



SUSTAINABILITY REPORT

2022

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Istanbul Technical University

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CONTRIBUTORS

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

Lütfiye Durak Ata
Sustainability Comissions



FIELDS OF ACTION FOR SUSTAINABLE ITU

The contents of this report are organized under 5 main topics which were decided in the Sustainability Commission Workshop 2021. The final chapter "Sustainability Office" explores the team that realised this report.

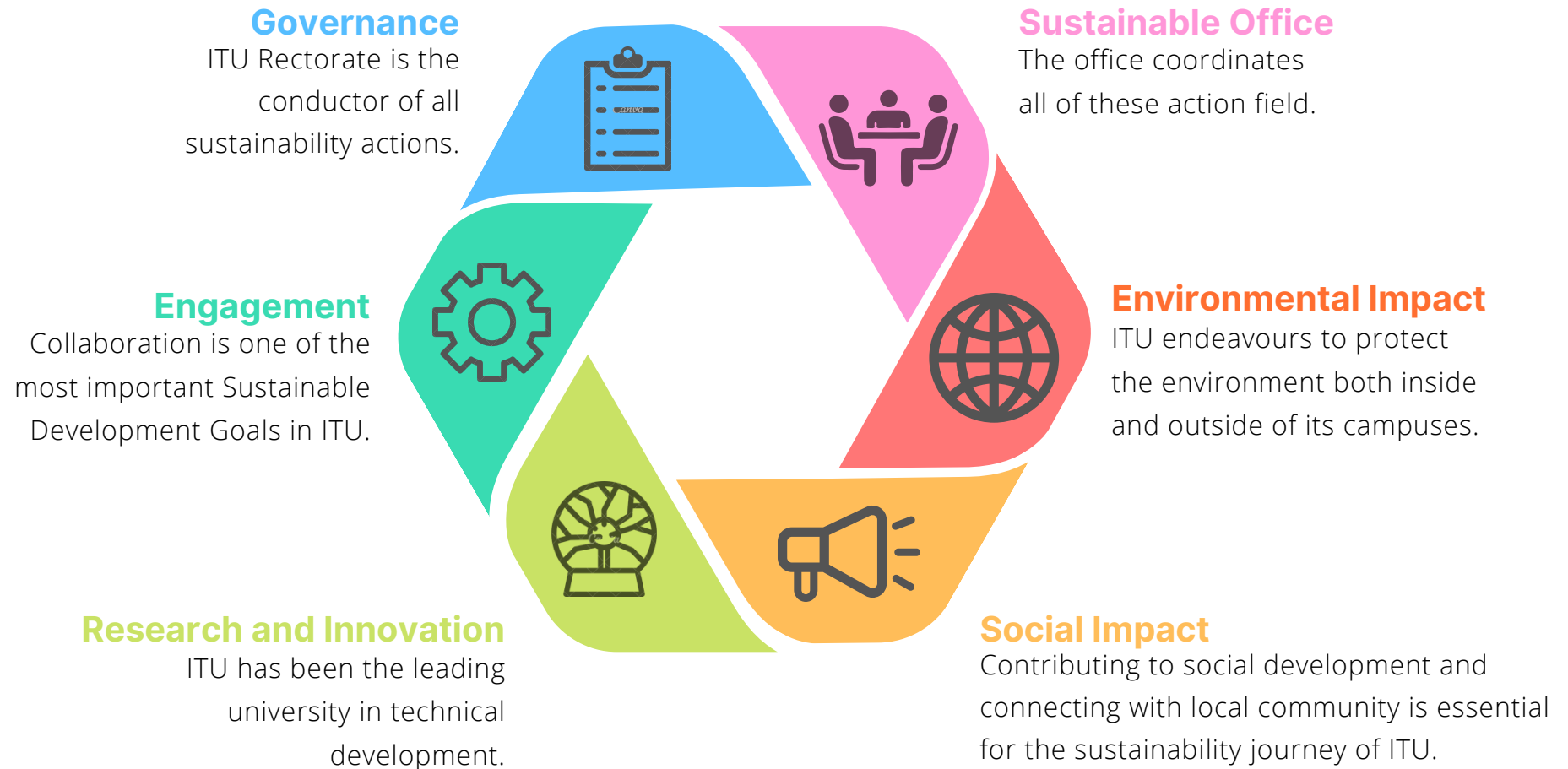


TABLE OF CONTENTS

03	Mission & Vision	22	Research and Innovation
04	Letter from the Rector	28	Social Impact
05	Letter from the S.O.	34	Environmental Impact
06	Methodology	40	Sustainability Office
07	Governance	43	Tables
16	Engagement		

BUHARLI Güç SANTRALI

$$q_{in} = h_3 - h_2 = 3317.2 - 277.03 \text{ kJ/kg}$$

$$q_{out} = h_4 - h_1 = 2276.2 - 277.03 \text{ kJ/kg}$$

$$\eta_{overall} = \eta_{th} \times \eta_{comb} \times \eta_{mech}$$



$$h_f = h_f @ 25 \text{ kPa} = 271.96 \text{ J/kg}$$

$$v_f = v_f @ 25 \text{ kPa} = 0.001020 \text{ m}^3/\text{kg}$$

$$W_{p,in} = v_1 (P_2 - P_1)$$

$$h_3 = 3555.3 \text{ kJ/kg} = (0.00102 \text{ m}^3/\text{kg}) / (5000 - 0.00102)$$

$$s_3 = 6.5993 \text{ kJ/kg} \cdot \text{K}$$

MISSION

To expand the borders of knowledge and its applications in science, education, technology and art for contributing to the sustainable community.

VISION

To become a leading, international university through its expertise and creativity in science, education, technology and art.

TARGETS

- Improvements in education
- Outcome-oriented, interdisciplinary research to be beneficial for society
- Effective cooperation in international relations
- Versatile, effective and sustainable university - industry cooperation (UIC)
- Strengthening the İTÜ perception in public; a participatory and transparent governance and with increasing own revenue

LETTER FROM THE RECTOR



Istanbul Technical University, as a leading research university in the national and international arena heading toward its 250th year, will continue to perform well and to add value to our country's science and education quality with the dedicated efforts of all of us.

Within the framework of the 2030 vision, which envisages that the direction of sustainable development, as the same as all over the world, ITU has adopted the goals and related actions on eliminating inequalities, strengthening economic growth and employment, improving cities and residential areas, ensuring industrialization, protecting oceans and ecosystems, producing and consuming energy more efficiently combating and adapting climate change, developing sustainable production and consumption practices, and strengthening human rights.

We continue our efforts to become a leading research university, to develop science and technology for sustainable development, to create qualified employment with a strong alumni network, and to realize projects that go beyond the borders of the country with technology entrepreneurship. In our report, which refers to the United Nation Sustainable Development Goals, it is explained that what are the achievements of ITU throughout 2022, and we present the activities carried out while also revealing the basic strategies of our institution.

This report also has guiding features in terms of being able to better determine our needs in addition to our achievements and our field of action in every new situation that may arise. We will all work in unity for a guiding and leading university by realizing our goals with a fair, equitable and accessible management philosophy. I would like to thank all my colleagues who contributed to the preparation of the report.

With love and respect...
Prof. Dr. İsmail Koyuncu
Rector

LETTER FROM THE 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 2022 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 2022 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 and 2022 ITU Sustainability Report is 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 consolidate 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.





GOVERNANCE



GOVERNANCE

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.

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 are used as mediums of instruction. There are departments that provide 100% English education and departments that provide 30% English education.

Since 2021, ITU is a **EELISA** European University which has received funding from the European Union's Erasmus+ programme.

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



ITU Ayazağa Campus, Rectorate Building, 34469 Maslak-İSTANBUL



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



ITU Maritime Faculty, Tuzla Campus 34940, Tuzla-İSTANBUL



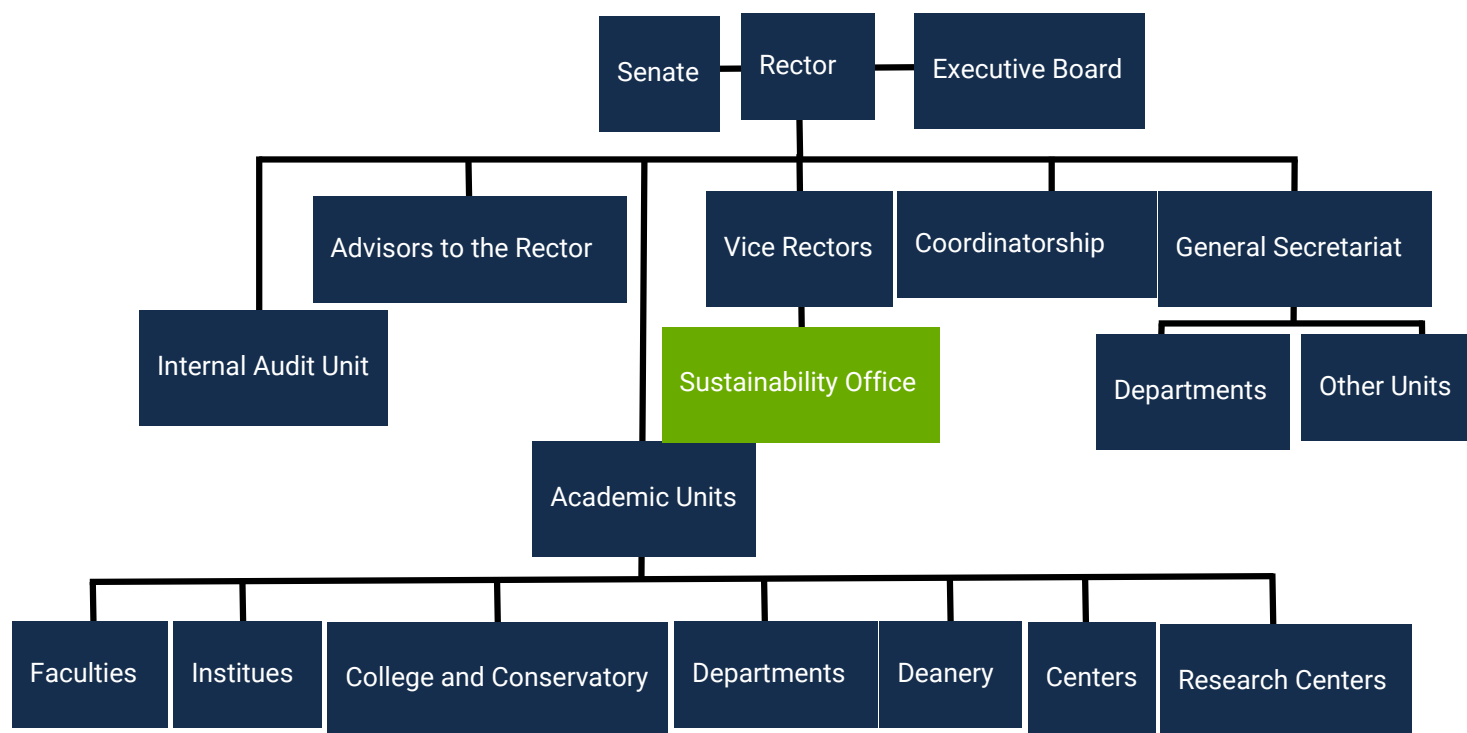
ITU Taşkışla Campus, 34437, Taksim-İSTANBUL



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

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.

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 with reference to its standing in the University. All of these activities are documented. At present, the assessment of the CQI system is being realized by means of an ABET EC2000 substantial equivalency accreditation.



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 student of ITU take active roles for 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. Their aim is to host social, educational and linguistic events on weekly basis to educate and provide students with **opportunities** to feel more engaged and benefit **experiences** they would otherwise be unable to undergo.

Where we are
TODAY



ITU IN NUMBERS

2022

STUDENTS

Number of graduates	5043
Number of graduates in health professions	89
Number of graduates who gained a qualification that entitled them to teach at primary school level	2629
Number of students starting a degree	7801
Number of first-generation students starting a degree	6022
Number of women starting a degree	2689
Number of students with work placements for more than a month	11315
Number of total graduates from law and enforcement related courses	367

STAFF

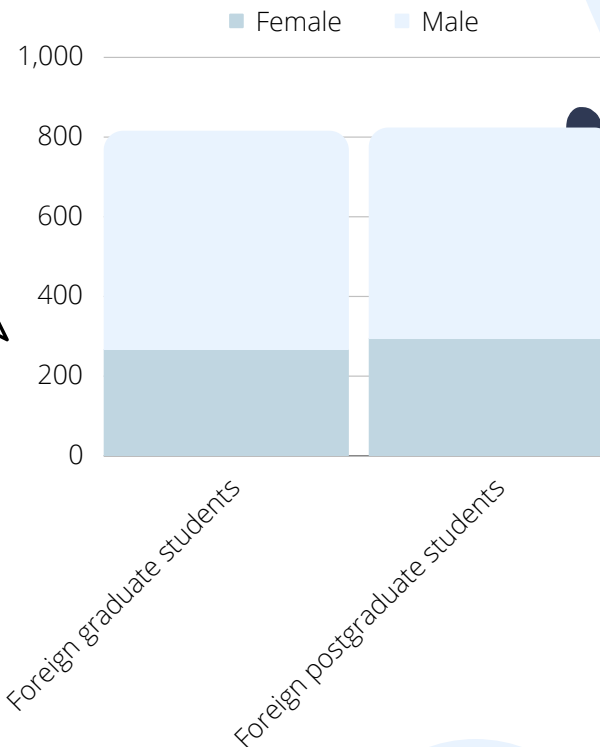
Number of employees	3320
Number of academic staff	820
Academic staff by subject area: STEM	681
Academic staff by subject area: Medicine	8
Academic staff by subject area: Arts & Humanities / Social Sciences	131

EXPENDITURE

Research income from industry and commerce: Total	£5,007,946,173
STEM	£4,918,303,937
Medicine	£67,759,012
Arts & Humanities / Social Sciences	£22,034,963

39% of students receive financial aid

There were **19078** students



13 students with disabilities

250.000+ alumni

There were **11622** postgraduate students

FINANCES

As a **public university**, ITU is committed to ensure 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.

University expenditure	1.429.607.179
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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 is [available](#).

STAFF

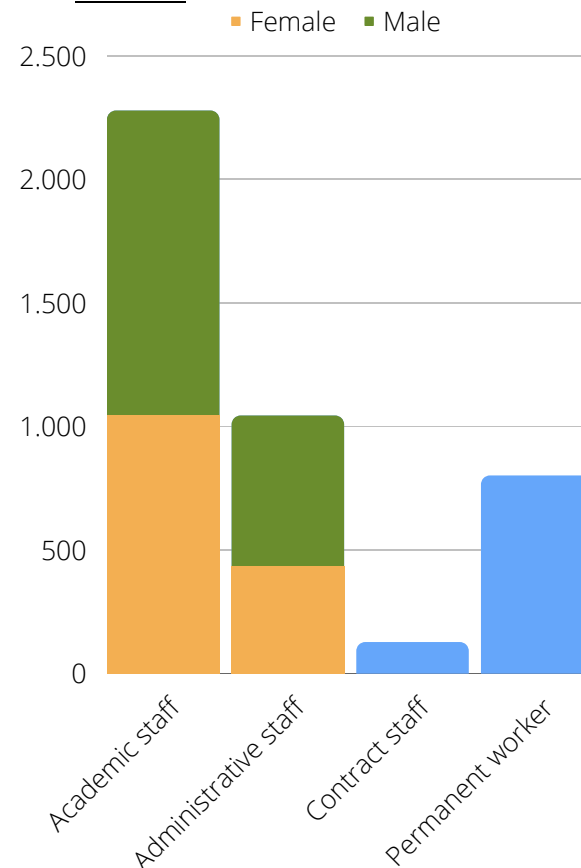
In 2022 the total number of **academic staff** in ITU was 2290. The 46% of the academic staff was female and 54% was male.

The total number of **administrative staff** was 1043 with 41% female and 58% male staff. There were 125 contract staff and 799 permanent workers.

Source: [ITU Activities Report 2022](#)

Our efforts in reduced inequalities in employment includes having;

- 677 senior academic staff
- 64 staff with disabilities,
- 4% refugees in foreign academic staff.



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

COMMUNICATION OF CONCERNS

Positive **relations** are established between the University and stakeholders to prevent conflicts of interest. The vision is clearly 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 statics are also available on the website.

In case a stakeholder need to communicate a critical concern they can be reach 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 unique question, they can create a Help Ticket. Users can choose any department to send their questions, **concerns and advices**.



PEACE AND JUSTICE

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 **practice** on its website. Compliance with **laws** and **regulations** is carried out according to The Higher Education Institutions Principles of Türkiye. Additionally, employment practice of ITU and Gender Equality Plan are available online.

GENDER EQUALITY

The ITU **Gender Equality Policy** describes the organization's intolerance on sexual harassment and gender inequality. ITU is steadfast in its policy of not discriminating against its employees on the basis of 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.





ENGAGEMENT

SUSTAINABILITY EDUCATION FOR STUDENTS&LOCALS

ITU is dedicated to ensure that every student has access to education, **regardless of ethnicity, religion, disability or gender.**

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 related course which is mandatory for undergraduate students of every department. The sustainability courses are listed for the easy access of students in the website of the Sustainability Office.

English for Academic Purposes

Through



by
Istanbul Technical University



ITU Continuing Education Center (ITU CEC) offers high-quality courses, seminars, and training programs in a variety of subjects for persons, institutions, and society by providing them with new developments in their fields and new skills. Sustainable Development Certificate programme is conducted for local individuals and businesses to increase their knowledge on climate change risks, impacts, mitigation, adaptation and impact reduction.

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

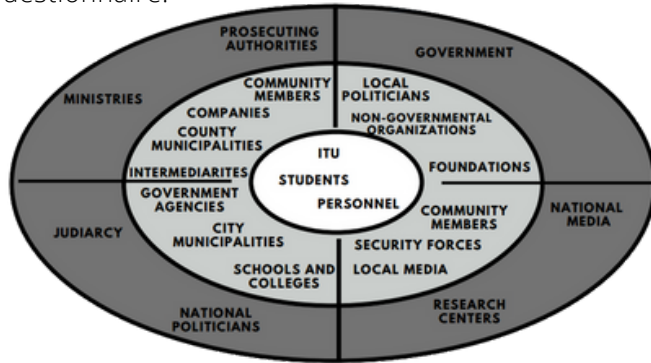
- Budapesti Műszaki és Gazdaságtudományi Egyetem
- École des Ponts ParisTech
- Friedrich-Alexander-Universität Erlangen-Nürnberg , Scuola Normale Superiore
- Scuola Superiore Sant'Anna
- Universitatea Politehnica din București
- Université Paris Sciences et Lettres
- Universidad Politécnica de Madrid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



STAKEHOLDER ENGAGEMENT

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 are ensured through means of **surveys, workshops, activities and joint events**. "External Stakeholder Questionnaire" published over the KEP, the data coming from the Academic and Administrative Units' Quality Commissions and Advisory Boards were grouped and evaluated in the seven areas. All of them were used in the creation of the SWOT analysis, strategies and objectives sections of the Strategic Plan. 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.



STAKEHOLDERS OF ISTANBUL TECHNICAL UNIVERSITY

SUSTAINABLE COLLABORATIONS

TU collaborates with numerous organizations to create a community of sustainability. As a result, the ITU signed **agreements** in several spheres of collaboration with local **governments**, ministries, numerous official institutions and organizations, as well as members of Türkiye's top corporate **sector** and non-governmental organizations.

As a well-established university, ITU members have been serving as **consultants**, experts, and guides in a variety of areas, both locally, nationally, and worldwide. Furthermore, ITU Academic staff contribute their **expertise** to assist numerous courts in Istanbul and throughout the country in resolving all issues and litigation relating to their fields of competence.

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.



Training and Collaboration Protocol Signed Between ITU and Ford Otosan in 16 Jun 2022.

COLLABORATIVE EVENTS FROM 2022

12 Jan 2022

Two projects developed and carried out with the aim of “effective fight against fires” were given support with the cooperation of ITU Scientific Research Projects (BAP) and STFA Investment Holding Group.

21 Mar 2022

“Women in Maritime Sector” workshop, organized by ITU Faculty of Maritime and Piri Reis University Maritime Faculty. Stating that the future is wide open for women mariners, our Vice-Rector Prof. Dr. Lütfiye Durak Ata emphasized that women in the maritime sector will carry the sector further in the 21st century.

13 Oct 2022

In its 250th year, ITU hosted the inter-university world cup matches of 3x3 basketball, a young and dynamic sport. Our university is participated in the International University Sports Federation (FISU) University World Cup 3x3 Basketball competition, which was held in Istanbul on October 27-29, with the matches played on our Ayazağa Campus.

20 Oct 2022

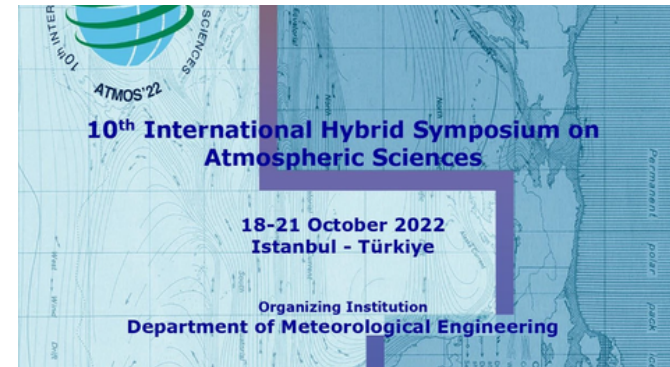
Department of Meteorology Engineering organized the 10th International Symposium on Atmospheric Sciences (ATMOS '22), the only event in its field in Türkiye. The symposium, which was held at the TAV Conference Room of our Faculty of Aeronautics and Astronautics on October 18-21 with both face-to-face and online presentations, brought together scientists from many countries around the world.

04 Nov 2022

The 10th Türkiye Quaternary Symposium, which brought together scientists from around the world in the field of Earth Sciences, was held at ITU Ayazağa Campus on 2-4 November. The symposium that focuses on the Quaternary period, the last geological period the Earth is in today, shed light on climate change and natural disasters.

16 Dec 2022

ITU is collaborating with Cargill to take important steps in the field of sustainability in our country. Within the scope of the “Zero Waste in the Field” and “Bioindustrial Products” projects launched in 2020 with the participation of ITUNOVA Technology Transfer Office, farmers are given trainings, and wastes are transformed into products with high added value.



GLOBAL ENGAGEMENT



Gate To The World
US News & World Report 2019:
Best Global University
in Turkey

ITU is a member of the following networks and follows closely the agendas and policy orientations in higher education:

European Region Action Scheme for the Mobility of University Students (ERASMUS)

The EU Programme of Education, Training, Youth and Sport (ERASMUS+)

Advanced Technology Higher education network (ATHENS)

Black Sea University Network (BSUN)

Conference of European Schools for Advanced Engineering Education and Research (CESAER)

Community of Mediterranean Universities (CMU)

Conference of Rectors and Presidents of European Universities of Technology (CRP)

European University Association (EUA)

European Engineering Learning Innovation and Science Alliance (EELISA)

International Association of Universities (IAU)

International Association of University Presidents (IAUP)

International Association of Maritime Universities (IAMU)

Institutional Management of Higher Education (OECD/IMHE)

European Society for Engineering Education (SEFI)

Top Industrial Managers for Europe (TIME)

Balkan Universities Association (BUA)

International Road Federation (IRF)

European Network for Housing Research (ENHR)

* For up-to-date information about international partnerships visit international.itu.edu.tr

ACADEMIC COLLABORATIONS

15 Apr 2022

Our Rector Prof. Dr. İsmail Koyuncu and the accompanying ITU delegation visited Nakhchivan at the invitation of Nakhchivan State University Rector Prof. Dr. Elbrus Isayev.

29 Eyl 2022

An Academic Cooperation Protocol was signed between our university and Ağrı İbrahim Çeçen University that will encourage, develop and support mutual cooperation and understanding of joint work in all fields of education. With academic cooperation, 250 years of academic knowledge and experience at ITU will be transferred to AİÜ.

07 Jul 2022

A courtesy visit to our university was made by David Bohmert, Secretary General of the European Schools Conference for Advanced Engineering Education and Research (CESAER) Association, whose members include ITU.

05 Jul 2022

ITU Faculty of Management faculty member Prof. Dr. Elif Karaosmanoğlu became the President-Elect of the European Marketing Academy (EMAC). Prof. Dr. Karaosmanoğlu became the first Turkish academic to be elected president of EMAC and will serve for three years.

27 Dec 2022

The active learning project prepared by ITU was granted support by the British Council under the "Connect4Innovation: UK-Turkiye Higher Education Institutional Partnerships" call. The two-year project will enable the development of an "active learning model" that includes students, graduates, academics and industry partners. University of Strathclyde will support the project with its experience.

14 Dec 2022

Our faculty members gave information about the EELISA European University Model to other universities at the "Erasmus+ Higher Education Area Central Projects Informative Meeting" held in Bursa on December 7-8.

14 Sep 2022

ITU Vocational and Technical Anatolian High School started the new academic year with the opening lecture on "Sustainability" given by our Rector Prof. Dr. İsmail Koyuncu.

24 Feb 2022

A project carried out by the Ministry of Environment, Urbanization and Climate Change and scientists from ITU to determine the microbial ecology of Lake Salda will trace life on Mars.



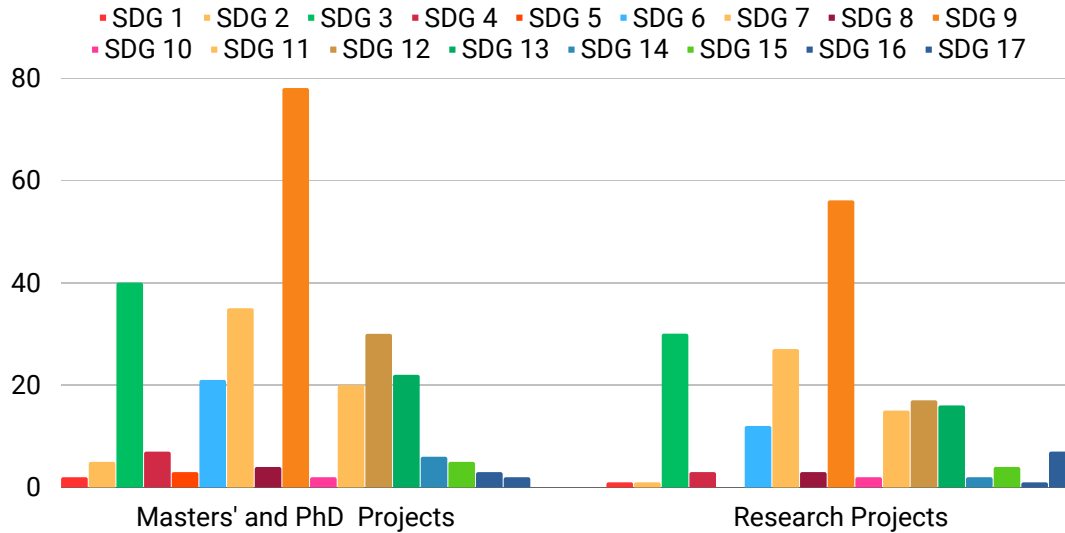


RESEARCH AND INNOVATION

RESEARCH

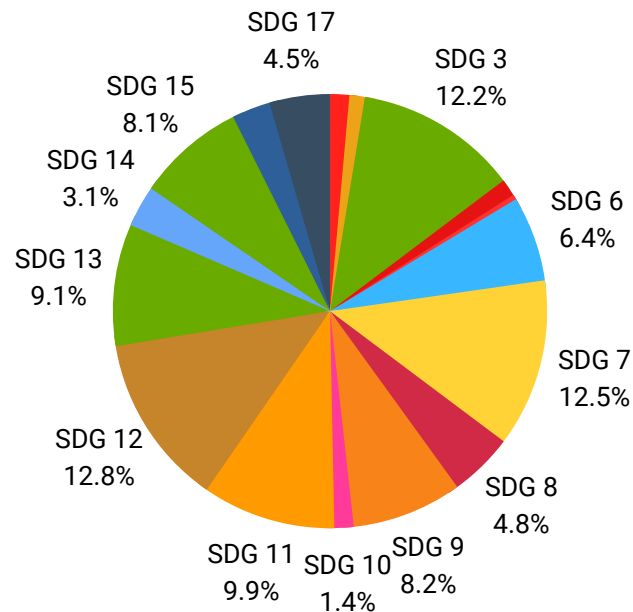
Number of university spin-offs	60
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Throughout 2022 ITU has kept funding numerous projects based on SDGs. The total budget for all of the SDG based projects is **3.062.800 USD**. Number of these projects are illustrated in the figure.



The researchers' **contribution** to UN Sustainable Development Goals are published in AVESIS ITU [page](#). AVESIS "Sustainable Development Goals" module increases the impact by ensuring that publications, projects, theses, and similar activities are **visible** at the international level.

The number of publications, projects, theses, organized events, congress and symposium participations, journal duties, awards and lessons in 2022 is displayed in the graph below.



STUDENTS PROJECTS

TEKNOFEST Aerospace and Technology Festival, of which our university is among the **academic partners**, was held at Samsun Çarşamba Airport between 30 August and 4 September under the leadership of the Turkish Technology Team Foundation (T3 Foundation) and the Ministry of Industry and Technology with the support of major institutions and companies of our country.

In the competitions held at TEKNOFEST, project teams of ITU students were highly acclaimed. Our students, who won a total of 16 awards, 3 of which were gold medals, became the prominent teams of TEKNOFEST.



INNOVATION

ITU is dedicated to addressing our society's sustainability issues through innovation and research. ITU Arı Teknokent and ITU Çekirdek support the ITU's innovation projects.

In order to leverage technology production in Türkiye, ITU ARI Teknokent aims to be a hub for R&D and innovation activities in Türkiye, particularly Istanbul, and support, improve and steer the synergy arising from ITU's academic knowledge and R&D companies. As part of these aims, academicians are encouraged into working with the Teknopark companies thanks to the ITU's infrastructure and knowledge for a versatile, effective and sustainable academy-industry cooperation.

ITU Çekirdek provides training, consultancy, mentoring, networking, corporate business partners, press & PR support and services to inspire technology startups at different stages and contribute to their success in the market.

Startups included in the process of ITU Çekirdek are eligible for Pre-Incubation, Big Bang Startup Challenge (Türkiye's biggest entrepreneurship event) and Incubation stages.

ITU Çekirdek provides various programs, one of which is the Sustainability Program. The start-ups also foster and support a low-carbon economy/technology.

Aiming to strengthen the local entrepreneurship ecosystem, "Startup Huddle Istanbul" continued to support entrepreneurs from ITU with its online activities.



ACADEMY&INDUSRY PROTOCOLS IN 2022

16 Jun 2022

In the context of university-industry collaboration, a training protocol was signed with **Ford Otosan**. Within the protocol called "Electric Vehicles Training Program," ITU academicians will train company employees.

07 Oct 2022

ITU and **Ericsson** signed a cooperation protocol. With this protocol, the two institutions will carry out projects on software security.

12 Jan 2022

Two BAP projects developed and carried out with the aim of "effective fight against fires" were given support with the cooperation of ITU Scientific Research Projects (BAP) and **STFA** Investment Holding Group.

22 Nov 2022

With the signature in Paris on November 14, ITU joined the **Digital Europe Program**. This program, developed within the scope of university-industry cooperation, aims to train qualified workforce in areas such as robotics, IoT, and cyber security.

05 Tem 2022

A cooperation agreement covering sustainability, business development and human resources projects was signed between ITUz and **IC Holding**.



AWARDS

16 Mar 2022

Our Computer Engineering Department student Çiğdem Onur came third in the 2022 Arzum Türkiye Women's Chess Championship held between 5-11 March 2022.

30 Mar 2022

ITU Chemistry Department faculty member Prof. Dr. Figen Kadirgan was deemed worthy of the "Academy Award" at the Women Energizing Türkiye Award Ceremony, which aims to raise social awareness by drawing attention to professional, academic and entrepreneur women who continue their activities in the energy sector all over Türkiye.

20 Oct 2022

Our faculty member Assoc. Prof. Dr. Duygu Ağaoğulları was awarded the 2022 Young Woman Scientist Award in the field of physical sciences within the scope of the "For Women in Science" award program implemented with the cooperation of L'Oréal Türkiye and Turkish National Commission for UNESCO.

01 Jul 2022

Faculty of Chemical-Metallurgical Engineering, Department of Chemical Engineering faculty member Assoc. Prof. Dr. Fatma Elif Günceli Güner's project titled "Microorganisms in Antarctic Glacier Cores and Their Potential for Cold-Active Enzyme Production" submitted within the framework of TÜBİTAK 1001 Polar Call is granted support.

10 Dec 2022

The Marine Pollution Detection Project for the Northern Region of the Bosphorus, developed in cooperation with ITU and ICA, won the first place in the "Green Transformation" category at the 2022 "Common Tomorrows Awards" organized by TİSK.

30 Sep 2022

ITU AUV (Autonomous Underwater Vehicle) Team, which was accepted to the Singapore AUV Challenge (SAUVC) 2022 competition organized by Singapore Polytechnic University, won the world's first place among 42 competitors from 19 countries.

29 Sep 2022

ITU Rover Team achieved a very important success on the way to Türkiye's space goal and won the first place in the European Rover Challenge 2022 with its presentation task.



AWARDS

18 Jan 2022

Our graduate Assoc. Prof. Dr. Özgür Şafak Şeker was awarded the “First Prize in the Field of Diagnosis” in Special Award for Covid-19 Global Outbreak organized by TÜBA Academy Council (Turkish Academy of Sciences).

14 Nov 2022

ITU Faculty of Science and Letters, Department of Molecular Biology and Genetics faculty member Assoc. Prof. Dr. Ayça Sayı Yazgan was awarded the “İşıl Berat Barlan Women Scholars” award given by the Turkish Society of Immunology under the leadership of Prof. Dr. Talal Chatila from Harvard Medical School.

24 May 2022

“ITU 2022 Academic Performance Awards” were presented at a ceremony held at Süleyman Demirel Cultural Center. The academic performance awards were given as a result of the evaluation of academic studies and publications by IITU academicians.

08 Nov 2022

ITU students achieved a great success in AYDA Awards 2022, the Asia Young Designer Awards competition organized by Nippon Paint. According to the results announced on November 5, ITU Department of Interior Architecture student Elif Nur Bora won the first place in AYDA Türkiye 2022, while many of our students achieved various degrees.

04 Oct 2022

ITU Faculty of Chemical-Metallurgical Engineering, Department of Food Engineering faculty member Prof. Dr. Esra Çapanoğlu Güven was deemed worthy of Georg Forster Research Award, given to only ten researchers worldwide every year.

11 Oct 2022

Our ITU ZES Solar Car Team made our country proud by making it to the top three in the iLumen European Solar Challenge 2022 in Belgium.

22 Dec 2022

ITU Department of Architecture students have achieved a significant success in the 21st Awards for Architecture Students competition. The works of our students won 12 out of 20 awards by leaving their competitors behind in the competition in which 433 projects from 53 different universities participated.

17 Aug 2022

ITU Environmental Engineering Department faculty member Prof. Dr. Orhan İnce and his team have patented two different projects that comprise inventions, namely; “Increasing Biomethane Efficiency in Anaerobic Digesters Using Rumen Fungi” and “Increasing the Efficiency of Biomethane Obtained from Microalgae Using Rumen Fungi”.

CENTRES

The opening ceremony of Air and Space Vehicles Design Laboratory, established in ITU Faculty of Aeronautics and Astronautics, took place with the participation of Turkish Aerospace Industries (TUSAŞ) General Manager and ITU Department of Aeronautical Engineering 1983 graduate Prof. Dr. Temel Kotil.

The computer laboratory and study area of our Faculty of Chemical-Metallurgical Engineering has been completely renovated through a comprehensive project. The opening ceremony of the area, which was put into the service of our students under the name “Yıldız Eren Computer Laboratory and Study Area”, took place on December 6, 2022.

CONFERENCES

21 May 2022

The international symposium titled "**250 Years of Engineering and Architecture in Turkey**" was held at ITU. At the symposium attended by speakers who are experts in their fields, the two and a half centuries period of Türkiye's progress in engineering and architecture in the modern sense was discussed.

08 Dec 2022

STEM's (Science, Technology, Engineering, Mathematics) Summit, organized by ITU Department of Management Engineering and ITU GINOVA, was held at ITU Ayazağa Campus SDCC on December 6-7. The summit, organized with the motto "**For a sustainable future**", featured presentations and trainings combining entrepreneurship and innovation with science, technology, engineering and mathematics.

20 June 2022

The panel titled "Past, Present and Future of Women in Engineering" was held on June 20, 2022 at the Süleyman Demirel Cultural Center in partnership with ITU and KADEM.

7 Oct 2022

ITU hosted the International Boron Symposium (BORON 2022) on October 5-7. The international symposium, which included many participants from public and private sector representatives to scientists, was held at ITU Süleyman Demirel Cultural Center between 5-7 October.

16 Mar 2022

Studies for "Water in Istanbul" project conducted jointly by ITU, University of Edinburgh and Northumbria University and supported by the British Institute at Ankara (BIAA) continue. ITU and BIAA took place "The 4th Workshop on Rainwater Collection in Public Spaces" in Istanbul. The workshop, which was held as part of the "Water in Istanbul" project, will bring together many public institutions addressing water management in Istanbul.

25 Mar 2022

ITU Career Summit 2022, which traditionally brings together sector representatives, students and new graduates every year and is one of the biggest events of ITU, took place online on March 8-9-10. The summit, whose main sponsor was Turkish Airlines, hosted 97 leading companies from different sectors. The motto of this year's ICS'22, which was prepared online with an interactive structure in order to respond to the pandemic conditions, the digital age and the expectations of participating companies, was "Touch the Talent".

22 Nov 2022

The "Mega City Waiting for the Earthquake: Istanbul, Building Safety, Reinforcement, Tsunami" panel held at ITU Faculty of Architecture on November 15 brought together experts in the field.

21 Oct 2022

9th Geochemistry Symposium was organized by ITU in Aydın, Didim on 17-20 October. Scientists from various universities around the world showed great interest in the symposium.

31 May 2022

52nd Meeting of Communication Group of Department Heads of Architecture Schools (MOBBIG), hosted by ITU Faculty of Architecture, was held on 27-28 May.

19 Oct 2022

ITU hosted the 11th International Nano-Satellite Symposium on 17-19 October. Following the symposium, Preliminary Workshop for the 8th Mission Idea Contest for Multiple Nano-Satellites was held on October 19, and the 8th UNISEC Global Meeting was held on October 19-21.





SOCIAL IMPACT

SUSTAINABILITY DAYS

Every year, ITU invites the local community to celebrate the important days for sustainability such as World Food Day, International Day for Biodiversity, Earth Day, World Water Day and more.



WORLD WATER DAY

The program on “The Future of Water” was held on 22 March World Water Day with the participation of Prof. Dr. Zekai Şen, who is known for his important studies in the field.



WORLD FOOD DAY

An event was organized within the scope of 16 October World Food Day with participation of local farmers.



EARTH DAY

The subject of “sustainability” was discussed from various perspectives at the “Sustainable World” event held at ITU on 22 April Earth Day.

WOMEN'S DAY

Gender Equality Plan on March 8 International Women's Day was published.



WORLD BEE DAY & INTERNATIONAL DAY FOR BIOLOGICAL DIVERSITY

May 20, World Bee Day and May 22, World Biodiversity Day were celebrated with many activities at ITU.



TRADITIONAL FISH DAY AT ITU

On the 138th Fish Day, held at ITU Tuzla Campus on December 10, the opening of Lifeboat Life Saving and Training Center was also made.



OUTREACH

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

Turkish courses towards **refugee** and international students by Turkish Teaching Application and Research Center (TÖMER) established at ITU started in February 14, 2022. Turkish language courses, which were previously held at ITU Continuing Education Center (CEC), will continue at TÖMER, which has been established in ITU Ayazağa Campus.

ITU continues their collaboration with DeepMind, a world leader in artificial intelligence research and its application to real world problems, 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.

In the Mentoring and Study Center, the virtual training ship, which was built by Orka, the R&D company founded by Captain Leven Şen in England and later completed in Türkiye, was offered to students **free of charge**.



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.

In the mining accident where 41 miners lost their lives in Bartın Amasra, the ITU Delegation went to the scene and received information from the authorities.

ACCESSIBILITY&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, office and/or officer (or the equivalent) tasked by the administration or governing body to advise on and implement policies, programs and training on diversity, equality, inclusion and human rights on campus. Mentoring/counseling/peer support programs, accessible facilities for the disabled, support services and access plans 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.

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.

FOOD

ITU provides various **scholarships** for students who cannot afford their studies during their entire 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.



WELL BEING

ITU has a **free of charge mental health support** unity, called ITÜ 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 our [ITU Ayazaga Campus](#), new food and beverage and rest areas have been added. The **newly opened social spaces** soon 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 2022, 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 **kindergarten** for student and staff mothers. The [policy directive](#) is available.

ART & CULTURE & SPORTS



"ITU 250th Anniversary Sports Events" organized by the Department of Physical Education ended with an award ceremony on Friday, May 27, 2022. At the closing ceremony held at our University's Ayazağa Campus Central Sports Hall with the participation of our Rector Prof. Dr. İsmail Koyuncu, students and staff who ranked in different branches and categories were awarded.



ITU Orienteering Team became the champion of Türkiye in the Inter-University Orienteering Championship organized by the Turkish University Sports Federation.



The Volleyball Tournament, in which our students compete on behalf of their faculties, started at 11:00 on Tuesday, April 5, 2022, at the Central Sports Hall in our university, where many activities are carried out as part of the 250th Anniversary Events.



Music writer, publisher and radio host Çağlan Tekil's record archive, consisting of a wide variety of music genres, rare editions and special copies, is opened to the use of researchers at ITU Dr. Erol Üçer Center for Advanced Studies in Music (ITU MIAM).



ITU awarded the title of "honorary doctor" to Erol Sayan, one of the most important composers of our country. At the honorary doctorate ceremony where Erol Sayan was present, ITU TMSC gave the audience a feast of Turkish art music with a repertoire consisting of Erol Sayan's compositions.



ITU Gümüşsuyu Campus is hosting the "Textile Machinery from Past to Present" Exhibition. Organized with the contributions of İTHİB and İHKİB, the exhibition is the first laboratory test equipment exhibition held in a university.

ART & CULTURE & SPORTS



Our Turkish Music Ensemble, consisting of ITU graduates, gave a concert in Uşak. The concert, in which our graduates showed interest, received great applause from the audience.



The play "A Midsummer Night's Dream" staged at the Mustafa Kemal Amphitheater by the Drama Club students of our School of Foreign Languages won the admiration of the audience.



ITU Family participated in the "81 Billion Steps in 81 Provinces" march, one of the events held on June 5, World Environment Day.



TÜBİTAK 53rd High School Students Research Projects Competition Project Evaluations was held on 14-17 March 2022 at ITU Süleyman Demirel Cultural Center.



A "Barrier-Free Orienteering" event was held on December 9, 2022 on our Ayazağa Campus with the participation of the students of our University's Orienteering and Volunteering Clubs.



Within the scope of the WeRIn-Women Entrepreneurs in Regional Inclusive Ecosystems project, in which ITU GINOVA is one of the partners, regional reports were completed by the project partner universities.



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.

The species living in ITU Ayazaga Campus are **recorded** at the ITU BioBlitz 2022 event, which is organized annually the ITU Biodiversity, Conservation of Ecosystems and Sustainable Use Commission.

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.



RARE SPECIES IN CAMPUS

The ITU Ayazağa Campus is also home to rare species. Assis. Prof. Dr. Özgür Ekincioglu, who works in the Department of Civil Engineering, identified the **Pallas's Leaf Warbler**, which was seen for the 7th time in Türkiye and the 2nd time in Istanbul. Wildlife photographer Alper Tüýdeş photographed the Pallas's Leaf Warbler in ITU, in November 2022.



CLIMATE ACTION PLAN

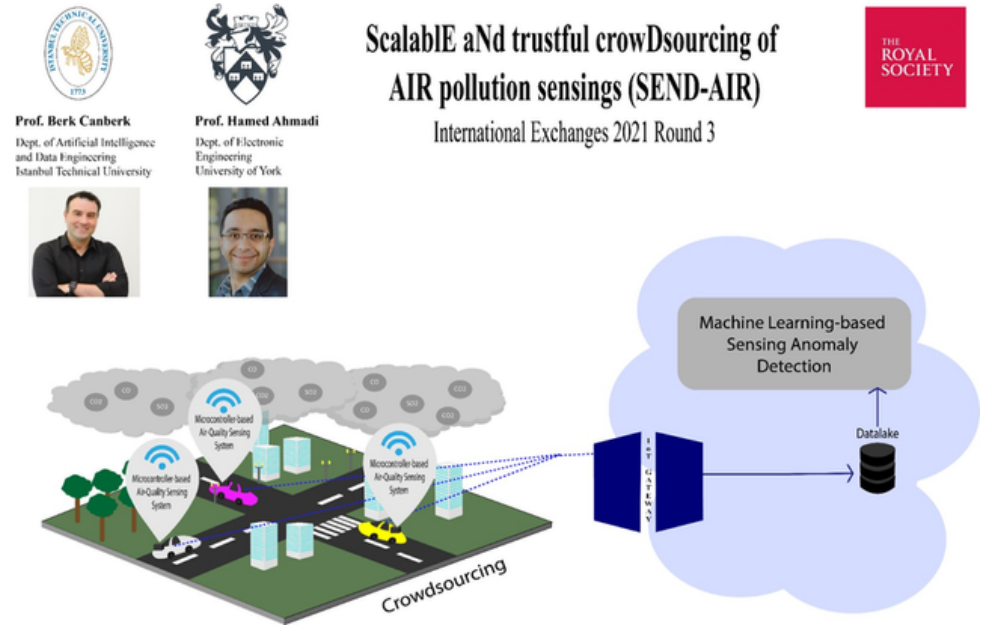
ITU has a Climate Action Plan and Strategic Plan which cover the utility consumption of each campus unit. The plan also analyzes the transportation, energy, water, waste diversification and education situation of ITU and discusses how improvements can be made in the future.

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**.



CLEAN AIR IN CAMPUS

ITU has a directive for smoke-free areas. The purpose of the directive is to take measures to **protect** personnel, students, guests and other stakeholders from the harms of tobacco products and to make arrangements to ensure that everybody can breathe **fresh air** on our campuses.

In 2022, a project for clean air was conducted. The project titled “Scalable and Trustful Crowdsourcing of Air Pollution Sensing” for monitoring air pollution through artificial intelligence within the concept of smart cities of the future, which is co-conducted by ITU Computer and Informatics Engineering Faculty member Prof. Dr. Berk Canberk, was granted joint support along with York University by the UK Royal Society.

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.

ITU energy management [directive](#) is available online.

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 Ayazağa 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.

WATER USE

Volume of water used in the university: Inbound
(treated/extracted water): **430,579m³**
Campus population: **41,647**

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.



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

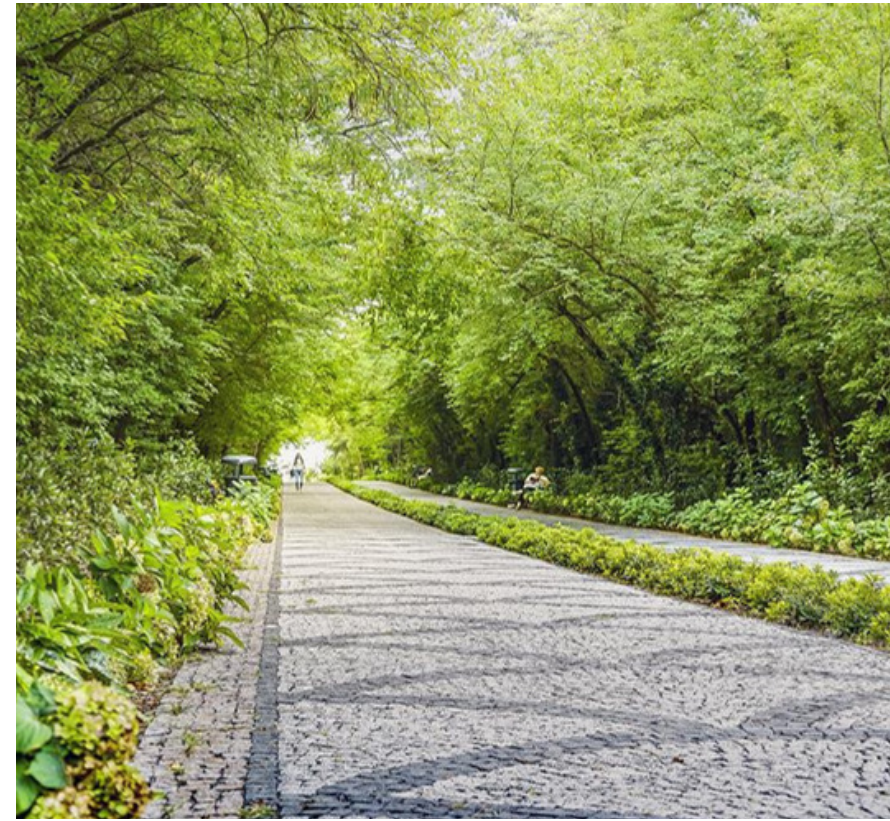
A faculty member is obliged to give lectures at least ten hours a week, however without being limited to campus. Thus, faculty members are not required to come to work all the time and can work **remotely**. This is supported by the Higher Education Law. Furthermore, ITU applies a **hybrid** education 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 Ayazağa campus and can be charged at four locations. Rental bicycles are located at 8 locations. The ITU Ayazağa 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 Ayazağa 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**.





SUSTAINABILITY OFFICE

In response to demand from the students, staff, and faculties, the Sustainability Office was launched in 2021. This is also a new initiative as part of the President's Strategic Directions in Fall 2021 at ITU. 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.

World SDG dashboard at the midpoint of the 2030 Agenda shows decreasing trend for SDG 2, 3, 11, 14, 15, 16 and stagnation for most of the SDG. Türkiye is showing improvements in SDG 4 - quality education and SD 1 - no poverty. Türkiye also ranks 72/166 in the 2023 SDG Index score (Sustainability Report 2023).

ITU SO TIMELINE

ACTIVITIES

OPENING

November 2021
January 2022 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 EDUCATION

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

EVENT AND ACTIVITY

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

SDG COMMISSION MEETINGS

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

KA171 ERASMUS +

ITU SO hosted an
international event
during the October 31st -
November 4th Personnel
Training Week.

SO 1ST YEAR CELEBRATION

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

AWARD

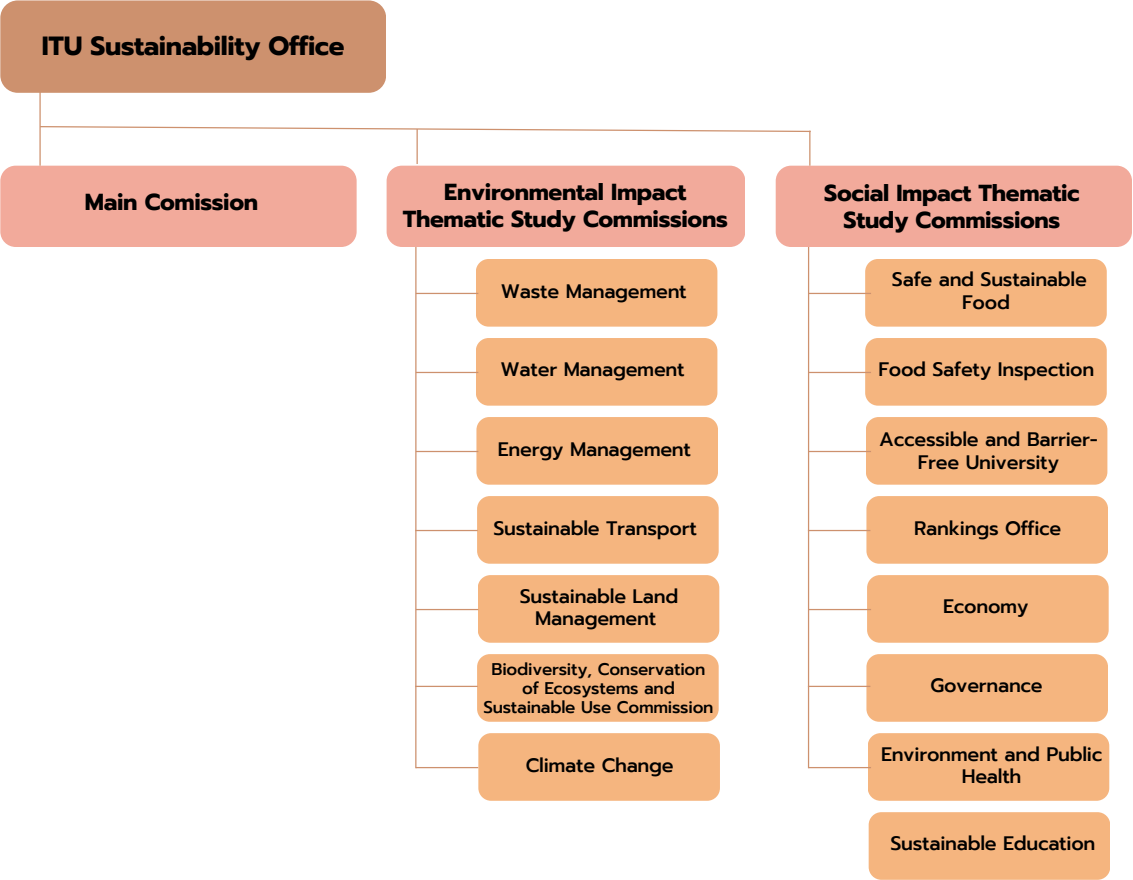
ITU was selected as the
"Environmentalism
University of the Year"
within the scope of
Boğaziçi Environment
Awards.

SUSTAINABILITY REPORT 2022

The third ITU
Sustainability Report is
published in 2023.



COMMISSIONS



ITU publishes its annual sustainability report which covers from January to December every year. Sustainability reporting and financial reporting dates aligned last year.

The sustainability report is prepared by the Sustainability Office of ITU which can be contacted for inquiry. Following the preparation of Annual Sustainability Report the Office presents the report and evidences to the rectorate. The final review is completed by the rector and signed ready for publication.

In addition to annual reports, the impacts are shared on SDG-related websites of ITU.

The Sustainability Office of ITU aims to integrate sustainability as a core principle throughout education, research, and management. ITU provides students with academicians who are skilled to teach SDGs. The collaborative seminar and workshops that are targeted to educate the students and staff are conducted to share the advanced knowledge through various activities every academic year. Eventually the students can take their knowledge into their careers in the future.

The Sustainability Office was established with a hybrid system of bottom-up or top-down approaches. The student organization, academic staff, and administrative staff are under the management of the Office. Issues pertaining to sustainability are managed by the Sustainability Office and Commissions contribute and work in line with the activities of the Office. The members of the Commission are chosen from the University academics, researchers, and administrative employees.

The vice rector works with the Sustainability Office and Comissions in managing the outcomes and impacts. The economic and environmental outcomes of the activities are measured and evaluated by the related Commissions. The Office seeks external assurance through its Commissions/Research Groups who reports on impact yearly.

Independent evaluations take place every year by THE (Times Higher Education) Impact ranking evaluations. ITU registers for THE Impact ranking by providing detailed information about its SDG advancement and publishes the ranking results that are received from THE.

ITU outcomes are also accredited by QS ranking and UI Green Metric.

TABLES

THE IMPACT RANKINGS METHODOLOGY 2023 - GRI INDEX MATRIX

THE	GRI Equivalent	Reported/ Reason Omitted	Page
1.2	GRI 203-2	Fully	31
1.3	GRI 203-2	Fully	31
1.4	GRI 2-6	Fully	18-21, 24
	GRI 415-1	Fully	24
2.2	GRI 306-3/4/5	Fully	36
2.3	GRI 403-6	Fully	31
2.4		Fully	12
2.5	GRI 413-1/2	Fully	29
3.2		Fully	12
3.3	GRI 403-1/6	Fully	31
4.2		Fully	12
4.3	GRI 413-1	Fully	17
	GRI 404	Fully	17
	GRI 2-23	Fully	15, 17
	GRI 418-1	Fully	17
4.4		Fully	12
5.2		Fully	12
5.3		Fully	30
5.4	GRI 401-1	Fully	13
	GRI 405-1	Fully	13
5.5	GRI 202-1	Partially	12
5.6	GRI 2-23	Fully	15, 17
	GRI 401-3	Fully	15

THE	GRI Equivalent	Reported/ Reason Omitted	Page
6.2	GRI 303-1/3/5	Fully	38
6.3	GRI 303-1/4	Fully	28
6.4	GRI 303-3/5	Fully	28
6.5	GRI 303-1	Fully	29
	GRI 304-3	Fully	29
7.2	G 4	Fully	38
	GRI 305-1/4/5	Fully	38
	GRI 302-4	Fully	38
7.3	GRI 305-1	Fully	38
7.4	G 4	Fully	38
8.2	GRI 405-2	Fully	15
	GRI 408-1	Fully	15
	GRI 409-1	Fully	15
	GRI 405-2	Fully	15
	GRI 2-20/21/30	Fully	13
8.3	GRI 2-19	Fully	13
8.4		Fully	12
8.5	GRI 2-7	Fully	
	GRI 2-8	Fully	13
9.2		Fully	26
9.3	GRI 203-1	Fully	25
	GRI 201-4	Fully	12
9.4	GRI 201-1	Fully	12
	GRI 203-2	Fully	12

THE	GRI Equivalent	Reported/ Reason Omitted	Page
10.2		Fully	12
10.3		Fully	12
10.4		Fully	12
10.5	GRI 401-1/2/3	Fully	13
	GRI 2-7	Fully	13
	GRI 404-1	Fully	13
10.6	GRI 2-7	Fully	13
	GRI 405-1/2	Fully	15, 30
	GRI 207-1	Fully	15, 30
11.2	GRI 2-1	Fully	8, 30, 32
	GRI 2-2	Fully	8-15, 30, 32
	GRI 203-1	Fully	
11.3	GRI 203-1	Fully	13
11.4	GRI 203-1	Fully	28, 39
12.2	GRI 306-2/3	Fully	36
12.3	GRI 306-3/4/5	Partially	36, 37
12.4	GRI 2-3	Fully	5, 42, 43
	GRI 2-4	Fully	5, 42, 43
	GRI 2-18	Fully	10, 42
	GRI 2-22	Fully	4, 42
13.2	GRI 302-1	Fully	
13.3	GRI 201-2	Fully	17, 35
	GRI 305-4	Fully	17, 35
13.4	GRI 302-2/3/4	Fully	35
	GRI 305-1/2/5	Fully	35
14.2	GRI 304-1	Fully	38
14.3	GRI 304-1/2	Fully	25
14.4	GRI 306-4	Fully	36
	GRI 304-2	Fully	36
14.5	GRI 304-1/3	Fully	38

THE	GRI Equivalent	Reported/ Reason Omitted	Page
15.2	GRI 304-1/2	Fully	29, 35
15.3	GRI 304-2/4	Fully	35
15.4	GRI 306-2/4	Fully	36
16.2	GRI 2-5	Fully	42
	GRI 2-9	Fully	9
	GRI 2-10	Fully	10, 11
	GRI 2-11	Fully	10, 11, 14
	GRI 2-13	Fully	10
	GRI 2-15	Fully	14
	GRI 2-16	Fully	
	GRI 2-20	Fully	13
	GRI 2-21	Fully	
	GRI 2-23	Fully	15, 17
	GRI 2-24	Fully	
	GRI 2-25	Fully	14
	GRI 2-26	Fully	14
	GRI 2-27	Fully	
	GRI 2-29	Fully	18
	GRI 2-30	Fully	
	GRI 206-1	Fully	
16.3	GRI 2-29	Fully	18
	GRI 410-1	Fully	18
16.4		Fully	12
17.2	GRI 2-28	Fully	17-20
17.3	GRI 2-3	Fully	5, 42, 43
	GRI 2-4	Fully	5, 42, 43
	GRI 2-12	Fully	10, 43
	GRI 2-15	Fully	43
	GRI 2-17	Fully	43
17.4		Fully	17



250TH YEAR
1773-2023

SUSTAINABILITY REPORT

2022

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