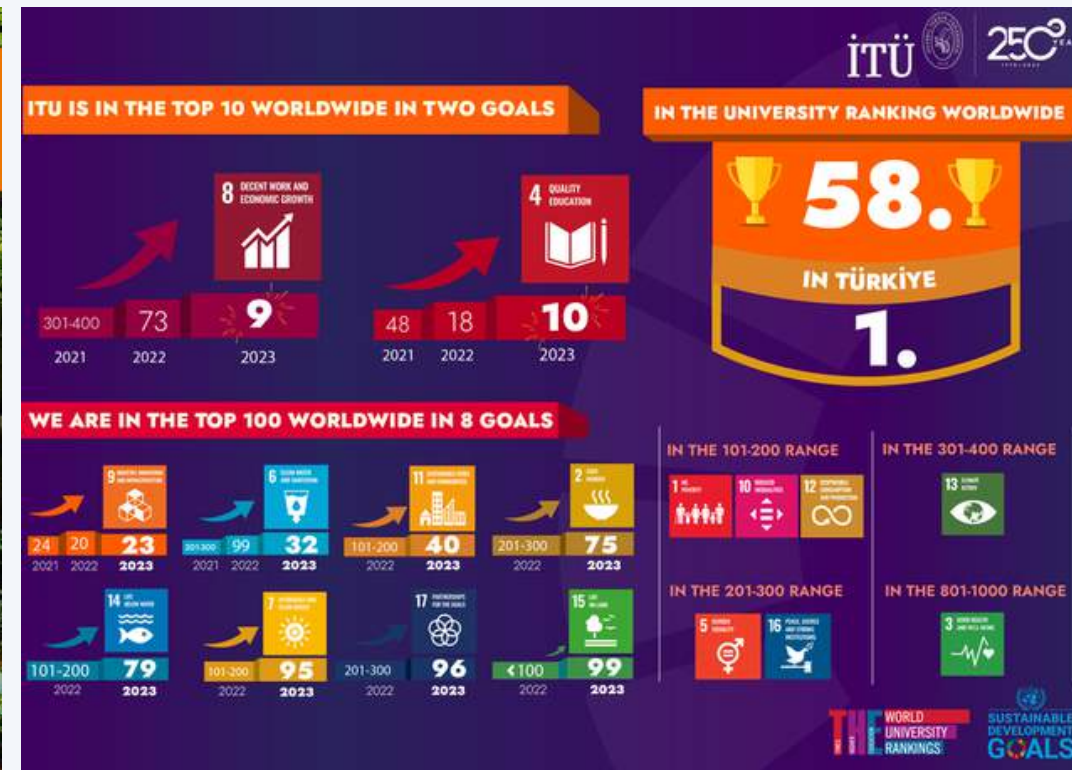
All of the employees are on secure contracts which encompasses over 24 months.



SUSTAINABILITY RANKINGS



THE MOST SUSTAINABLE UNIVERSITY IN MIDDLE EAST
UI GreenMetric Rankings 2023



58TH MOST SUSTAINABLE UNIVERSITY
THE Impact Rankings 2023



221ST MOST SUSTAINABLE UNIVERSITY
QS World University Rankings: Sustainability





GOVERNANCE

ABOUT ITU

ITU is a government university under the Republic of Türkiye Higher Education Institution that has been extending its facilities since its foundation in 1773. This study includes information from five ITU campuses as listed on the left.

Undergraduate programs in 13 faculties and graduate and doctorate programs in 7 institutions are provided on 5 separate campuses in the heart of Istanbul. Both Turkish and English languages are used as mediums of instruction. Some departments provide 100% English education and departments that provide 30% English education.

Since 2021, ITU is an [EELISA](#) (European Engineering Learning Innovation and Science Alliance) European University that has received funding from the European Union's Erasmus+ program.

Following the 2030 Agenda for Sustainable Development and all SDGs, EELISA strives to reform European higher education while improving ties between engineering and society.

MANAGING OUR OUTCOMES

The UEB and the Senate consider the sustainability outcomes through **overseeing** activities in education, research, and management of ITU. The **effectiveness** is reviewed by the UEB which meets every week or every other week and the Senate meets every two to three weeks.

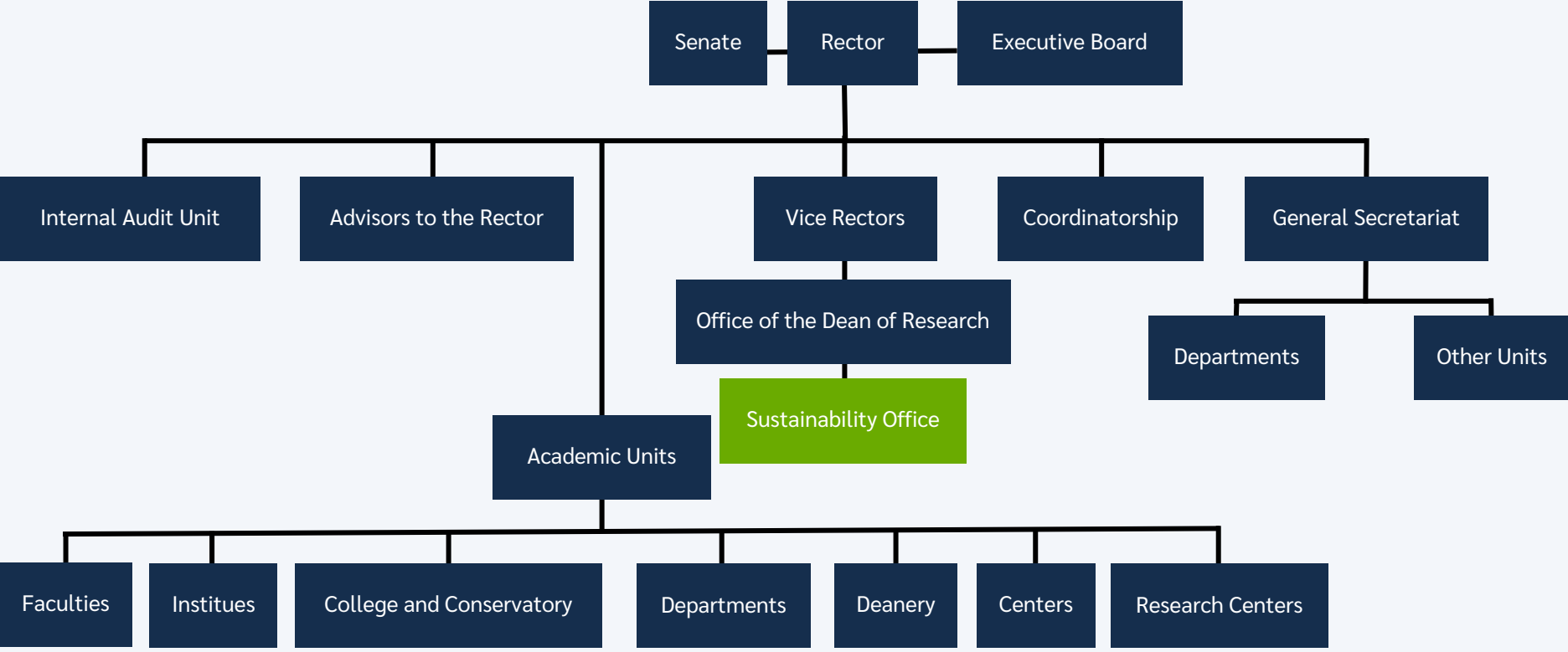
Quality assurance in education at ITU is mainly based on a **Continuous Quality Improvement** (CQI) system. The CQI system is based on a two-loop outcome assessment and feedback procedure. According to the CQI system, each course must define its role in satisfying the **educational** objectives and outcomes. Each program decides on its educational objectives together with stakeholders by taking into consideration the mission of the institution and department, **stakeholder** inputs, and feedback from the process.

For evaluation of the **performance**, a questionnaire is sent to graduates at defined periods after graduation to measure the expected educational objectives.

The Senate Education Committee also conducts a **questionnaire** on the web for each course every semester. This is intended to give an overall idea of the course concerning its standing in the University. All of these activities are documented. At present, the assessment of the CQI system is being realized by using an ABET EC2000 substantial equivalency accreditation.

GOVERNANCE STRUCTURE

The Rectorate, along with the University Senate and the University Executive Board (UEB), is ITU's highest governance body. The UEB, composed of the rector, vice-rectors, deans, and three **elected** members of the University, is in charge of the day-to-day operations of the University. The Senate is composed of the rector, vice-rectors, deans, directors of all institutes, and one senator from each faculty elected by the Faculty Board. The Senate is the highest **academic council** of the University. Both the Senate, UEB and the Faculty Executive Boards are constituents of the Faculty Boards. These committees are in charge of making decisions and overseeing **management**.



Rectors of all universities in Türkiye are selected for a four-year term by the Presidency of the Republic of Türkiye. In ITU, the rector, appointed by the President of Türkiye, appoints three (currently four) vice-rectors whom each has one of the following primary **responsibilities**: 1) research, industrial relations, entrepreneurship and revolving fund, 2) student affairs, educational matters, cultural and artistic functions, and judiciary matters, and 3) construction, infrastructure development, utilities, continuing education, and sports. Competencies relevant to the impacts of the organization of the rectors are explained in **detail** on the official [website](#) of the Council of Higher Education.

ITU believes in **quality culture and quality management** in all aspects of the University system. During the past ten years of **change** in management thinking, the University has realized that physical and institutional **advancements** are not very difficult but the most effective way of developing human resources is by quality-management systems. ITU believes in quality-**assurance** systems at the university, national and European levels. ITU academic staff is involved in the establishment of a non-government national accreditation system for engineering programs, namely the **Engineering Evaluation Board**.

The **transition** of management has been successful in reviving the University. The alumni have started to play an **active** role in supporting and contributing to University policies. The State Planning Organisation and Treasury responded with support of extensive projects of ITU.



ITU Ayazağa Campus, Rectorate Building, 34469 Maslak-ISTANBUL



ITU Mechanical Engineering Faculty, Gümüşsuyu Campus 34437, Gümüşsuyu-İSTANBUL



ITU Maritime Faculty, Tuzla Campus 34940, Tuzla-İSTANBUL



ITU Taşkışla Campus, 34437, Taksim-İSTANBUL



ITU Faculty of Business, Maçka Campus 34357, Maçka-İSTANBUL

STUDENT REPRESENTATION

ITU's management includes student **representation**. Each department is represented by a postgraduate student who is also a research assistant. The University Research Assistant Representative is elected by **voting** of faculty representatives. The Faculty Research Assistant Representative has the authority to represent the Faculty Administrative Board during the management phase.

The student council president is also represented in the University Senate. The dean and a notable academic member chosen from the faculty have the right to represent the faculties in the senate. The ITU senate also includes the secretary general as a non-faculty staff representation.

The management recognizes independent student **unions**. The Student Council is an official unit affiliated with the Rectorate, which observes student rights in meeting and developing the educational, health, sports, and cultural needs of students at universities. Student Representatives at ITU are determined by **election**. Student Representatives come together to form the Faculty Student Representation Boards and ITU Student Council.

The students of ITU take active roles for the sustainability of the university. Environmental Engineers' Club and ITU EELISA Student Club are some of the clubs focusing on SDGs

REFUGEE STUDENTS

There were **1640** foreign students in ITU in 2022. ITU students have established an International Students Club which is the official **representative** of the international students within ITU. The club has had over 600 members from more than 22 countries, including **refugee** students. The aim is to host social, educational and linguistic events on a weekly basis to educate and provide students with **opportunities** to feel more engaged and benefit from **experiences** they would otherwise be unable to undergo.

FINANCES

As a **public university**, ITU is committed to ensuring the responsible consumption of its funds. ITU follows public legislation to determine the **payments** and **remuneration policies**. All employees of the state universities are public employees and the government fixes their salaries as well as the yearly increases in their salaries. ITU 2022 **income** distribution and **expense** distribution are available in the 2022 Annual Report which is published online. The employment practice of ITU is available [online](#).

ITU supports **income-generating** activities in the University through **projects, consultancy, part-time lecturing**, most notably, **Technocity**, which is crucial in improving staff income. Detailed information is available [online](#).

In addition, the university has four more sources of income: income from the **services** provided by the University to third parties; student **fees** towards highly subsidized services; research **funds**; land and building development **projects**. These are also subject to laws, rules, and regulations similar to those concerning the state-provided budget. In addition to the general structure of funding in state universities, ITU has two foundations (ITU Foundation and ITU Development Foundation) contributing to the University through alumni **donations** and **fundraising** activities. The funds from the two foundations are not subject to strict state budget rules, and they provide a measure of flexibility to the management system.

RESPONSIBLE PURCHASE

ITU prefers to use products from **local sources**. The Food Service System of ITU prioritizes local producers. Safe and Sustainable Food Management Directive regulates the responsible purchases which are [available](#).

STAFF

In 2022 the total number of **academic staff** in ITU was 2290, in 2023 this number raised to 2340. The %45,88 of the academic staff was female and %54,12 was male.

The total number of **administrative staff** was 1055 with 40,28% female and 59,72% male staff.

Source: [ITU Activities Report 2023](#)

Our efforts in reduced inequalities in employment includes having;

- 694 senior academic staff
- 64 staff with disabilities,

All of the employees are on secure contracts which encompasses over 24 months

GENDER EQUALITY

The ITU **Gender Equality Policy** describes the organization's intolerance of sexual harassment and gender inequality. ITU is steadfast in its policy of not discriminating against its employees based on religion, gender, or age. ITU publishes its non-discrimination policy against women.

ITU eliminates gender discrepancies in **payment** scales for all employees, and it also ensures that pay scales are not computed based on gender.

Government's **maternity** and **paternity** policies, that support women's participation are detailed in our plan. ITU offers a variety of childcare services to students and staff.





Thanks to the application, ITU members can share with each other the problems they face, monitor the developments and contribute to the solution processes. Milu also informs its users about social responsibility projects and offers them the opportunity to get involved in these efforts.

Milu is an initiative supported by many prestigious institutions such as ITU Çekirdek Pre-Incubation, BTM Pre-Incubation, Startup Wise Guys Pre-Accelerator, KUGİM UP 22, Microsoft for Startups Founders Hub, Zemin İstanbul, ÜNLÜ & Co Women Entrepreneurs Academy.

COMMUNICATION OF CONCERNS

Positive **relations** are established between the University and stakeholders to prevent conflicts of interest. The vision is delivered to the stakeholders and continuous **feedback** is collected from them in order to anticipate and mitigate any disputes. To ensure beneficial **relationships**, the Higher Education Institutions' Principles of Ethical Conduct are observed. In the event of a **conflict**, the University will adhere to the published policies.

The tools for obtaining guidance and voicing issues are conveniently accessible via internet platforms. Concerns of students, faculty, and stakeholders are communicated to appropriate offices using an online "help ticket".

The ITU uses an online mechanism to handle and share any issues or complaints that arise. The technology is available to anyone who wishes to **communicate** with ITU departments. The Help Ticket statistics are also available on the website.

In case a stakeholder needs to communicate a critical concern they can be reached to the rectorate by creating a help ticket to the general secretariat. The nature of the help tickets is determined by the categories offered on the website.

The user can also see the previously asked questions. If the user has a unique question, they can create a Help Ticket. Users can choose any department to send their questions, concerns and advice.



ETHICAL CONDUCT

As a public university, ITU **abides** by the National Laws on Crime, Corruption, and Bribery. ITU staff manual mentions the salary that all staff and administrative staff will receive according to the economic development **policy** of the Republic of Türkiye. ITU recognizes labor rights for all workers which guarantee **decent** work. Therefore, it strongly supports policies that **eliminate** everything related to forced labor, modern slavery, human trafficking, and child labor within its institution, in Türkiye, and around the world.

Since ITU is a state university, it guarantees the equal **rights** of the employees in the event that the activities carried out in public places are carried out by third parties. Staff can **appeal** for their rights and/or pay.

Academic freedom is ensured through the Directorate of Higher Education's **Ethical Behavior Principles**. Subclause 1 of Article 1.2 in these principles is on "academic **freedom** and autonomy". Scientists working at the university are able to share their ideas and knowledge with society and have a guiding feature, both by choosing their study subjects and by presenting the subjects on which they work and are experts to society and the public. ITU offers a **neutral** and safe environment on different campuses of the university to discuss politics-related issues.

Our University follows the National University Entrance Exam. Therefore, there is no **discrimination** in accepting students. ITU registers students based solely on the Exam results.

ITU publishes its university governance measures and employment practices on its website. Compliance with laws and regulations is carried out according to The Higher Education Institutions Principles of Türkiye. Additionally, the employment practices of ITU and the Gender Equality Plan are available online.



ITU 250th Anniversary Chorus is in Azerbaijan



International Scientific Collaborations

ENGAGEMENT



SUSTAINABILITY EDUCATION

Our University is deeply committed to educational outreach activities and community engagement. At our institution, we are committed to providing an inclusive and equitable environment for lifelong learning. For good practices, we have several policies reflecting our dedication to ensuring that individuals from all backgrounds and abilities have equal opportunities to engage in continuous education. These [policies](#) outline our principles, practices, and ongoing efforts to remove barriers and create an [accessible](#) and supportive learning environment for everyone. ITU is firmly dedicated to promoting gender [equality](#) within the fields of science, engineering, and technology.

ITU is a vibrant hub for lifelong learning. We are offering diverse opportunities for personal (i.e. art courses or workshops by ITU SEM) and professional (i.e. certificate courses by SEM or [free educational events](#) by different parts of the university) growth. With expert faculty and research, ITU empowers lifelong learners to enrich their lives and contribute to societal progress.

In 2022, ITU Continuing Education Center (SEM) provided a total of [265 community educational events](#) within 41 public programs on professional development, art and foreign language education that are open to the general public.

ITU's [Open Courseware](#) initiative is a forward-looking program aimed at making high-quality educational resources freely accessible to learners worldwide. By providing open access to a diverse range of courses and educational materials, ITU strives to promote lifelong learning, foster global knowledge sharing, and support the pursuit of academic and professional growth. ITU offers a diverse range of online courses and provides free access to lectures through the ITU AKE (Open Source Education) YouTube Channel.

ITU has shown its commitment to meaningful education around the SDGs by increasing the number of [courses](#) related to SDGs. There are **100+ sustainability courses** university-wide at all levels. There are both mandatory and elective sustainability courses in various departments. Most crucially, there is a [SDG course](#) which is mandatory for undergraduate students of every department. The sustainability courses are listed for easy access of students on the website of the Sustainability Office.



OPEN ACCESS LIBRARY

Organized at

5 campuses and

8 locations

the ITU Library System actively serves as a vital "stakeholder" in the educational, teaching, and research activities conducted at ITU through contemporary library services. ITU Libraries possess a rich collection of information and documents, including

1 million publications,

564,923 e-books,

96,978 e-journals,

42,596 visual materials,

6,000 rare works,

7,500 maps, over

200 databases, and

5 million electronic theses.

EELISA

ITU as a EELISA European University partner, offers its students online courses on SDGs from other EELISA Universities, including;

- Budapesti Műszaki és Gazdaságtudományi Egyetem
- École des Ponts ParisTech
- Friedrich-Alexander-Universität Erlangen-Nürnberg , Scuola Normale Superiore
- Scuola Superiore Sant'Anna
- Universitatea Politehnica din București
- Université Paris Sciences et Lettres
- Universidad Politécnica de Madrid
- Zürcher Hochschule für Angewandte Wissenschaften



[EELISA SusCo](#) (Interdisciplinarity for Sustainable Competences in Engineering Education) Community, of which ITU Sustainability Office is also a member, visited ITU in October 2023. In the meetings held during the visit, the ITU Sustainability Office made an introductory presentation and workshops were held for future partnerships.

The Sustainability Master's Degree, launched by ITU in the 2023/2024 academic year, was introduced to the EELISA SusCo Community. Following the introduction, academicians from EELISA universities attended the SUS503E course as guest speakers.





INTRODUCTION

GOVERNANCE

ENGAGEMENT

RESEARCH AND INNOVATION

SOCIAL IMPACT

ENVIRONMENTAL IMPACT

TABLES

STUDENT CLUBS

In the vibrant ecosystem of our university, student clubs play a pivotal role not only within the campus but also beyond its boundaries. These clubs are more than just extracurricular organizations; they are dynamic engines of change and community engagement.

ITU Volunteering Club's project called 'Bir Başka Yol' (Another Path) aims to support high school students facing financial or personal limitations in showing interest in education and attending private tutoring. In line with the project, a team of 25 university students dedicated their time from February 3, 2022, to June 29, 2023, programmed basis to assist 11th and 12th-grade high school students in their university entrance exam preparation.

Tears of Water is a civil society initiative carried out by ITU Environmental Engineering Club students since 2008. In this project, our students aim to create environmental awareness in children at an early age. Therefore, they provide education to our young friends at primary schools, who are the future. They are the most important part of creating an environmentally conscious society.

The aim of the ÇMK Academy project is to introduce environmental engineering and ITU to high school students. ÇMK Academy also offers a two-session education about the circular economy, life cycle analysis, zero waste, sustainability in fashion, water footprint and ecological living. On Friday, June 3rd, 2022, CMK Academy was at Saryer Vocational and Technical Anatolian High School. Presentations were given on sustainability in education, zero waste, life cycle analysis, and water footprint topics to high school students by ITU Environmental Engineering Club students.

ITU UNIFEB Club successfully organized the 6th edition of the 'Çocuklar Gülünce Aydınlik Gelecek Projesi' (the Bright Future When Children Smile Project) in Izmir from May 26 to May 27, 2022, with the participation of 40 people. As part of the project, our students who visited the school had an enjoyable time engaging with the children. At the end of the day, they also distributed gift packages they had prepared to the students of the village school.



DIALOGUE WITH STAKEHOLDERS

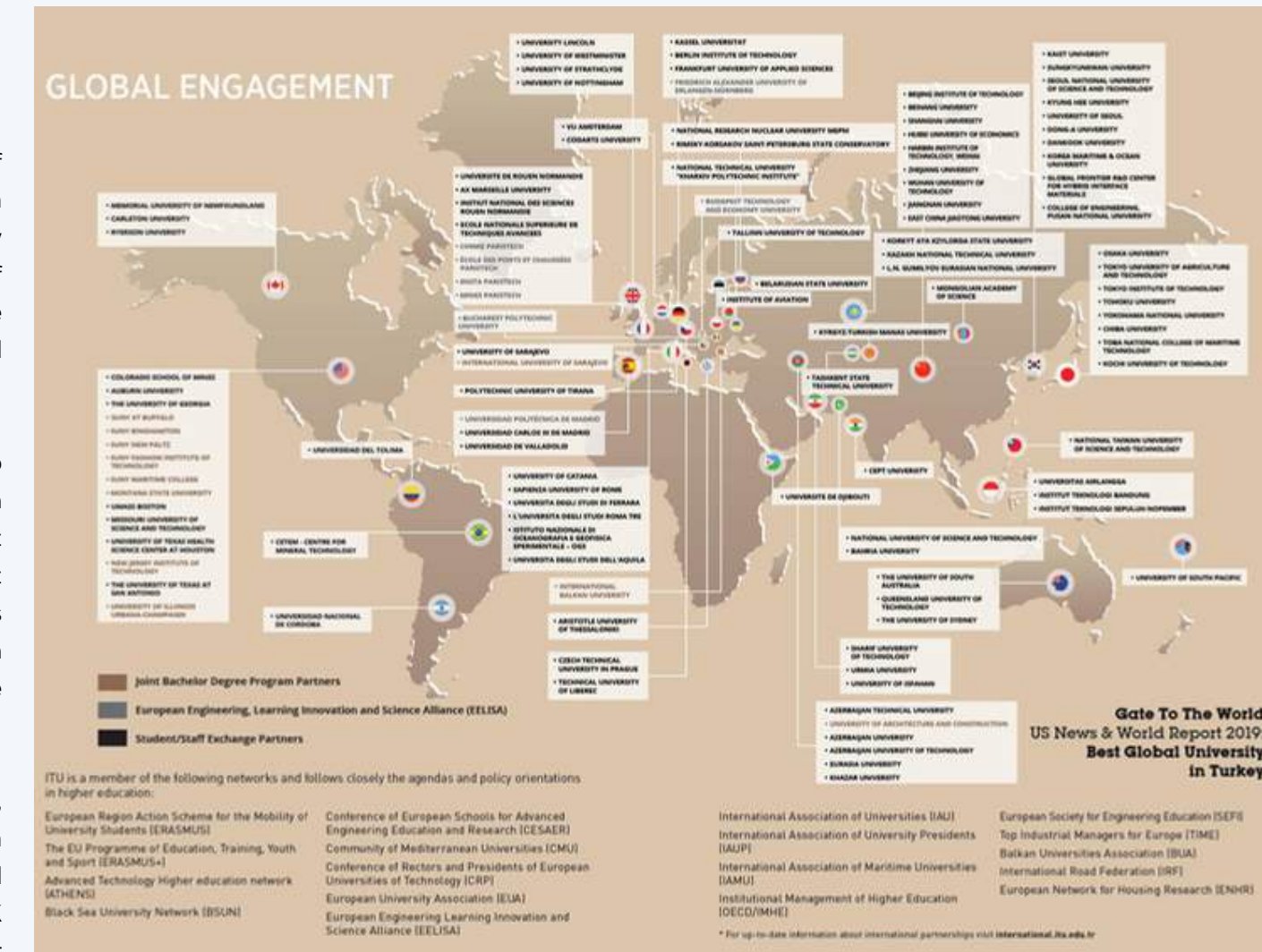
ITU collaborates with numerous organizations to create a community of sustainability. ITU has established relations and signed cooperation agreements in different fields with local governments, ministries, many official institutions and organizations, as well as representatives of Turkey's leading private sector and non-governmental organizations. The policies and procedures of these cooperation protocols are signed differently for each partner.

ITU is a research university. It attaches particular importance to strengthening its technical and technological presence that will nourish this quality. ITU, which has a very rich research and development asset that will enable students, young researchers and academics to carry out scientific work, has nearly 30 education and research centers as well as more than 400 laboratories. These centers and laboratories, which enable scientific research in many different fields, also constitute important meeting points for interdisciplinary work.

Industry partners, alumni, government, policymakers, local community, non-governmental organizations, public institutions, suppliers from whom the University purchases products and services, regulatory and supervisory institutions, including accreditation institutions such as YÖK (Higher Education Council) and ABET (Accreditation Board for Engineering and Technology) are among our stakeholders.

The engagement with these groups is ensured through means of surveys, workshops, activities and joint events. The results were used for the strategies and objectives sections of the Strategic Plan 2022-2026. The Importance-Impact matrix approach was used to prioritize the identified stakeholders of our University. Evaluations were made by the Strategic Planning Subcommittee using the External Stakeholder Questionnaire.

ITU provides education on the policy by cooperation protocols are made with local governments. Many academicians in ITU provide consultancy services and project partnerships with government departments and public institutions. In addition, protocols have been signed with many public institutions to start and manage joint projects.



SUSTAINABLE TECHNOLOGIES SUMMER SCHOOL

In the summer of 2023, the “International Summer School on Transdisciplinary Collaboration of Sustainable Technologies (TCST)”, organized by the Consortium of four T.I.M.E (Top International Managers in Engineering) member universities, took place. The Consortium consists of ITU, Technische Universität München (Germany), Xi'an Jiaotong University (China) and the Aristotle University of Thessaloniki (Greece)

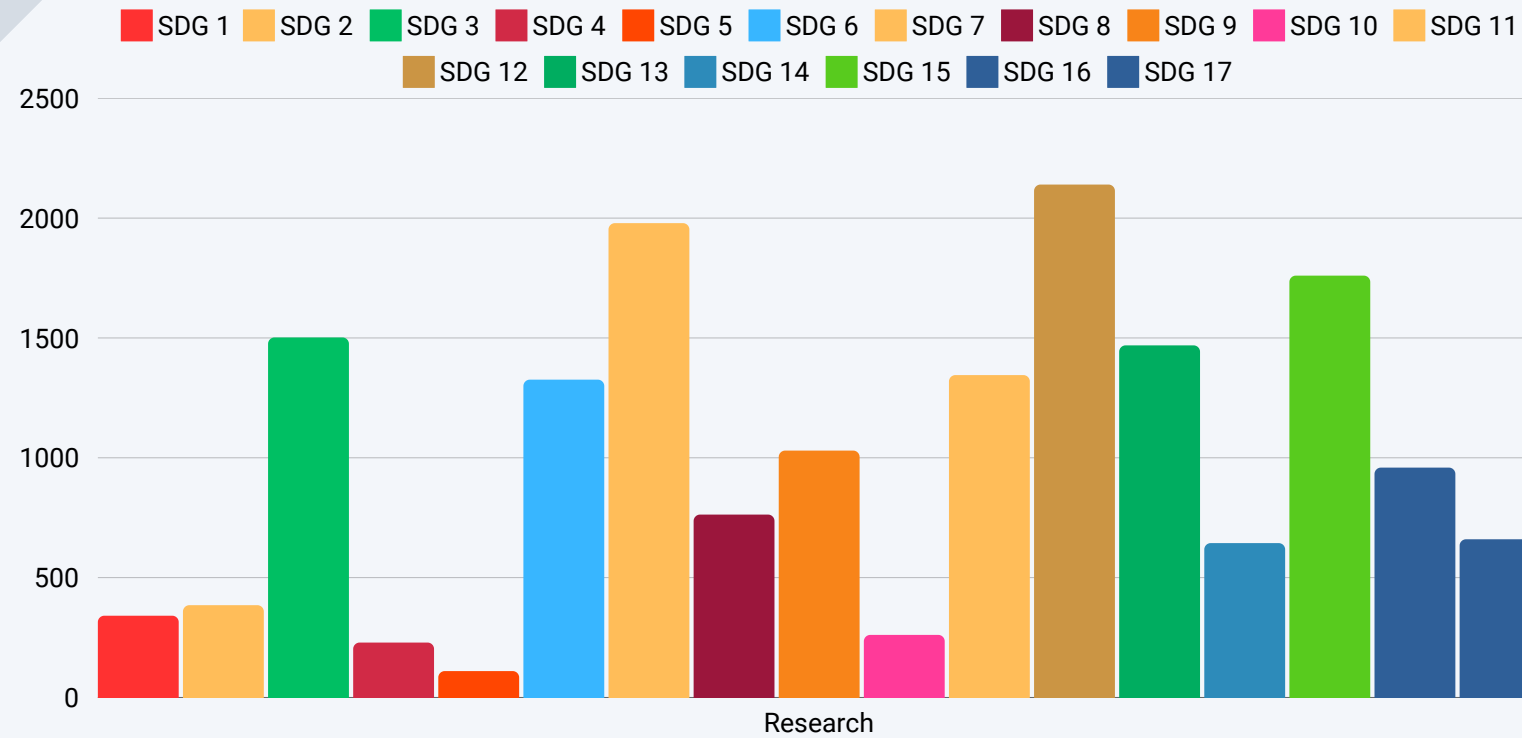
During the summer school open to students, industrial partners, young researchers and engineers, the focus was on the sustainable use of innovative materials and technologies that contribute to intelligent solutions for a clean environment, sustainability, and digitalization.



RESEARCH AND INNOVATION

SDG RESEARCH

ITU has kept funding numerous projects based on SDGs. The number of research activities on various SDGs are illustrated in the figure.



The researchers' contributions to UN Sustainable Development Goals are published on the ITU page. "Sustainable Development Goals" increases the impact by ensuring that publications, projects, theses, and similar activities are visible at the international level.

INVENTIONS OF 2023

New patent registrations of ITU faculty members were obtained from countries such as Türkiye and the USA. The patents can be listed as:

- An Economic Method for Biological Remediation of Petroleum Contaminated Soils
- Invention that reduces carbon fiber coating to a single step
- A new production method for forward osmosis membranes in water treatment
- A fire-resistant, conductive and thermally comfortable fabric that protects against electromagnetic radiation
- A new mechanism for valve control in vehicle engines
- New chemical compounds alternative to Alcian Blue dye
- Method that enables simultaneous production of multiple active enzymes in the cold
- Structure that protects against impacts from objects with kinetic energy

TEKNOFEST AEROSPACE AND TECHNOLOGY FESTIVAL

Teknofest, organized for the sixth time this year, took place at Istanbul Atatürk Airport between April 27 and May 1, 2023. Our university returned with a total of 11 awards from the festival, where many shows and races were held in the fields of aviation, space and technology. Project teams consisting of ITU students won a total of 11 awards and degrees, including performance, design and best presentation. Our project teams, which won first place in the Technology for Humanity, Swarm UAV and Agricultural Unmanned Land Vehicle competitions, won a total of eleven awards, including two second, third and performance awards each, as well as one design and best presentation award each.

ITU hosted Teknofest competitions this year as well. Our Olympic Swimming Pool was the venue for the Unmanned Underwater Systems Competition.

17 project teams from ITU participated in the aerospace and technology festival TEKNOFEST, which was held for the first time at Ankara Etimesgut Airport between 30 August and 3 September. The festival, organized by the Turkish Technology Team Foundation (T3 Foundation) and the Ministry of Industry and Technology, was visited by around one million people. ITU stand became the center of attention of technology and science enthusiasts.

ITU students also took part in TEKNOFEST, the aerospace and technology festival held at İzmir Çiğli Airport between 27 September and 1 October. ITU students were awarded for their achievements in the technology and entrepreneurship competitions organized as part of the festival, which hosted various activities including air shows, educational workshops, air and land vehicle exhibitions, and simulation experience areas.

PROTOCOLS IN 2023

ITU signed a protocol with Anadolu Isuzu within the scope of MasterBee, the first and only program in Türkiye that offers its students the opportunity to take graduate courses, internships and early graduation during their undergraduate education.

As a result of the protocol signed between ITU and Dolby Institute, ITU Dr. Erol Üçer Center for Advanced Studies in Music (ITU MIAM) became the first and only Turkish university to cooperate with Dolby Institute. ITU MIAM Sound Recording Studio control room, which has been serving our country's music industry for recording and production as well as education since 2000, was made ready for three-dimensional sound productions with the intense efforts of ITU graduate students and academic staff, and became the first and only Dolby certified studio among the universities in our country after being calibrated by the Dolby field team.





CONFERENCES

The international conference on “6 February 2023 Kahramanmaraş Earthquakes”, organized with the cooperation of ITU, UNESCO (United Nations Educational, Scientific and Cultural Organization) and IPRED (International Platform for Reducing Earthquake Disaster) at the Süleyman Demirel Cultural Center in ITU Ayazağa Campus on September 27, 2023, featured scientific talks on the social consequences of the earthquakes and suggested solutions.

Melih Han Bilgin, General Manager of Turkish Petroleum Corporation (TPAO), who was a guest at the “Energy and Our Common Future” Conference organized by ITU Faculty of Mining, shared the importance of sustainable use of energy resources with ITU students and faculty members.

The Additive Thinking Conference, organized by the ITU Additive Manufacturing Team, brought together expert academicians and leading names in the industry with those interested in the field.

The International Materials Technologies and Metallurgy Conference (MTM 2023), held for the third time this year with the support of TMMOB Chamber of Metallurgical and Materials Engineers Training Center (METEM), was held between 11-13 October 2023, at the Süleyman Demirel Cultural Center of ITU Ayazağa Campus, with the participation of experts and academicians.

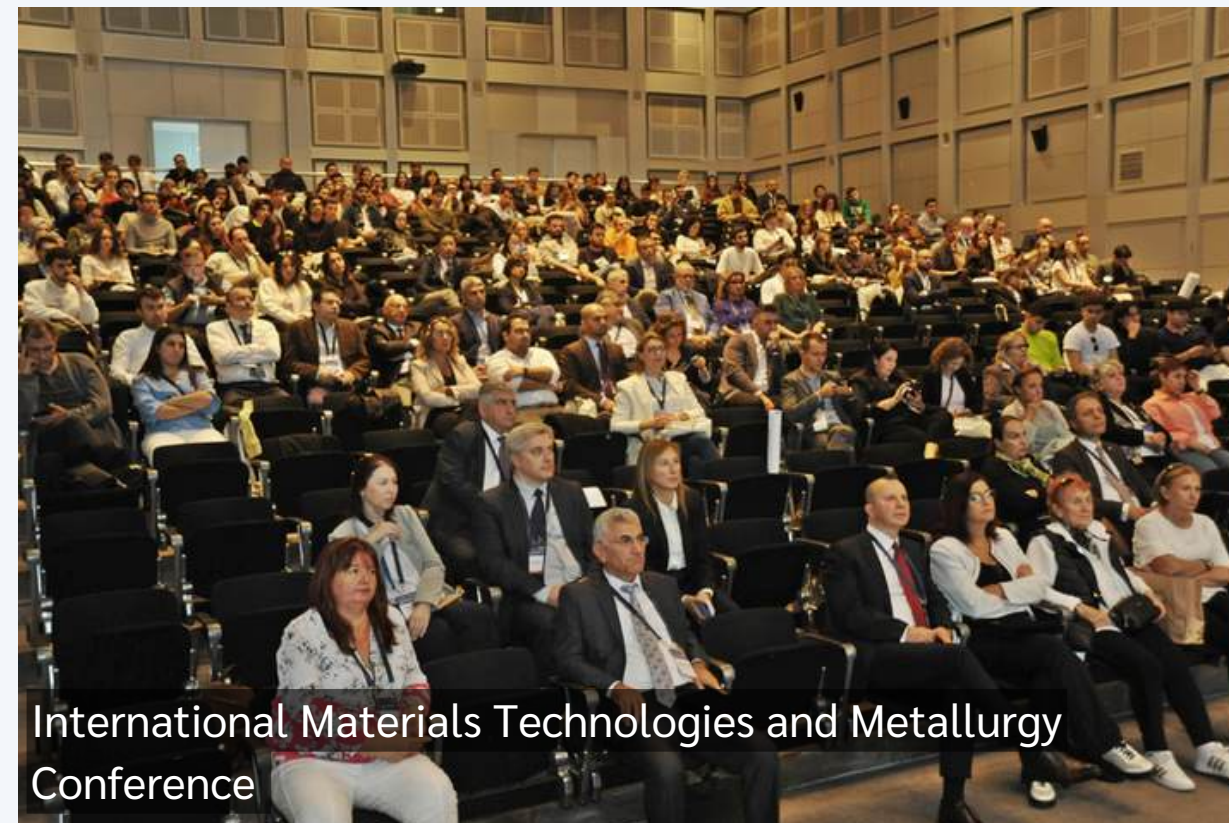
ITU academics participated in the “1st EELISA International Conference” held on October 5-6, 2023 with their presentations. At the meetings and ceremony organized simultaneously with the conference, signatures were put for the second phase of EELISA.



Additive Thinking Conference



6 February 2023 Kahramanmaraş Earthquakes



International Materials Technologies and Metallurgy Conference



1st EELISA International Conference



Energy and Our Common Future Conference



SYMPOSIUMS

The "Future of Food Symposium", organized within the scope of World Food Day, brought together experts on the subject at ITU Ayazağa Campus on October 13, 2023.

The 7th MEMTEK International Membrane Technologies and Applications Symposium, held at ITU Ayazağa Campus between 17-19 October, brought together many scientists who are experts in the field.

Water in Istanbul project, of which ITU is one of the stakeholders, was introduced to the world with an international symposium held at Taşkışla on March 14, 2023. The project aims to investigate water management in Istanbul from the Byzantine and Ottoman times to the present day, and to develop sustainable and environmentally friendly technologies to address current problems.

"Transforming the Built Environment: Accelerating Circular and Digital Transition Symposium" organized by ITU Center for Advanced Studies in Architecture at ITU Taşkışla Campus on 21 November 2023 hosted those interested in the field.

ITU hosted the 3rd Mediterranean Geosciences Union (MedGU) Symposium on 26-30 November 2023. The symposium, dedicated to the memory of Prof. Dr. Aral Okay, who recently passed away, brought together 400 scientists from 91 countries.



ITU RECTORATE LIBRARY OPENED

ITU continues to implement new projects on its campuses to improve social opportunities for its students. “ITU Rectorate Library” was opened to the use of students at our Ayazağa Campus with a ceremony held on Friday, January 20, 2023.

ITU Rectorate Library was opened for students’ use with a ceremony attended by a large number of academics and students.

The Rectorate Library was inaugurated with a ribbon cutting by the participants including our Rector Prof. Dr. İsmail Koyuncu and the Council of Higher Education (CoHE) President Prof. Dr. Erol Özvar.

Our Rector Prof. Dr. Koyuncu and CoHE President Prof. Dr. Özvar met with ITU students from undergraduate to doctoral level and answered the questions addressed to them. In the Q&A session, which was followed by a large group of faculty members, a wide range of topics were discussed. Many people took the floor in the Q&A session, which took place in a friendly and cheerful atmosphere.



ITU focuses on improving accommodation areas with its investments, as much as it attaches importance to study areas. Yılmaz Akdoruk Guest House, which can be used by ITU students, graduates, academic and administrative staff, as well as guests from outside the university, has been completely renovated and put into service in recent months. Yılmaz Akdoruk Guest House, located on ITU Ayazağa Campus, is one of the facilities established to provide quality and affordable accommodation services at our university and stands out with its structure that focuses on the comfort and safety of its guests.



200
Students capacity at
the new ITU Rectorate
Library



SUSTAINABILITY

M. Sc.

Interdisciplinary, 100% English, Sustainability Master Program will started in the Fall Semester of 2023-24. Graduates from all 4 year engineering undergraduate programs, all 4 year Basic Science and Humanities and Social Sciences undergraduate programs can register to the Program. Total number of applicant was 130 in the first year are 30 students in 2023.

Students of the Sustainability MSc. are encouraged to bridge the gap between industry and academy through their thesis. ITU has ongoing protocols signed with many industry stakeholders that students can benefit from. In addition, our students will be guided to do their thesis with international collaborations within the scope of the EELISA Project.

30

students in the
opening year





ITU Rectorate Library opening



ITU Maçka Campus

SOCIAL IMPACT



OUTREACH

ITU TÖMER was established to teach Turkish to students at ITU, also students from all over the world, and to our academic/administrative staff who want to use the Turkish language effectively in their **social** lives. The **trainings** to be provided in this context are not be limited to ITU students and staff, but open to anyone who wants to learn Turkish and increase their cultural interaction.

The free language learning application for foreign students, of which ITU is one of the stakeholders within the scope of Erasmus + KA2, is now available on Google Play and App Store. The application aims to teach 6 different languages, including Turkish, at A1 level.

Turkish courses towards **refugee** and international students by Turkish Teaching Application and Research Center (TÖMER) established at ITU started in February 14, 2022.

ITU continues their collaboration with DeepMind to provide **scholarships to female students** who are enrolled in selected ITU M.Sc. and Ph.D. programs.

“Mentoring and Study Center” established by ITU Maritime Faculty and ITU Maritime Faculty (YDO) Alumni Association (DEFAMED) was opened.

ITU Library continues its efforts to carry out scientific research in a more transparent and collaborative environment. Within the scope of open science studies, it is aimed to free science by making the publications, data and all details of the research process easily accessible.

ACCESIBILITY & EQUITY

As an institution, our university has a publicly posted admissions policy that is non-discriminatory and explains the rationale for appropriate affirmative action policies in admissions.

Applications and admissions are measured/tracked from underrepresented groups, including ethnic minorities, low-income students, non-traditional students, women, LGBT students, students with disabilities, and newly settled refugee students, and takes planned steps to recruit students/staff/faculty members. There is a diversity and equality committee tasked by the administration to advise on and implement policies, programs and training on diversity, equality, inclusion and human rights on campus.

Mentoring and support programs, accessible facilities for the disabled students are offered. The Disabled Students Unit has a directive that ensures the equity is provided for everyone. There is a Women Studies Centre in Science, Engineering and Technology that follows the equity issues.

As an institution, our university provides public access to buildings, monuments or natural heritage landscapes of cultural significance. Our library and its resources are completely accessible to our graduates, with lifelong free access. ITU has a policy on open access archive.

FOOD

ITU has a **free of charge mental health support** unity, called ITU Psychological Counseling and Guidance Center. There is a directive on health services and sport facilities.

The training series given by ITU PDR Center Coordinator, **Psychological Counselor** Cem Demirbaş, is live on our ITU YouTube channel.

Istanbul Technical University Vocational and Technical Anatolian High School (ITU MTAL) R&D Center Project brought the **simulators** used in naval **training** to the virtual world with ARGEP360. ITU MTAL R&D Center, in order that students do not have any problems while doing dangerous electronic experiments in lessons; developed ARGEP360 to **safely** experience all **experiments** and studies using augmented reality.

In ITU Ayazaga Campus, the **newly opened social spaces** became popular places for our students.

Our university provides **shared** sports **facilities** with the local municipality, **local** people from the surrounding, local community and with local schools. In 2023, the sport activities including Capoeira, pilates, yoga and zumba courses, swimming pool and gives lessons to children and for adults, **sport school** of basketball and football continued.

ITU has a **kindergarten** for the children of student and staff. The policy directive is available for the kindergarten.

WELL BEING

ITU provides various **scholarships** for students who cannot afford their studies during their university life. There are scholarships for students who are successful in the University Entrance Exam and cannot afford their studies. Our university provides **Achievement Scholarship, Athlete Scholarship, Food Scholarship (free lunch) and Necessity Scholarship**. Students also receive computers donated from the graduates' association. The scholarship directive is available online.

ITU is providing **affordable food choices** three times a day and providing free soup (Beeçorba) to students every morning during the week days. All food outlets contain various sustainable food choices including **vegan, vegetarian** and **gluten-free**. Alternative options are available in different cafeterias.

Daily **calorie** values are calculated and announced on ITU Portal, ITU SKS website and ITU mobile application for Dining Halls Affiliated to the Catering Branch Directorate.

There is a directive to ensure safe and sustainable food is purchased and used in the campus.



KAHRAMANMARAS

Earthquakes

6 February 2023

Two earthquakes (Mw 7.8 and Mw 7.7) occurred at 04.17 and 13.24 Turkey time, with epicenters in Pazarcık (Kahramanmaraş) and Elbistan (Kahramanmaraş). Many buildings collapsed and became rubble in 10 provinces.

ITU family acted immediately to bring aid to the affected areas and continued its research and education on the earthquakes throughout the year.

ITU provided personnel and supplies to contribute to the efforts for the earthquake victims. The humanitarian support team sent from ITU worked at the aid center established at Adiyaman University to heal the wounds of the earthquake. A total of 35 ITU personnel, consisting of security guards, cooks and drivers, left for the disaster area on February 9th to support the relief efforts at Adiyaman University. ITU students also worked to gather the various life and aid supplies that were delivered to affected areas.

“As ITU, we will continue to do our best”

Our Rector wished success to the teams that set out to participate in search and rescue efforts in the earthquake area. Prof. Dr. Koyuncu said, “As the Istanbul Technical University Family, we will continue to do our best to support the earthquake victims.”

no.

Aid trucks sent to affected areas

ITU published a comprehensive report covering the following topics:

1. Geological, Geophysical, Geodesy and Geomorphological Preliminary Determinations Regarding the Earthquake
2. Evaluation of Strong Ground Motions
3. Assessment of Structural Damages
4. Evaluation of Future Implications for Urban Planning and Construction Techniques That Can Be Used to Meet the Need for Rapid Housing
5. Evaluation in Terms of Environmental Infrastructure and Earthquake Waste Management



ITU sent two aid trucks, many personnels and academicians to the affected areas.



6 February 2023, Kahraman Maraş Earthquakes



9 February
ITU personnel travel to affected areas.



17 February
ITU published preliminary report on based on site visits.



24 March
ITU published a comprehensive report on the Earthquakes



3 April
Partnership to recycle e-waste from ITU for education devices to be used in affected areas.



25 May
“06.02.2023 Kahramanmaraş Earthquakes: Structural and Geotechnical Observations” seminar.



27 September
"6 February 2023 Kahramanmaraş Earthquakes" conference organized with UNESCO and IPRED.



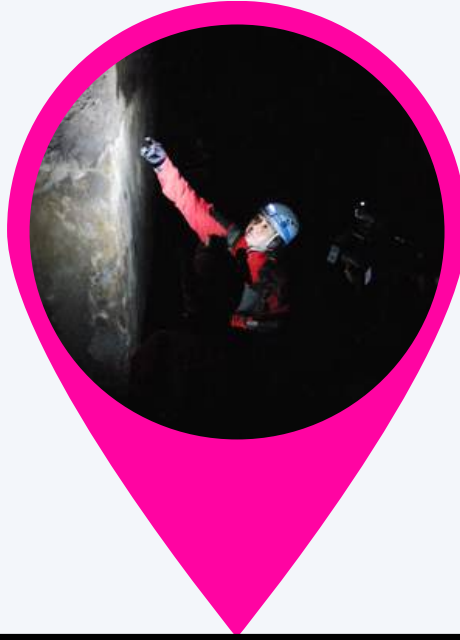
31 October
“Seminar on Rebuilding after Kahramanmaraş Earthquakes” organized by ITU Disaster Management Institute jointly with Sichuan University IDMR from China

SUSTAINABILITY DAYS



8 MARCH 2023 **WOMEN'S DAY**

The "Gender-Sensitive Disaster Management" panel organized by ITU Women's Research and Application Center in Science, Engineering and Technology on March 7, 2023, brought together experts in the field of gender and disaster management.



22 MARCH 2023 **WORLD WATER DAY**

Water in Istanbul project, of which ITU is one of the stakeholders, was introduced to the world with an international symposium held at Taşkişla on March 14, 2023. The project aims to investigate water management in Istanbul from the Byzantine and Ottoman times to the present day, and to develop sustainable and environmentally friendly technologies to address current problems.

ITU the symposium titled "Water in Istanbul and Beyond: Past, Present and Future", where the Water in Istanbul project was introduced, also shed light on the drought problem that threatens our country.



22 MAY 2023 **INTERNATIONAL DAY FOR BIODIVERSITY**

The species living in ITU Ayazaga Campus were recorded at the ITU BioBlitz 2023 event, which was organized for the second time this year by the ITU Biodiversity, Conservation of Ecosystems and Sustainable Use Commission. Students, volunteers and expert academics from different universities identified more than 400 different flora, fauna and fungal species with more than 1800 observation records at the "ITU BIOBLITZ 2023" event held as part of the World Biodiversity Day.



16 OCT 2023 **WORLD FOOD DAY**

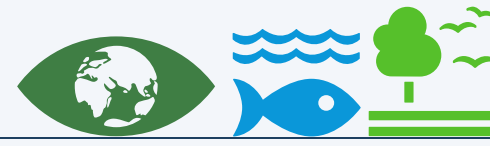
The "Future of Food Symposium", organized within the scope of World Food Day, brought together experts on the subject at ITU Ayazağa Campus on October 13, 2023.

ITU added a new one to its scientific and peer-reviewed journals. "ITU Journal of Food Science and Technology" will share qualified articles written in the fields of food science and technology with the scientific world.

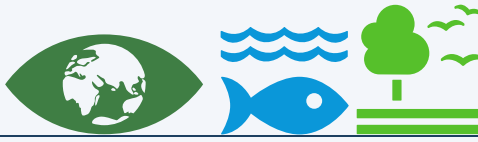


10 DEC 2023 **ITU TRADITIONAL FISH**

The 139th Traditional Fish Day, organized in cooperation with ITU Maritime Faculty and ITU Maritime Faculty Alumni Association (ITU DEFAMED), brought together students, graduates and faculty members at ITU Tuzla Campus on December 10, 2023. Following the parade accompanied by the band performance performed by the Pipe and Trumpet Branch students, the Tayfun Günerhan Student Social Building located within the campus was opened with the participation of the 27th Prime Minister.



ENVIRONMENTAL IMPACT



SUPPORTING BIODIVERSITY

ITU as a body has Directive on the Conservation and Sustainable Use of Biodiversity and Ecosystems which aims to support the protection, improvement and sustainable use of natural and artificial ecosystems in ITU campuses, prevent the loss of biodiversity hosted by ITU campuses, stop and reverse the land degradation in ITU campuses, sustainable **management** and **protection** from pollution of marine and coastal ecosystems that are associated with ITU campuses.

There are different bird species such as parrots, hawks and magpies on campus. Reptiles, squirrels, hedgehogs, cats and dogs are other types of animals that live on campus, cabins have been created where they can meet their eating and drinking needs. All dogs and cats have been vaccinated and a **veterinarian** has been appointed to control their health.



CLIMATE ACTION PLAN

ITU Climate Action Plan and Strategic Plan cover the utility consumption of each campus unit. The plans also analyzes the transportation, energy, water, waste diversification and education situation of ITU and discusses how improvements can be made in the future.

ITU has agreed to be **Carbon Neutral** by 2048.

MANAGING OUR WASTE

ITU has a directive on waste management which is compatible with National Waste Framework Directive. The directive includes measures to reduce and reuse packaging wastes as well as other waste materials. In ITU Ayazaga Campus, plastic, paper and metals, are collected in blue containers, whereas glass are collected in green-white containers. Used oil is collected in green bins located in 2 different locations. All other waste is collected in grey containers.

ITU has complied with the criteria to obtain the **Basic Level 'Zero Waste' Certificate of Ministry of Environment, Urbanisation and Climate Change**.



AFFORDABLE HOUSING

ITU Faculty of Architecture have been collaborating with local authorities to address **planning/development issues**.

Affordable housing is **provided** to employees. There is a 5 years upper limit for the apartments renting so that every employee can benefit from it. Currently there are 657 apartments inside the Ayazaga campus.

UTILISING BROWN FIELDS

Our university focuses on utilizing brownfield sites by primarily building **new buildings** on them whenever necessary and possible. Ari-7 Teknokent, Simitevi and Bisikletevi buildings in our Ayazaga campus were built on construction waste sites. The construction sites comprise the waste of İşbank towers and İstinye Park mall.

SUSTAINABLE LANDSCAPING

ITU as a body prefers landscaping applications with plant species, which consume **less** water and are **suitable** for the local climate. Due to the high demand for water, grass areas are created in certain areas. In most areas, the land is leveled and the area becomes a meadow by itself without planting.

Local plants are preferred in the landscape which does not require precipitation more than that in Istanbul. Landscape practices that do not require intensive gardening works have been put into practice recently. Gardening activities in new sustainable buildings are important examples of this new concept. Secondly, a new garden was established on the campus following **permaculture** principles. The garden is one of the attempts to strengthen ecological agriculture.

ITU launched the “250 Thousand Saplings in the 250th Year” campaign in partnership with NGO.

TELECOMUTING

A faculty member is obliged to give lectures at least ten hours a week, however without being limited to campus. Thus, faculty members are not required to come to work all the time and can work **remotely**. This is supported by the Higher Education Law. Furthermore, ITU applies a **hybrid** education system combining online education with conventional in-class teaching in all programs, further allowing remote working under the legislation.



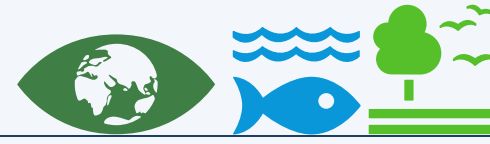
IMPROVING SUSTAINABLE TRANSPORTATION

Our university declared a Climate Action Plan, including a **Sustainable Commuting** Section, where the data on the existing state of the campus and the targets are presented.

Our university provides and extends specifically assigned **bicycle** and electrical **scooter** roads throughout the campus. Furthermore, ITU turns roads for motorized vehicles on the campus into pedestrian zones to provide more sustainable commuting inside the campus. **Rental** electrical scooters are provided on the Ayazaga campus and can be charged at four locations. Rental bicycles are located at 8 locations. The ITU Ayazaga campus comprises three **electric car charging** stations with one rental electrical car located at each.

ITU campus traffic policy states clearly that pedestrians have **priority** over all other vehicles including bikes. To indicate this, crosswalks are placed at 32 different locations on Ayazaga Campus. The most pedestrian-intense spot of the campus, the main entrance is furtherly emphasized with the patterned tiles, as an extra caution for motorized vehicles. Some regions of the campus that were previously open to motorized transport, are transformed into **pedestrian- only or pedestrian+bike-only access**.





ENERGY

Energy related policies, strategies and applications play a fundamental role in shaping the sustainable society and the environment from energy security, economic stability and carbon neutrality points of view by the help of education, technological innovations and awareness studies. For example, ITU prepared and started to “Sustainable Development Certificate Program” to train sustainability experts who are competent, professional and equipped with the necessary skills to meet these requirements under ITU Centre for Continuing Education (ITU SEM). For this purpose, employees of public institutions, local government, industry and service sectors as well as undergraduate and graduate program students of universities can apply to this program. Training program consists of 7 modules covering 17 basic sustainable goals and related sub-goals under 6 main headings as “Sustainable Cities and Communities and Urban Opportunities, Social Sustainability, Sustainable Economic Growth Climate Action, Green Deal and Disaster Resilience, Energy and Water Efficiency, Productive Economies and Innovation and Technology, Participatory Management”.

The project "A Greek-Turkish Solar Energy Excellence Hub to Advance European Green Deal - SolarHub" has received funding under the Horizon Europe, Widening Participation and Strengthening the European Research Area call. ITU takes part in the project as a partner. With a focus on agricultural applications, SolarHub's overall goal is to fortify ties between and scale-up five Greek and Turkish solar energy innovation ecosystems as a single, hybrid, cross-border, and interconnected Solar Energy Excellence Hub. In particular, a Hub Strategy and a Joint Strategic Research and Innovation Agenda will be jointly developed. It will involve business, government, academic institutions, and the general public in supporting research and accelerating commercialization by putting into place a diverse set of complementary interventions. The project will also implement joint research activities and develop four pre-designs of diverse solar energy solutions. To maximise its impact, SolarHub will create relevant research strategies, networking and training opportunities for stakeholders, and promote synergies between research infrastructures. Additionally, the project will carry out joint research initiatives and create four preliminary designs for various solar energy solutions. SolarHub will develop pertinent research plans, networking and training opportunities for stakeholders, and encourage synergies between research infrastructures in order to maximize its impact.

ITU Environmental Engineering have patented two different projects that comprise inventions in the field of “biomass” resources, one of the most important alternatives of renewable energy sources, received a patent certificate and patent registration from the International Spanish Patent and Trademark Office. First Invention is on “Increasing Biomethane Efficiency in Anaerobic Digesters Using Rumen Fungi” with Registration Number ES2743316 and the second is on “Increasing the Efficiency of Biomethane Obtained from Microalgae Using Rumen Fungi” with Registration Number ES2743548. Biogas production from animal manure is one of the most important applications of anaerobic digesters. It is foreseen that in the near future anaerobic digesters will be more widely used within the framework of renewable energy production, integrated bioconversion concept and waste management. For this reason, biomass energy obtained from animal manure can be used for domestic, commercial and industrial purposes. In addition, algal biotechnology, which has a large share in environmental investments and enables renewable energy production, waste utilization and carbon emission reduction at the same time, started to attract attention since the 2000s. Algae are small biological factories that convert carbon dioxide and sunlight into energy very efficiently through photosynthesis and produce oil during the process, and therefore have a very important function in maintaining the integrity of all ecosystems.

The last but not the least, ITU gave contribution to “Second National Energy Efficiency Action Plan (NEEAP)”, in two workshops and wrap-up meeting organized by Ministry of Energy and Natural Resources, the WorldBank and Escarus Company. The workshops are on “Energy Supply Security” and “Energy Management and Financing”. In these workshops, demand-side management tools, general lighting efficiency application alternatives and energy service market improvements were deeply analysed on the basis of the first NEEAP (2017-2023) targets and their success levels. Moreover, in the wrap-up meeting recommendations for the second NEEAP strategies and targets were developed.



WATER USE

Volume of water used in the university: Inbound
(treated/extracted water): **352,168 m³**
Campus population: **42,866**

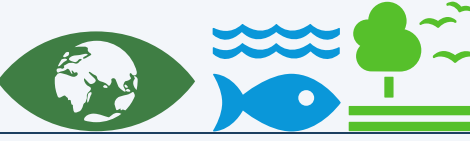
ITU has a directive for water management which ensure sustainable use of water through its campuses. Ayazaga Campus has a water pond, called as Gölet, that is used as a source to rain water. Extracted water from Gölet is used as **irrigation** water in campus.

A **social** responsibility project called Tears of Water (Suyun Gözyaşları) is carried out by ITU Environmental Engineering Club since 2008. The Project aims to give free seminars and workshops to elementary school students in order to increase the conscious in water use.



BOILER ROOMS TRANSFORMATION

The work started in November 2022 (the project is about to be completed), in the heat center boiler rooms conversion work, the faculty of chemistry and metallurgy, the faculty of mining, the faculty of electricity and electronics, the Turkish Telekom building, the Adnan Tekin material sciences, which are fed by the central boiler room (central heating power plant) located on the Ayazağa campus will be converted into a heating system on a building or faculty basis, with the start of construction. The aim of the project is to get rid of the disadvantages of feeding from a single boiler, to reduce the losses in pipes passing through long gallery lines, and to switch to energy efficient heating boiler and pump systems. In addition, since the central boiler capacity (9,000-10,000 kW) is currently high capacity, 30-40% savings are achieved with the project (excluding circulation pumps energy consumption).



Biodiversity ***days***

Every year ITU organizes several events on World Bee Day and the International Day for Biological Diversity. During these events, the rectorate, faculty members and students tour the natural areas on the campus to raise awareness of biodiversity and its conservation.

The species living in ITU Ayazaga Campus were recorded at the ITU BioBlitz 2023 event. Students, volunteers and expert academics from different universities identified more than 400 different flora, fauna and fungal species with more than 1800 observation records at the "ITU BIOBLITZ 2023" event held as part of the World Biodiversity Day. Although the ITU Ayazağa campus is located in the center of the city, it attracts attention with its diverse ecosystems and rich biodiversity. Our campus, which is very rich in terms of plant diversity, has not only endemic species such as Sweet Pea (İstanbul nazendesi) living in and around Istanbul, but also Black Sea region trees such sessile oak, pedunculate oak and Hungarian oak and many species such as evergreen oak, spartium, spruces and phillyrea which represent the Mediterranean flora. 160 different bird species have been recorded on our campus, which also has rich shelter and feeding areas for birds. As the ITU Biodiversity, Conservation of Ecosystems and Sustainable Use Commission, we continue to work with different projects to increase awareness about biodiversity and to protect biodiversity.

3rd
BioBlitz
event



E-ATAK, THE AUTONOMOUS BUS OF ITU



Karsan cooperated with ITU and agreed to the use of Autonomous Atak Electric in the R&D activities of the university. Autonomous Atak Electric, developed on the 8-meter-class Atak Electric model, with the work done by the Karsan R&D team and the autonomous technology partner ADASTEC, delivered to ITU in 2021. At the signing ceremony held for the project at ITU Rectorate, Okan Baş, CEO of Karsan, met ITU Rector Prof. Dr. İsmail Koyuncu and Dr. Ali Ufuk Peker, CEO of ADASTEC.

In 2023, the autonomous bus e-ATAK, one of the innovative technologies developed by ITU through university-industry cooperation, won an award in Belgium with its advanced autonomous driving capability.

In the project implemented through the partnership of ITU, Karsan and ADASTEC, the first mass-produced Level 4 autonomous bus in the US and Europe started test drives as a ring service at our Ayazağa Campus at the beginning of the 2023-2024 academic year. ITU academics and students benefit from the e-ATAK bus as a training and R&D laboratory.

Level 4 is called high driving automation. Among the five autonomy levels, it is the level at which the driver can control the vehicle, but in most cases, all driving functions are performed autonomously by the vehicle.

Level **4**
autonomous
bus





ITU SUSTAINABILITY OFFICE

In response to demand from the students, staff, and faculties, the Sustainability Office was launched in 2021. The Sustainability Office has designed and implemented several initiatives to build a culture of sustainability on campus and across the greater Istanbul community. The Sustainability Task Force was created to evaluate the status of sustainability at ITU and its peer institutions. This committee created the “Outline of Sustainability Initiatives,” which encompassed academics, outreach and community relations, auxiliaries operations, facilities operations, campus life, and executive council decisions.

OPENING

November 2021 setting up the SO Team
Establishment of ITU SDG commissions

THE IMPACT RANKING 2020

ITU ranked first in Türkiye in 2022 THE Impact Ranking.

GREENMETRIC RANKING

ITU advanced 10 places in the 2022 GreenMetric ranking and became the "47th most sustainable campus in the world"

SUSTAINABILITY REPORT 2021

The second ITU Sustainability Report was published in 2022.

SDG COMMISSION MEETINGS

Sustainability Commissions Coordination Workshop organized by ITU SO was held on 21 June 2022.

EVENT AND ACTIVITY

May 20 World Bee Day and May 22 World Biodiversity Day were celebrated with many events held at ITU.

SDG EDUCATION

Sustainable Development Certificate Program started at ITU SEM on May 10, 2022.

SO 1ST YEAR CELEBRATION

On Nov. 23 2022, ITU Sustainability Office 1st Year Celebration and Acknowledgment Program to the Commissions were held.

AWARD

ITU was selected as the “Environmentalism University of the Year” within the scope of Boğaziçi Environment Awards.

SUSTAINABILITY REPORT 2022

The third ITU Sustainability Report is published in 2023.

THE IMPACT RANKING 2024

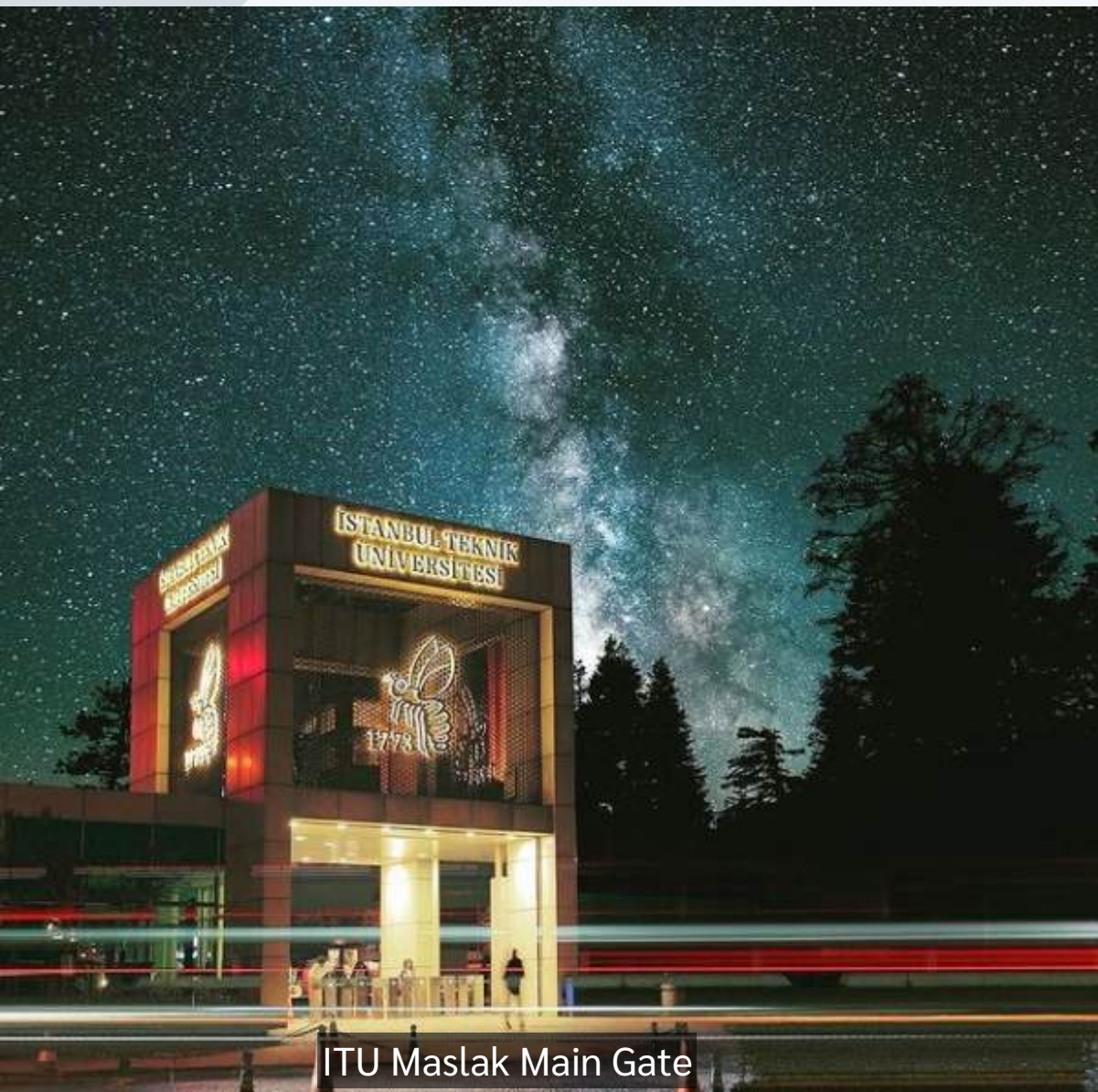
ITU ranked 34th in THE Impact 2024 Rankings. Sustainability Office Coordinator and Vice Coordinator represented ITU at the event held in Bangkok on 10-13 June 2024.

GREENMETRIC RANKING

ITU became the “The Most Sustainable University of the Middle East” and “47th most sustainable campus in the world”.

SUSTAINABILITY REPORT 2023

The fourth ITU Sustainability Report is published in 2024.



ITU Maslak Main Gate



TABLES

TABLES

GRI Standard	Disclosuure	THE	Location/Page	Omission (Not applicable, Legal prohibitions, Confidentiality constraints, Information unavailable/incomplete)
GRI 2: General Disclosures 2021	2-1	11.2	11	cannot be omitted
	2-2	11.2	11	cannot be omitted
	2-3	12.4	2	cannot be omitted
	2-4	12.4 and 17.3	2	cannot be omitted
	2-5	16.2	11, 13	cannot be omitted
	2-6	1.4	13	
	2-7	8.5 and 10.5 and 10.6	7, 12	
	2-8	8.5	7, 12	
	2-9	16.2	11, 12	
	2-10	16.2	11, 12, 13	
	2-11	16.2	11	
	2-12	17.3	11	
	2-13	16.2	11, 12, 13	
	2-14	16	2	
	2-15	16.2 and 17.3	13	
	2-16	16.2	13	
	2-17	17.3	11	
	2-18	12.4	2	
	2-19	8.3	13	
	2-20	8.2 and 16.2	13	
	2-21	8.2 and 16.2	13	
	2-22	12.4	15	
	2-23	4.3 and 5.6 and 16.2	24	
	2-24	16.2	16	
	2-25	16.2	28, 29	
	2-26	16.2	13	
	2-27	16.2	13	
	2-28	17.2	15	
	2-29	16.2 and 16.3	16	
	2-30	8.2 and 16.2	12	
GRI 3: Material Topics 2021	3-1	16	2	cannot be omitted
	3-2		2, 34	cannot be omitted
	3-3	13	28, 29	

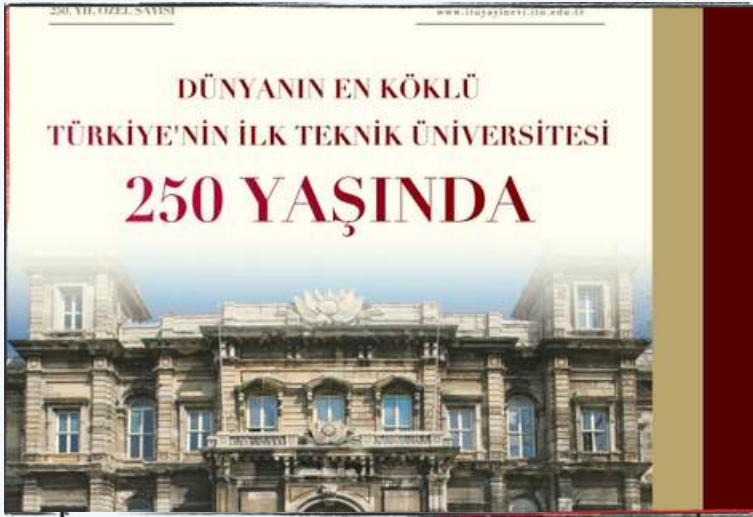


250TH YEAR OF ITU

2023 THE YEAR OF SUSTAINABILITY



- ITU declared 2023, the 250th anniversary of its establishment, the “**Year of Sustainability**”.



- ITU Magazine "250 Years Special" issue was published as **open access**.



- We published a series on youtube to celebrate our quality education through **250** years.



- On the **100th** Anniversary of our Republic we planted a tree for the memory in ITU Ayazağa Campus.



- 3,195** students, of whom **2,524** were undergraduate students and **671** were postgraduate students, successfully graduated.



- ITU ranked **34th** in THE Impact 2024 Rankings.



- In its 250th year ITU invited its graduates and senior academic staff to celebrate their **70, 60, 50 and 40** years in ITU.



- “Memory Path,” “250th Anniversary Monument” and “250th Anniversary Square,” were opened.

Sustainability Report
2023



Published by the Sustainability Office



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