

2022



YILDIZ TECHNICAL
UNIVERSITY
2022 SUSTAINABILITY
REPORT

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PREFACE

Yildiz Technical University develops its activities, which it carries out in accordance with environmental, social and economic sustainability principles, within the framework of YTU Sustainability Policy every year, and is on the way to become a leading university on a global scale with its human-oriented, scientific, technological and social dimension. In addition to the Annual Reports published by YTU every year, the annual sustainable developments of the university, especially R&D and education, are reported and their contributions to sustainable development are listed under the headings of sustainable development goals. The Sustainable Campus Reports and all studies on sustainable development are shared on the Smart Green Campus page to be presented to the attention of university employees, academics, students and all other YTU stakeholders.

Yildiz Technical University aims to contribute to the transformation of technology and innovation activities, which are also included in the national Development Plans, into benefits by increasing private sector focus, by educating individuals who contribute to the needs of society and national competitiveness, and by implementing innovative ideas and practices. With the university-industry collaborations it has developed, an ecosystem based on innovation is created on its campuses, and the commercialization of research results and branded technology-intensive products contribute to the country's high competitiveness in international markets. In this respect, while the number of YTU patents increases every year, national and international accreditation of the activities of YTU services for sustainable development is carried out through certifications.

Prof. Dr. Tamer Yılmaz

Some of these certifications are ISO 14001 Environmental Management System, ISO 9001 Quality Management System, ISO 45001 Occupational Health and Safety Management System, ISO 27001 Information Security Management System and Zero Waste Certificate, and at the same time, there are also Orange Flag Accessible Campus awards, which are given by HEC on a faculty basis and indicates the compliance of spatial accessibility with the standards.

INTRODUCTION

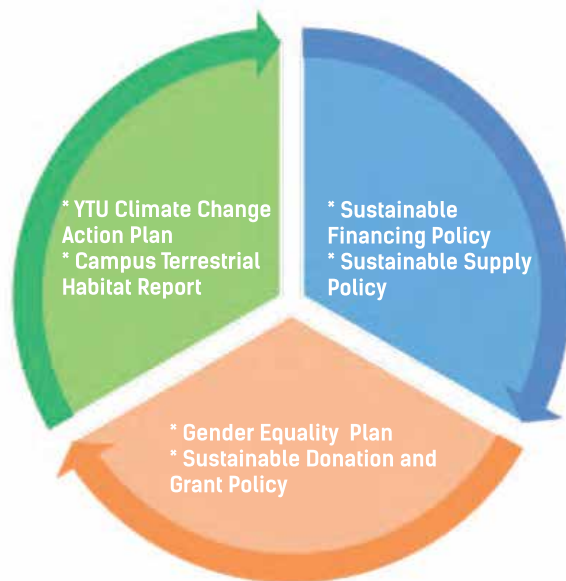
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YTU Documents Created in the Framework of Environmental, Economic and Social Sustainability

In YTU's Sustainability Policy, there are targets determined separately under the 17 headings of the United Nations Sustainable Development Goals and indicators created to monitor the realization of these targets so that social and economic development can take place in a way that minimizes environmental impacts. In this context, in the following sections of the report, YTU activities and visual and numerical data related to these activities are listed under the sub-headings of "R&D", "student" and "activity" under the UN Sustainable Development Goals.



While YTU patents, scientific publications, scientific research collaborations and project partnerships are the subject of the "R&D" sub-title, education, information and awareness activities for students in line with the sustainability principles are the subjects of the "student" sub-title. In addition, all kinds of activities and organizations held with YTU students, employees and stakeholders and in which YTU participates as a stakeholder are given in detail under the sub-title of "activity" and the contribution of all objectives to the 17th objective "Partnerships for Purposes" is in the form of a separate additional report presented in the last section.

Thanks to the plans, programs and policies it has prepared, YTU, together with its employees, students and stakeholders, is getting closer to its environmental, economic and social sustainability targets day by day. The main ones of these documents created within the framework of environmental, economic and social sustainability are Climate Change Action Plan, Campus Terrestrial Life Report, Sustainable Financing Policy, Sustainable Supply Policy, Gender Equality Plan, Sustainable Donation and Grant Policy.



NO POVERTY

Yıldız Technical University supports students and researchers who are below the national poverty level to participate in education, training and research activities in line with the goals of fighting against poverty. The YTU Foundation, which was established for this purpose, delivers the financial funds created to the students through the YTU Scholarship Coordinatorship.

With the cooperation of YTU Foundation, which takes initiatives to help and support the development of Yıldız Technical University, increase its efficiency, expand, increase the level of education and training, strengthen financial resources, and reduce the problems of students and academic staff, the number of the supported students and the amount of the support are increasing day by day.

Support for YTU students is not only financial but also in-kind. Housing opportunities such as dormitories and lodgings at affordable prices offered to students and academics make a significant contribution to reducing poverty in a metropolis like Istanbul where economic conditions are difficult.





R&D

The articles published by YTU academics and researchers, the projects they created, the conferences and events they participated in are classified in AVESIS in line with the Sustainable Development Goals (SDGs). Accordingly, there were 16 publications and 2 projects under the title of SDG1: End Poverty in 2022.



In addition, YTU Startup House, which continues its efforts to contribute to the establishment of sustainable and innovative businesses by low-income groups who will start new businesses, supports startups in providing access to new talents, turning talents into brands, increasing employee loyalty, improving digital experience and ensuring corporate resilience.

According to the UBI Global index, in which more than 1,800 incubation centers from 90 countries are ranked and evaluated in 2022, YTU Startup House has been ranked in the top 10 in the world as the Best University Incubator. Within YTU Startup House, more than a thousand entrepreneurs have been supported by creating more than ten programs per year, and with these supports, entrepreneurs have received more than 2 billion TL investment in the last five years.



YTU continues its R&D studies in order to develop cooperation and projects for the elimination of extreme poverty everywhere and for everyone. In this context, projects are supported by the BAP Coordinator. In addition, incentives are given to researchers and academicians during the application processes for grant and support programs outside the institution.





On the other hand, partnerships and collaborations are developed to support researchers at YTU Technopark and to meet with investors in order to implement their innovative ideas.

With the new entrepreneurship programs initiated within YTU Technopark, the companies of YTU researchers are supported for the transformation of innovative ideas on current technological issues into products and the commercialization of products.

The Gamesup Project, created in 2022, continues to contribute to the growth of the GamesUp ecosystem as the largest incubation center in Istanbul in the field of Games and E-Sports.



Student

Yıldız Technical University student clubs are involved in social responsibility projects in various ways. YTU Social Responsibility Club visits the residents of nursing homes with the Huzureli Project and shares good times with them. Another contribution made by YTU students to sustainable social development is the Let the Star Shine Project. With this project, YTU students studying in different departments provide high school students with information about their departments and share their own experiences. Thus, they contribute to more high school students directing their lives by making the right choices.





Event

Overcoming poverty related reasons which prevents students, researchers and staff from participating in, continuing and graduating from education, training and research studies, YTU has made various announcements on the social media accounts of the YTU Scholarship Coordinator, YTU Foundation and the university so that more students can benefit from the scholarships, increasing the number of scholarship students, as well as the scholarship amount. Yıldız Technical University organizes various events to support the establishment of sustainable and innovative businesses at the beginning stage.

In 2022, YTU Quality and Efficiency Club organized an entrepreneurship festival. In the festival, which was transformed into fun with sports and music activities, various companies made promotional activities to students and stakeholders in the stands they set up in the middle garden of YTU, while invited speakers shared their knowledge and experiences with YTU students.





YTU organized the YTU Startup House Bootcamp Hackathon with 18 YTU student clubs so that YTU students can transform large sectors as part of the entrepreneurship ecosystem and realize their innovative ideas by taking part in Yıldız Technopark. In the Hackathon, where YTU students develop innovative solutions to many sectoral problems from finance to gaming, from health to insurance, awards were given and students were encouraged to establish sustainable and innovative businesses. Preparations continue for YTU's 2023 Startup House Bootcamp.







ZERO HUNGER

Aiming to contribute to the access of its students, staff and all stakeholders to safe food, Yıldız Technical University provides dining hall services to more than ten thousand people a day with clean and safe food supply and nutritious and adequate menus.

In order to support the good nutrition of its students, employees and stakeholders, it offers quality nutrition opportunities, which is one of the most important features of sustainable campuses, in the form of two 5-course meals every day at an affordable price. The meal capacity, which has increased from 3000 to 10000 in the last two years, has also been diversified with Vegan, Vegetarian and Celiac menus. The menus prepared by YTU Health, Culture and Sports Department are announced in advance with their calories, taking into account the eating habits, health status and daily calorie calculations of students, employees and stakeholders. In this way, food waste is prevented, efficient use of resources, prevention of waste generation and reduction of waste as well as access to healthy food for students, employees and stakeholders are supported.

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At the same time, in order to reduce food waste generated in YTU cafeterias, suitable meals for dogs on campus are collected separately by YTU Animal Rights Club students; Biodegradable wastes generated during meal preparation and in the cafeteria are collected separately at the source and delivered to İSTAÇ.

Biodegradable wastes collected separately in YTU cafeterias are converted into biogas at the IMM Biomethanization Facility. In 2022, 23,650 kg of cafeteria waste was reused as dog food; Biogas was recovered from 14,190 kg of biodegradable waste from the cafeteria.





 **R&D**

Yıldız Technical University develops R&D activities and projects on sustainable food production systems, practices that increase productivity and production, agricultural activities that protect ecosystems and are compatible and resistant to climate change, and innovative technologies that improve land and soil quality. In 2022, 9 scientific publications were realized and 7 projects were put into practice. In the field of Food Science and Technology, YTU Food Engineering Department, where researches on this subject are concentrated, was first in Shanghai Ranking's ARWU ranking in Turkey and among the first 201-300 universities in the world. YTU researchers create cooperation and projects for increasing agricultural production capacity, food safety, gene banks and needed technologies with their cooperation and projects.

Details of R&D activities on food safety and food preservation can be accessed in the annual Faculty Bulletins. YTU researchers continue to draw attention in the world of technology and science with their national and international awards.



YTU entrepreneurs are supported to contribute to agricultural research, protection of ecosystems and development of rural infrastructure, which are an integral part of access to healthy food and equal access to food for all.

Food Engineering Faculty Member Assoc. Enes DERTLİ received the TÜBA-GEBİP Award for his studies that illuminate the mechanisms of action of probiotic LAB species and aim to develop unique prebiotics.



Student

Yıldız Technical University supports its students, staff and all stakeholders in accessing safe food, providing clean and safe food, and preventing food waste. With its R&D technical infrastructure with national and international accreditation in the field of sustainable food, especially in the Department of Food Engineering, and its well-equipped researchers and the curriculum it provides to its students, it supports innovative approaches to these issues and to provide a new vision by taking an active role in the future.

While continuing their education, students are supported to increase their awareness and consciousness levels in the departments that have many sustainable food technology content such as Food Biotechnology, Biopolymers and Food Packaging Applications, Molecular Techniques in Food Analysis, Natural Food Additives and Antioxidants, Modern Food Preservation Methods.

Yıldız Technical University students share their knowledge about the evaluation of excess food before it turns into waste and healthy eating practices at the annual "Sustainable Nutrition Practices" event.

Another event held in 2022, the award-winning quiz competition "Future Food Competition" was held in cooperation with Afro Turco, and students' projects on healthy nutrition and access to food were rewarded.





Joint trainings and projects are organized with other stakeholder institutions, both online and face-to-face, in order to encourage lifelong learning on food safety, achieving good nutrition and supporting sustainable agriculture.

Among these are the D-Future Project Competition organized in cooperation with Döhler firm for YTU students in 2022 and online trainings on "Nutrition and Motivation in Cancer".





Event

Yıldız Technical University aims to increase and contributes to increasing the awareness of not only its students and staff, but also its stakeholders and leading companies in the sector, through activities designed to increase the awareness and awareness of its students, staff and all stakeholders, on issues such as access to safe food, clean and safe food supply, and food waste.

Organized in 2022, the "Stars of Food" Sustainability Summit and Award Ceremony were held in two stages. While the sustainability efforts of companies in the food sector were shared at the Sustainability Summit, awards in different categories determined by the votes of the students were given to the representatives of the sector at the award ceremony.



Awards given at the Stars of Food Award Ceremony were designed from waste.



**Ülker ve Yıldız Teknik Üniversitesi
gıda sektörünün geleceğine yön verecek.**



YTÜ Kimya-Metalürji Fakültesi Dekanı Prof. Dr. Osman Sağdıç	Ülker AR-GE Başkan Yardımcısı Ali Sertakan	YTÜ AR-GE'den Sorumlu Rektör Yrd. Prof. Dr. Bestami Özkaya
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Collaboration protocols with the food industry contribute significantly to the sustainable access to healthy food in Turkey and in the world, with the R&D and innovation capacity of Yıldız Technical University being actively involved in the food industry.



GOOD HEALTH AND WELL-BEING

In order to ensure that students, researchers and staff have access to safe, effective and quality primary health care services for the protection of their health, the Medico-Social Health Units located in Yıldız Technical University Beşiktaş and Davutpaşa campuses provide health services to students, academic-administrative staff and their family members, and personnel retired from the University.



To support the prevention and control of the use of cigarettes and other tobacco products by students, employees and stakeholders, smoke-free areas have been created; infrastructures such as sports and fitness centers, swimming pools and open fields have been established in order to maintain a healthy life.



In order to increase counseling, support and mentoring activities for disadvantaged and special needs students and staff, YTU Dean of Students supports the academic, social, personal and cultural development of students. It facilitates university life by improving students' awareness of corporate belonging, and offers effective solutions to the problems experienced by students. Orientation days are held every year in order to create a dynamic campus environment. For three days, new students are provided with basic information about university life, the places they will use during their education life on campus and the relevant people are introduced, and they are encouraged to meet with other students.

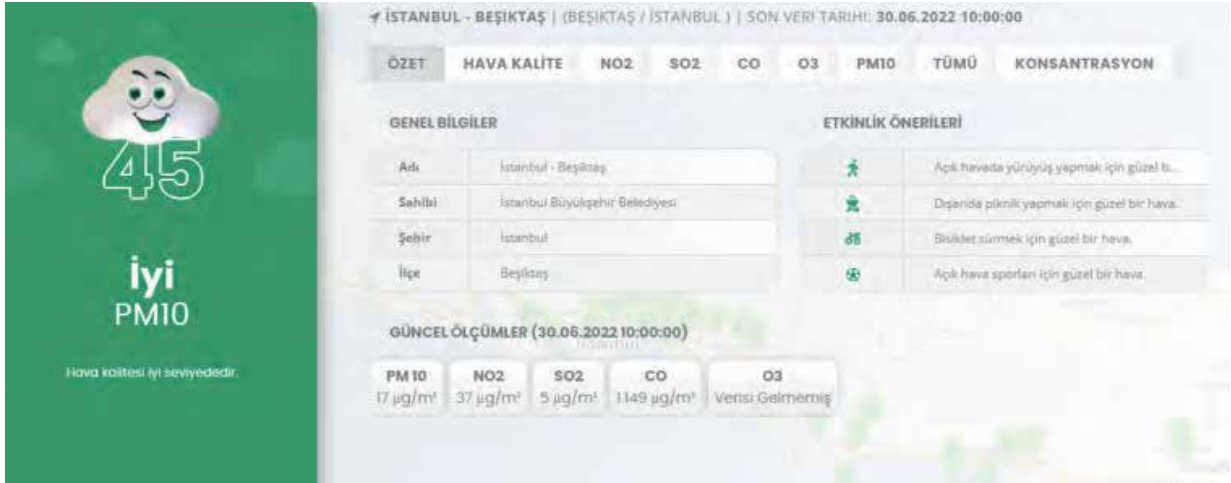




Another program applied for new students is the "Peer Counseling" program. Volunteer students who are entitled to become "peer counselors" after their education voluntarily support other students who want to benefit from this service at YTU.

Offering infrastructure such as health services, psychological support, sports and activity opportunities to its students, employees and stakeholders, YTU also offers a campus environment where they can live in healthy conditions. In this respect, YTU pays maximum attention to human and environmental health by including practices that do not pose a risk to water, air, soil, plants, animals, and humans in its activities. The air pollution control points of the Ministry of Environment, Urbanization and Climate Change of the districts where the campuses are located reflect this situation quite well.





R&D

Yıldız Technical University supports the development of the country in this field by developing innovative practices and techniques in the health sector, increases the number of patents obtained in this regard and commercializes patented products by conducting R&D studies for the health sector, via joint projects and collaborations, together with its students, employees and stakeholders.

In 2022, "Yıldız Technical University, Marmara University and Istanbul University-Cerrahpaşa Health Biotechnology Excellence Joint Application and Research Center (SABIOTEK)" was established under the coordination of Yıldız Technical University and in cooperation with Marmara University and Istanbul University-Cerrahpaşa.





SABIOTEK Proje Toplantısı



In 2022, researchers and academics within YTU carried out a total of 61 projects, 28 of which were externally supported, on Healthy and Quality Life, published 362 scientific publications, and contributed to two seminars and conferences.

Being one of these and supported within the scope of TÜBİTAK's Sports Research Call, in Mechatronics Engineering Department faculty member Assoc. Dr. In Hüseyin Üvet's project, "Artificial Intelligence Supported Virtual Sports Coach in Tennis" Project, an artificial intelligence-based robotic study that can reveal analytical and statistical results for tennis is aimed. Thus, a robotic Virtual Sports Coach will be developed in the project, which will make significant contributions to the coaches in terms of professional game development and monitoring.



Student

Yıldız Technical University includes many training programs in its curriculum on supporting healthy living in its academic departments, especially YTU Physical Education Department and YTU Biomedical Engineering Department. In addition, with the seminars organized, students get information about the use of current and new technologies from industry stakeholders.

The "Biotechnology Conference", which was held for the sixth time in 2022, brings YTU students together with sector representatives on health technologies, while providing them with information on sustainable practices in the sector.

Another event organized with the contributions of the students of the Biotechnology and Genetics Club was the "Bioinformatics Conference", the first of which was held in 2022. In this conference, students learned about important technologies that contribute to a healthy life, such as new generation analysis methods and bioinformatics training.



YTU organizes courses in various branches in order to contribute to the society consisting of healthier individuals by reducing the health risks of its students, staff and all stakeholders. In Davutpaşa Campus Semi-Olympic Indoor Swimming Pool, Swimming Techniques Course is given in company with swimming instructors for those who do not know how to swim and want to improve themselves in swimming techniques. With the course program determined after registering to the system with membership, students attend swimming courses regularly for 8 sessions per month.

YTU both participates in tournaments held in different cities and hosts new tournaments with its teams in different branches from folk dances to sailing, from tennis to Far Eastern sports.





Organized in 2022 with the contributions of YTU Student Sports Club students, Sporfest'22 introduces different branches of sports, which are an indispensable part of healthy life, to YTU students. Club students contribute not only to students but also to YTU staff and stakeholders to be a part of healthy life and sports through tournaments.

Interviews where the stars of the sector that contribute to healthy life come together with YTU students are among the awareness of healthy and quality life offered by YTU to its students in 2022.





Event

Yıldız Technical University increases its consultancy, support and mentoring activities every year to meet the needs of its students and staff regarding healthy and quality life. In addition to these, it emphasizes the importance of these services with a series of events organized within this framework. Among these, YTU academics Şebnem Uşen and Emrah Uçar, and Sound, Breath, Body Awareness, and Tone Workshops with YTU students, held in 2022.

YTU leads important projects on healthy and quality life with the collaborations it has developed. In the project, which is carried out jointly with academicians from five universities in Turkey, the imaging technique that will enable the treatment of cancer patients to be tailored to the individual has been developed and brought to the medical literature.

The tenth of the three-day event BioForm, which is organized by the IEEE YTU EMBS Committee held in December every year, was held in 2022 with leading companies, professional names and competent speakers in sectors such as biotechnology, biomedical, pharmaceutical, food, and engineering applications in medicine.



IEEE YTU EMBS		
BioFORM X		
"Bu Etkinlikte Yaşam Var!"		
3 ARALIK	YARLIK	3 ARALIK
09:30	BioForm X Açılış	
10:00	AKMIB	YILDIZTEK
10:00	VISION	ARAGIDA
10:45	AKMIB	YILDIZTEK
11:00	VISION	ARAGIDA
11:45	AKMIB	YILDIZTEK
12:00	ÖĞLE ARASI	
12:45	AKMIB	YILDIZTEK
13:00	ÖĞLE ARASI	
14:00	AKMIB	YILDIZTEK
14:45	VISION	ARAGIDA
15:00	AKMIB	YILDIZTEK
15:45	VISION	ARAGIDA
16:00	AKMIB	YILDIZTEK
16:15	VISION	ARAGIDA
17:00	Kapanış	



In the Bioscience event, which was held for the eighth time in 2022 with the contributions of Yıldız Technical University Chemical Technologies Club, the theme of "Epigenetics" was discussed at YTU Davutpaşa Congress Center.

In the event, invaluable speakers from various fields, especially medicine, molecular biology and genetics, and bioengineering, shared their knowledge on subjects such as chemical changes that occur in genes and affect gene expression during life, heredity, embryology, and biopsychology.

At the conference on "Artificial Organ Production with 3D Bioprinting" held in December 2022, Dr. İbrahim Tarık Özbolat shared his different research experiences such as; Bioprinting of pancreatic organs for Type-I diabetes, vascular and vascularized tissue bioprinting and angiogenesis, Intraoperative composite tissue bioprinting, Skeletal tissue printing, Bioprinting of organ-a-chip models including cancer, pancreas and lung, new for advanced tissue bioprinting, the development of bioinks, the development of new bioprinter technologies, bioprinter tumor models for immune-cancer cell interactions, bioprinting of human lung tissue models with YTU and sabiotek researchers and students.



An inspiring conference for YTU researchers and students



On the other hand, YTU, which supports quality life, supports the increase of activities in the region with the sports events it organizes. In 2022, the Turkish University Sports Federation (TÜSF) Istanbul 1st League Group Championship, in which YTU Men's - Women's Basketball, Men's Handball and Men's - Women's Volleyball teams also took part, was held in the Physical Education Department Sports Hall of our university with the participation of approximately 27 universities.

Another collaboration realized by Yıldız Technical University in the field of Healthy and Quality Life in 2022 is the "Impartial View" Project, which was initiated to analyze the public perception of critical positions in the Super League matches. Within the scope of the project, a signing ceremony was held at the TFF Hasan Doğan National Teams Camp and Training Facilities for cooperation with the Turkish Football Federation.

In addition, 100 students from Yıldız Technical University were given "Basic refereeing and position training" and "Impartial Perspective Training" for two days at Riva by MHK Deputy Chairman Murat Ilgaz.





Yıldız Technical University students, who receive training in order to carry out sports activities in a healthy way in order to maintain a quality life, will evaluate the critical positions sent to them by MHK every week within the framework of certain criteria. YTU students will take an active role in the sports world as supporters of various clubs from different age groups by submitting the reports of the positions they evaluate with the education they receive, and the evaluation forms consisting of the analysis of the perception of critical positions in the eyes of the public, to the Turkish Football Federation.



QUALITY EDUCATION

Yıldız Technical University aims to raise students with the equipment and competencies suitable for the new generation digital age, who play a role in solving the problems in the world, while contributing to the development of the country with its student-oriented and internationally competitive education method, which it pioneers in the national arena. For this purpose, it adopts a free, open, questioning and result-oriented research culture and an approach to education and training that is accessible, transparent, fair, and accountable. YTU's education and research activities prioritize the development of innovative solutions to global sustainability challenges by providing inclusive and equitable quality education and promoting lifelong learning opportunities for all. In this respect, with the vision of "YTU Leading in R&D", it creates scientific environments for YTU students and researchers to lead in the transformation of R&D into products and commercialization.

YTU, which combines theory and practice by providing quality vocational and technical education, university education, equal access to higher education for all women and men, offers 20 thematic research groups, 30 research and application centers, more than 300 research laboratories equipped with international standards in continuing its activities in education and R&D.

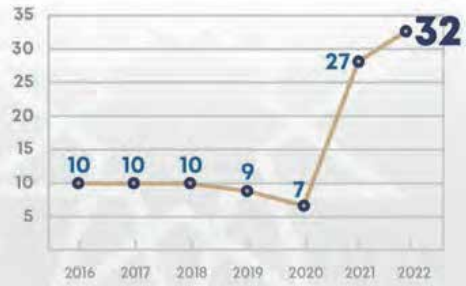
With the increasing quotas, it ensures that more and more students are prepared for life not only by attending classes, but also with an original education system approach that captures the spirit of the time. In this context, a total of 32 departments, including the school of foreign languages, from YTU education programs, all integrated into the European Union Bologna System, were accredited by MÜDEK, EPDAD, MİAK, FEDEK and PEARSON accreditation bodies in 2022.



YTU, which provides safe, non-violent, inclusive and effective learning environments for everyone and plans and implements the appropriate infrastructure, continues its activities by facilitating its activities with applications. Students can perform all kinds of education and training processes digitally, as well as access online education content.



YTÜ Akredite Lisans Programları



YTU's graduate and doctorate programs are designed to meet the needs of the digital age and to lead the development of innovative technologies. Every year, new programs are added to these programs implemented by the Institute of Science and Social Sciences. The Clean Energy Technologies Institute, which was opened in 2022, conducts postgraduate education, scientific and applied research, innovation and commercialization studies at the national and international level in the field of renewable energy such as clean energy sources and technologies; while carrying out activities such as the establishment of scientific, industrial and social cooperation of YTU in this field; as well as sustainable coordination with stakeholders.



YTU contributes to sustainable quality education by creating new and innovative educational content in 2022, not only for its academics and students, but also for the training of trainers to increase the trained human capacity of the society in which it is located.



Three centers, Continuing Education Application and Research Center, Turkish and Foreign Language Application and Research Center and Distance Education Application and Research Center provide services in order to ensure equal access to education and vocational courses by all segments of the society at all levels. The quality, effective and modern education programs implemented in the centers include YTU students and other university students, as well as participants from all kinds of institutions, from industrial establishments to educational institutions.



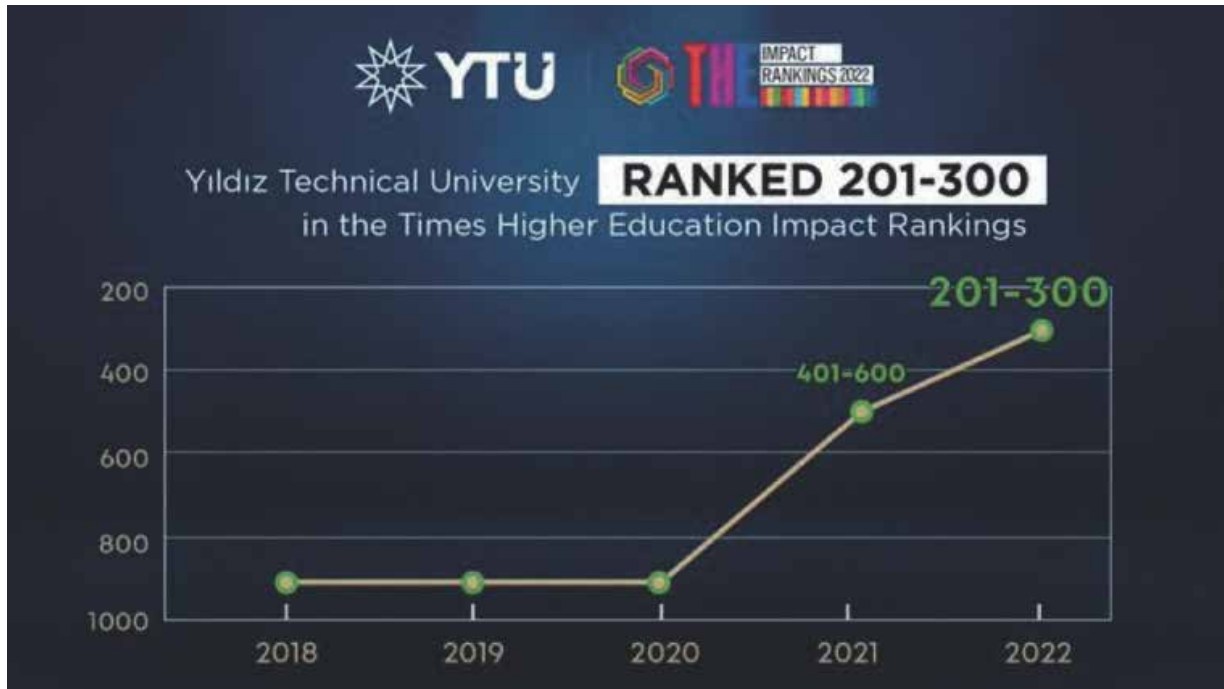
In 2022, YTU started to operate YTU Schools in order to provide education with modern and innovative methods primarily to its employees and other pre-school and primary school students in the region.

With the cooperation protocol of Istanbul Provincial Directorate of National Education signed in 2022, students at Maçka Vocational and Technical Anatolian High School receive their technical education with the support of YTU. A new dimension has been added to the vocational education collaborations at the high school level, which were made before.



YTU, which is involved in every stage of education from kindergarten to doctoral programs, contributes to raising individuals who are the pioneers of sustainable development in order to create a socially developed society with technology, where R&D and innovation are implemented, and to increase the welfare level of the society. The rise in the rankings of universities in order to become the leader in the international university rankings every year draws attention as the most important indicator of this.





R&D

Yildiz Technical University strengthens its place and prestige among the world's leading universities by developing more national and international projects and increasing R&D studies. In addition to the significant increase in scientific publications, which constitute an important starting point for the presentation of R&D studies to the whole world and for commercialization with patenting, the presence of YTU journals in international channels such as SCOPUS significantly supports the visibility of YTU in R&D studies.





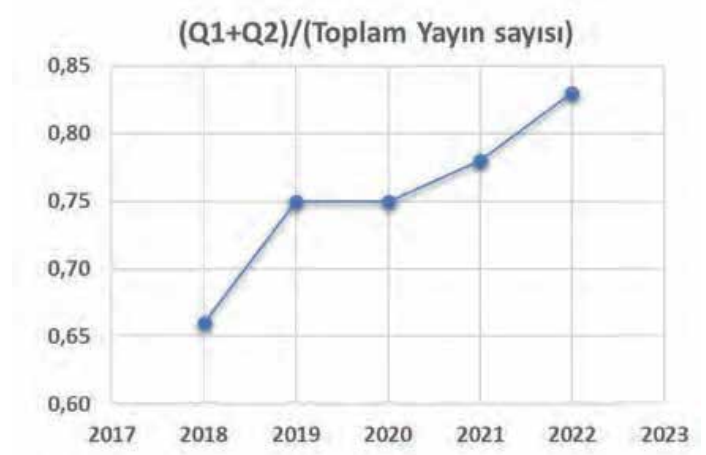
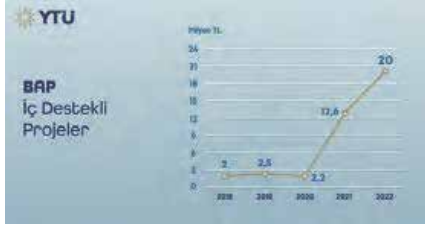
YTU organized briefings in 2022 so that researchers and academics can establish cooperation and partnerships for the product and commercialization of R&D in international research groups and projects.

While the number of scientific publications of YTU academics increases every year, the strengthening of the quality of these publications is also revealed by the increase in the rates of international citations.



R&D, Technology and Innovation Based YTU Education Ecosystem Continues to Grow.





In addition to the technical support given to researchers for project writing and project creation, the incentives have led to an increase in project applications, as well as an increase in the number of successful projects for grant supports received from various national and international institutions.





Student

Yildiz Technical University supports its education programs with international student exchange programs and internship opportunities in order to provide its students with technical and vocational skills that are pioneering in the national arena, competitive in the international arena, contribute to the development of the country and play a role in the solution of the problems in the world.



Podcasts were also initiated in 2022 in order to expand the way of learning outside the classroom by combining the classical education-teaching approach with the requirements of the digital age and satisfying more students' curiosity about the newest topics with creative methods.

In postgraduate education, new programs were opened in 2022 and it was aimed to include more researchers in the YTU technology ecosystem, and it was pioneered to carry out more R&D studies on innovative focus technologies.



According to HEC University Monitoring and Evaluation Report 2022, YTU has become the university with the highest number of students participating in international exchange programs, especially Erasmus+.



With the new interdisciplinary graduate programs, YTU increased the number of doctorate students in 2022 so that more researchers can take part in research and development studies. Accordingly, the ratio of the number of doctoral students to the total number of students increased to 8% in 2022.



In addition to the pedagogical formation programs opened in order to include qualified educators in quality education, quality education leaders and social support leaders of the society are trained with the programs within the Faculty of Education.



Organized in 2022 for teachers, prospective teachers and exam students with the theme of "Being an effective teacher" with the contributions of YTU Children's and Education Club students, the "Education Summit" is one of the events held to train qualified educators.



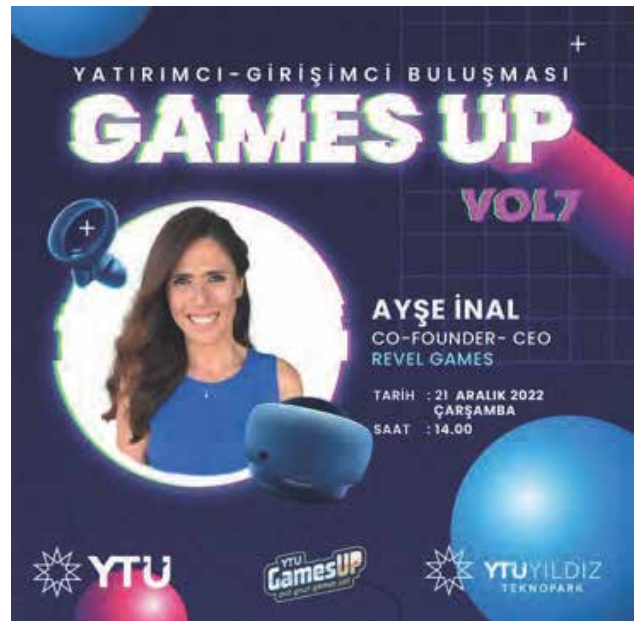
With the collaborations developed in graduate education, sector-based qualified education is paved for YTU students and researchers.





With the YTU Children's Festival, YTU students are brought together with their future students within the scope of the new generation teaching approach, while at the same time, students are supported with online information.

Encouraging its students to encourage entrepreneurship and to create employment and decent jobs, YTU organizes briefings by bringing together representatives of innovative focus technologies and sectors.





YTU KOOP Model (CO-OP - Cooperative Education), which was implemented by redefining the traditional internship in an innovative way within the scope of Vocational Education in Business Administration of YTU students in 2022, started to offer education opportunities in different businesses with new collaborations developed while continuing.

"Investing in Young People, Software for the Future" program was launched for YTU students who want to pursue a career in software with Turkcell and leave their mark on the world of the future. Within the framework of the program, candidates will have the opportunity to work in Turkcell Group Companies if they successfully complete the program by receiving 120 hours of technical training and mentoring support in the selected field from Java, Kotlin, Swift, .Net, Front-End classes.



With the Future Booster'22 event, organized with the contributions of YTU Quality and Efficiency Club students, a series of seminars, training and information on digital technologies were held.



YTU organizes "Starry Projects" Competition every year so that its students can realize their creative ideas and innovative projects on this subject.



Event

Yıldız Technical University, which aims to increase the knowledge and skills of its students, staff and all stakeholders in the fields of sustainable development and sustainable lifestyles, human rights, gender equality, developing a culture of peace and nonviolence, world citizenship, cultural diversity and the contribution of culture to sustainable development, makes significant contributions to the developments in the society and in the world with its collaborations.



In order to increase the mobility of YTU students and researchers, promotion days of exchange programs are held and information is given about these programs.



Organized within the scope of YTU's Erasmus+ program, the event, where staff and students from all over the world, students and academic staff meet, gives place to an academic and cultural exchange in an international atmosphere.



ESTIEM (European Students of Industrial Engineering and Management), which brings together students from related departments, especially European Industrial Engineering and Management Students, offers YTU students the opportunity to travel to various parts of Europe and develop themselves by establishing relationships that will contribute to their personal, professional and cultural development. An event was held in 2022 to attract the attention of YTU students to ESTIEM.

YTÜ pioneers qualified and high-quality education not only within its own body, but also with the collaborations it has developed with Yıldız Technical University stakeholders.



In 2022, a cooperation protocol was signed between Yıldız Technical University and Istanbul Provincial Directorate of National Education, including doctorate and master's programs.



In 2022, a protocol covering education, research and industrial cooperation was signed between Yıldız Technical University and Eastern Michigan University, USA.



YTU continued its activities and briefings in 2022 to encourage its students for entrepreneurship and to create new employments. Entrepreneurship events and conversations were hosted with representatives of innovative technology and sectors in order to establish more companies that will lead the way in Sustainable Development.

GENDER EQUALITY

In order to develop and implement policies to prevent gender-based discrimination, violence, sexual harassment and attacks in line with needs, Yildiz Technical University makes institutional arrangements that will ensure gender equality and strengthen the fight against discrimination. Within the framework of the Gender Equality Plan, gender differences were determined with the data of current employees and students and analysis was carried out on gender. Accordingly, 48% of all academic staff are women and 52% are men, and the gender gap among academic staff is 4%. As for administrative personnel, 41% of all administrative personnel and men represented 59%, while the gender difference was determined as 18%. Overall, it resulted in a 10% gender difference in favor of males.



According to the evaluation made on the number of students, the percentage of female students gradually increases day by day in all degrees. According to the latest data, while there is a 50% balance in gender distribution at the graduate level, a 12% gender difference has emerged in favor of men at the undergraduate level. In the general evaluation, the gender difference was 16%.





On the other hand, the Equal Opportunity and Anti-Discrimination Commission has been established within YTU, and the commission continues its efforts to establish Equal Opportunity and Anti-Discrimination Working Groups and to carry out the activities in the Plan.

By providing safe, non-violent, inclusive and effective learning environments for everyone, security measures such as cameras in outdoor environments and control of entrances and exits are implemented in YTU, which use appropriate infrastructures. There is a 24/7 Star Line where all kinds of feedback, suggestions and complaints can be conveyed. Health and psychological counseling services for female students, employees and academicians are provided by the Medico Social Center.

YTU campuses also contain gyms and swimming pools that can be used by female students, female employees and academicians, and include suitable places for women's social activities.

 **R&D**

Yıldız Technical University, which prioritizes female employees at every level of its management and supports female researchers, supports more women to participate in R&D and training studies on innovative focus technologies.



Academic appointments and promotions



"R&D Stars of the Month" are determined and announced through social media accounts in order to increase the visibility of women by encouraging them to find more place in the innovative and entrepreneurial ecosystem of YTU.



Successful women researchers of YTU were deemed worthy of awards by various institutions and organizations in 2022 with their R&D studies.







Student

In order to end gender inequalities in education and support more women to contribute to their social processes, special scholarships are given to female students, and dormitory opportunities are provided for female students to continue their education and complete it strongly.

In order to contribute to the education and scientific research of female students and researchers at Yıldız Technical University in a comfortable, peaceful and reliable environment, facilities such as; Contemporary Life Sennur Selçuk Öztap Girls' Dormitory, Istanbul Girls' High School Girls' Dormitory and Şehide Türkan student dormitory, and Türkmen Tekin Girls' Dormitory are present on Davutpaşa Campus.

In 2022, YTU students contributed to raising awareness on gender equality by organizing a run in cooperation with YTU Sports Club, YTU Social Responsibility Club, YTU Yıldız Teker Club and YTU Yıldız Run in Davutpaşa campus.



YTU Foundation and Sarbak Foundation collaborated on granting scholarships to 10 female students.





The strong women of YTU take an active role not only in education and training, but also in the branches of art and sports and achieve success.



Prof. Dr. Nur BEKİROĞLU
MODERATÖR

KATILIMCILAR

 Aynur ULUĞTEKİN Kıyım Planlama Çalışma Birim Müdürü	 Sümeyye CEYLAN Uluslararası Kuruluş	 Fethiye POYRAZ Bireysel Siyasetçiler Kurumu
 Sibel ARSENYAN İşletme Fakültesi Doktora Öğrencisi	 Nesrin KARARSLAN KARADAĞ Pedagojik Fakültesi	

14.00  ELEKTRİK-ELEKTRONİK FAK. KONGRESAN SALONU

8 MART DÜNYA KADINLARI GÜNÜ





Event

Yıldız Technical University contributes to the development of awareness and consciousness on this issue, with the events and collaborations it organizes, which carries out leading policies to ensure that all women take a role in the solution of the problems in the world and take an advantageous place in the competitiveness focused on R&D, innovation and entrepreneurship at the international level.

In addition to the companies established by women entrepreneurs in the YTU ecosystem in 2022, activities such as panels, interviews, culture-arts-sports events on this subject attracted the attention of students, employees and all stakeholders.

Yıldız Teknik Üniversitesi'nde
8 Mart
Female Gazetesi Haftası
Sinema Kulübü, Cep Sinema
8-11 Mart
IEEE YTU WIE 8 Mart Etkinliği
Davutpaşa Kongre Merkezi
18. RLC Günleri Fuaye Alanı
8-9-10 Mart

YTU
Çeviri Tarihi ve Kadın Çevirmenler
YTÜ YDÇK, Prof.Dr. Şevket Erk Salonu
Dünden Bugüne 8 Mart
YTÜ KAÇAT, Prof.Dr. Şevket Erk Salonu
8 Mart
Sektörde Kadın Olmak
Yapı Kulübü, İnşaat Fakültesi
Konferans Salonu
8 Mart

YTU
2021-2022 5/5 İSTANBUL FLAG FUTBOL LİGİ
ŞAMPİYON
Yıldız Teknik Üniversitesi
FLAG FUTBOL TAKIMI
EN İYİ OYUNCU (MVP)
Amalija **ESER**
YILDIZLI BAŞARILAR - SPOR

YTU
2022 TÜRKİYE ULUSLARARASI
KARATE ŞAMPİYONASI
Esra KARABAĞ
YTÜ MİMARLIK
Kadınlar Kumite 55 Kilo
BİRİNCİSİ
YILDIZLI BAŞARILAR - SPOR

YTU
TÜSF OKÇULUK
ÜNİTİG Türkiye Şampiyonası
YTÜ Okçuluk Takımı
Klasik Yay Kategorisi
ÜÇÜNCÜSÜ
YILDIZLI BAŞARILAR - SPOR

Some of the woman athletes who were successful in various sports in 2022

 **Kişisel Gelişim Semineri**
Spor Kulübü (Wing Chun,
Krav Maga, Kick Boks) Orta Genç

8 Mart

 **Work Like A Woman**
Ekonomi Kulübü, EEF Konferans Salonu

8 Mart

Kampüsten Bir Adım Dışarıda

Şantiyelerden resim
atölyelerine varan
uzun bir yoldaki
farklı meslek
gruplarından
kadınlarla
buluşuyoruz.

🕒 16:30

📅 29 Mart Salı

🎤 İlayza Metin-Elektrik Mühendisi
Bilgeşe Karakulak-Çevre Mühendisi
Selenay Alpsay-Sanatçı
Öğr.Gr.Dr. Ayten Sarıca-Akademisyen

📍 Prof. Dr. Şevket Erk
Konferans Salonu, YTU
Davutpaşa Kampüsü



MATCH DAY

📅 20.12.2022 / Salı

KADIN YTÜ - FENERBAHÇE ÜNİ.
14:00

ERKEK YTÜ - İSTANBUL GELİŞİM ÜNİ.
16:00

📍 YTÜ Davutpaşa Kapalı
Spor Salonu

**MATCH
DAY**

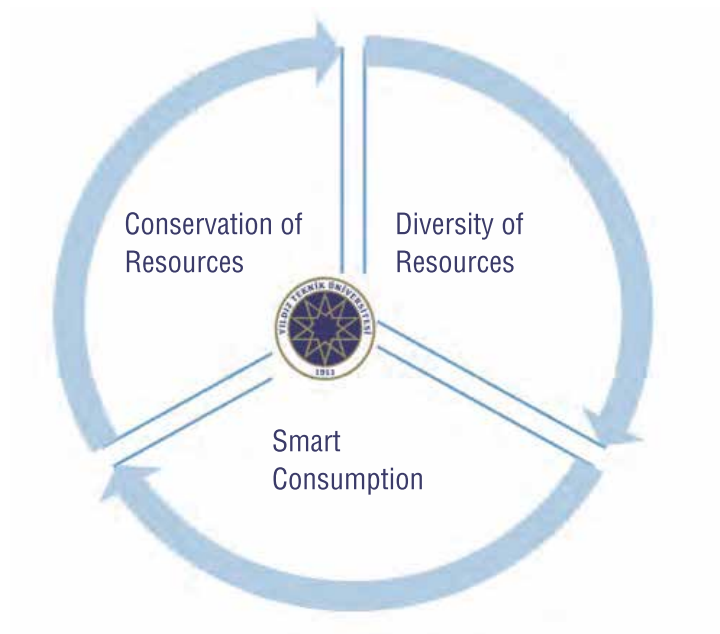
**YILDIZ TEKNİK
ÜNİVERSİTESİ**
VS
**İSTANBUL MEDENİYET
ÜNİVERSİTESİ**

23.12.2022 CUMA / 18.15

YTÜ DAVUTPAŞA KAPALI SPOR SALONU

CLEAN WATER AND SANITATION

Yıldız Technical University ensures sustainable access to clean water for its students, employees and stakeholders on its campuses with effective, efficient and inclusive water management. By increasing the recycling and reuse of water, it contributes to the effective and efficient consumption of water resources and protects aquatic ecosystems.



YTU Water Management

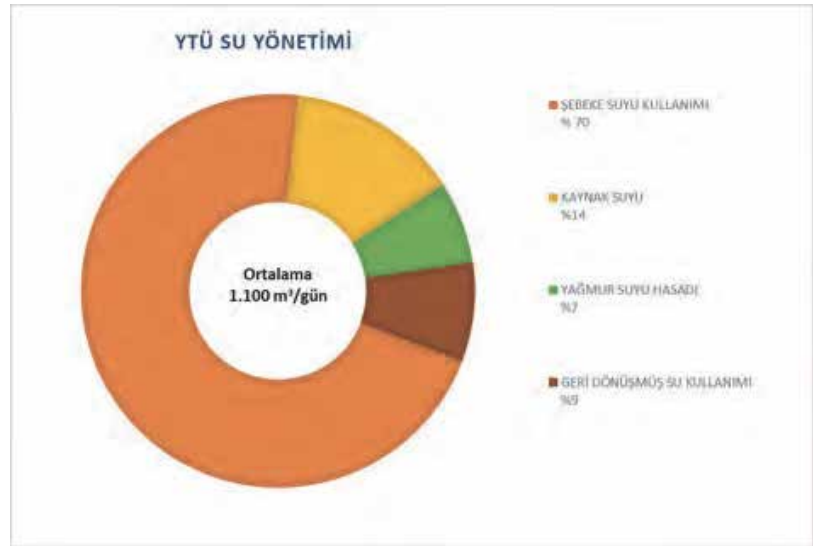
With the biological ponds in YTU campuses, natural environments are created that clean and renew themselves without disturbing the balance in nature, and whose aquatic flora and fauna are maintained without the need for chemical treatment and drugs.





Water supply in Yıldız Technical University campuses is provided through city mains water or natural sources. City mains water is mostly used in wet areas in buildings and campuses. Natural water resources are used for irrigation of green areas, which constitute approximately 63% of the total area. In addition to the historical cisterns in the campus, rainwater collection tanks and the spring and drainage waters in the campus are among the natural resources used for water supply.

Rain water, spring water and drainage water not used in irrigation are given to rainwater collection channels. Waste water in the entire campus is collected by sewerage and treated at the city wastewater treatment plant.



YTU Water Efficiency

While it is aimed to protect natural water resources by minimizing the need for water such as arid landscaping applications, efficient use of water is ensured on campus with methods such as smart irrigation systems, drip irrigation, use of rain water, and evaluation of spring water and recycling water.



In buildings and campuses, water-friendly preferences such as sensor faucets and low toilet bowls are applied for efficient use of water, and warning labels are affixed to WC and water usage points.



More Efficient Water Consumption in 2022!

Each year, the energy consumption equivalent of YTU water management is calculated, and the change over the years and the effect of water use on global warming are calculated. The annual average energy consumption from water supply provides a savings of 53,500 kWh, which means that an average of 165 tons of CO₂e emissions are reduced.



R&D

Yildiz Technical University develops cooperation with its stakeholders from different institutions in the fields of water collection, water efficiency, wastewater treatment, recycling and reuse technologies, carries out joint projects and carries out R&D activities. It contributes to sustainable water management with 9 national and international projects it carries out with 62 publications published in 2022 in order to contribute to the infrastructure of the society in which more people have access to clean water and by developing innovative wastewater treatment technologies.



A workshop on "Integration of Wastewater Recovery with Renewable Energy Technologies" was held in 2022 within the scope of "England-Turkey capacity building project for integrated wastewater treatment with renewable energy and safer reuse of water in sustainable communities".



Student

In Yıldız Technical University, which has engineering curriculum at undergraduate, graduate and doctorate levels in a wide variety of branches from water supply to wastewater treatment, from drinking water technologies to the design of water-related infrastructures in YTU Departments and Research Groups, especially YTU Environmental Engineering Department, awareness studies are carried out on students' access to healthy water.



Hollow Fiber Membrane Example used in wastewater treatment brought to the attention of YTU Students and stakeholders.



In order to facilitate access to healthy drinking water, in addition to the purification devices in the kitchens and the water dispensers in the building corridors, potable water areas, an innovative application, were created in the campus garden in 2022.

They take part in awareness studies, interviews and workshops to mobilize local resources for the importance of sustainable water resources and effective water management of the country.



Event

Developing collaborations with different institutions on water collection, water efficiency, wastewater treatment, recycling and reuse technologies, YTU researchers are involved in various activities to support and strengthen local participation for the improvement of water management, prevention of water waste, and smart use of water. At the same time, YTU academics take part in various non-governmental organizations operating on the protection of water resources and access to clean water, such as the Water Foundation, making significant contributions to the country's water management in this regard.

AFFORDABLE AND CLEAN ENERGY

Yıldız Technical University leads the way in accessible, sustainable clean energy for everyone by designing and implementing effective, efficient and inclusive energy management on its campuses and by including more and more renewable energy in its processes.

YTU Renewable Energy Journey

After detailed energy efficiency studies, Energy Performance Classes were determined by issuing Energy Performance Certificates (EPC) in the buildings on YTU campuses.



Studies on Energy Efficiency:

Building designs are designed to minimize energy consumption.

Energy efficient products are preferred in electrical and electronic devices.

LED conversion has been carried out in all garden lightings. LED conversion has been achieved in 40% of the building lighting.

Electrical, mechanical and thermal measurements of the buildings were carried out.

For the current energy performance of the buildings, Energy Identity Certificate (ECD) studies were carried out and the energy identities of all buildings were determined.

YTU Energy Survey Report was prepared and targets for energy efficiency measures and improvement of building energy performances were determined.



Studies on Renewable Energy:

The Authorized Institution certificate has been obtained, and Energy Manager and Survey Project Manager Trainings are organized.

YTU has a thermal radiant heating/cooling system using ground heat, consisting of three pilot-scale wind turbines, each with 4,000 watts of 48 volts, and 2 heat pumps with a heating capacity of 10.5 kW and a cooling capacity of 8.5 kW.

Currently, 24 solar panels with 260W 24V capacity are used.

As of November 2022, solar panels have been placed on the roof of the Waste Temporary Storage Area.

In the YTU Energy Survey Report, the renewable energy potential of Davutpaşa campus was calculated and it was determined that a total area of 15,655 m² on the campus is suitable for the installation of PV Panels with a capacity of 4 MW.

Energy Efficiency in Public Buildings (EPPB) project is being carried out.



Energy Efficiency in Public Buildings (EEPB) Project

- Nearly all of the electricity consumption in YTU campuses will come from renewable energy sources!
- YTU is taking firm steps towards becoming a self-sufficient zero emission campus!

Within the scope of the Energy Efficiency in Public Buildings (EEPB) project, funded by the World Bank and implemented by the Ministry of Environment, Urbanization and Climate Change, General Directorate of Construction (YİGM) with the support of the Ministry of Energy and Natural Resources (MENR), the buildings on YTU campuses will be renewed in an energy-efficient way, which will lead to energy saving, comfort increase, and greenhouse gas reduction.

Our University's Davutpaşa Campus signed a consultancy contract for the energy efficiency conversion of 11 buildings, among the buildings analyzed in the YTU Energy Survey Report, which received grants within the scope of EEPB, in 2022, by signing a consultancy contract for the preparation of the survey projects and renovation application projects.





YTY
DANUTPAŞA KAMPÜSÜ
Proje Kapsamı

KAPSAMI

PROJE BİNA ADI	BLOK SAYISI (AD)	İNŞAAT KİMLİĞİ (m ²)
01 ELEKTRİK ELEKTRONİK FAKÜLTESİ	4	95.073,00
02 FEN EDEBİYAT FAKÜLTESİ	4	27.950,00
03 KİMYA METALURJİ FAKÜLTESİ	5	30.138,00
04 KÜTÜPHANE BİNASI	1	5.667,00
05 İNŞAAT FAKÜLTESİ	4	38.872,00
06 KAPALI SPOR SALONU	1	3.066,00
07 KAPALI YÜRME HAVUZU	1	3.937,00
08 İKTİSAT & İDARI BİLİMLER FAKÜLTESİ	1	18.820,00
09 YEMERHANE	1	6.918,00
10 KIZ YÜRÜDÜ	3	2.564,00
11 EĞİTİM FAKÜLTESİ	2	15.850,00
	29	189.450,00

Prepared by ATLASCert®



EĞİTİM FAKÜLTE BİNASI

ÖNLEM GENEL TANIM

- Çatı üzeri Monokristal PV sistemi ile elektrik üretimi
- Çatı üzeri ışıklar yaz döneminde iç ortam sıcaklığının aşın artmasına sebep olmaktadır. Söz konusu yapıların yaz döneminde kapatılabilmesi için hareketli gölgeleme sistemi tesisi önerilmektedir.
- A-B-C blok açılır kanat kapılardan yoğun şekilde kullanılanları döner kapı ile değişimi. (Öğrenci giriş çıkışlarında hava değişimi kaynaklı ısı kayıplarının ciddi seviyelere ulaştığı düşünülmektedir.
 - Döner kapı tesis edilemeyen bölümlere ısıtısız hava perdalarının tesisi edilmesi düşünülmektedir. (Sadece kapılar açıldığında devreye girmesi için manyetik sensör kullanılacaktır.)
 - Tek camlı yalıtımsız kapıların ısı transfer katsayısı düşük kapılar ile değişimi önerilmektedir.
- Mevcut aydınlatma elemanlarının tamamının LED armatür dönüşümlerinin gerçekleştirilmesi.
 - Binada ağırlıklı olarak 4x18 çift parabolik floresan aydınlatma armatürleri kullanılmaktadır.



ODAK

ENERJİ ÜRETİMİ

ENERJİ VERİMLİLİĞİ KONFOR ŞARTLARINDA İYİLEŞTİRME

ENERJİ VERİMLİLİĞİ

ENERJİ VERİMLİLİĞİ



Prepared by ATLASCert®



 **R&D**

Yıldız Technical University aims to increase national and international projects and collaborations by carrying out R&D studies on renewable energy, energy efficiency, clean energy including advanced and cleaner fuel technologies, as well as developing investments in energy infrastructure and clean energy technologies. The Clean Energy Technologies Institute, which was established for this purpose, Smart Grids and Energy Management, Energy Production Technologies from Waste, Economic, Social Impact and Sustainability, Energy Storage Technologies, Energy Logistics, Policies and Strategies, Energy Modeling, and Simulation.





Event

YTU, which aims to encourage the efficient and smart use of energy and to increase the awareness and sensitivity of its employees, students and all stakeholders, develops new activities to increase renewable energy applications. It organizes certified trainings within the scope of the Authorization Certificate obtained in accordance with the Communiqué on Granting Authorization Certificates to Institutions and Organizations to Carry out Energy Efficiency Services.

The 2nd World Energy Storage Conference (WESC-2022), which brings together international scientists, researchers, engineers, policy makers and other stakeholders focusing on energy storage technology, was held between 18-21 December 2022 in cooperation with Istanbul Medeniyet University and Yıldız Technical University.



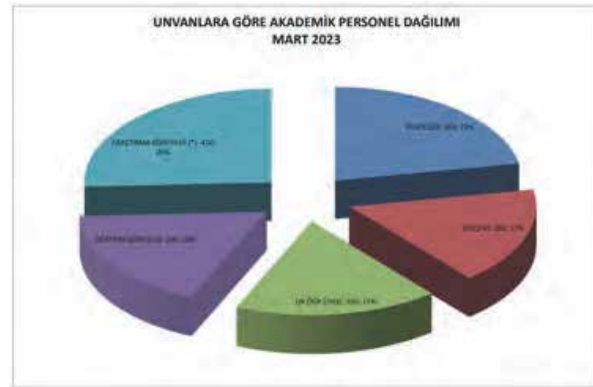
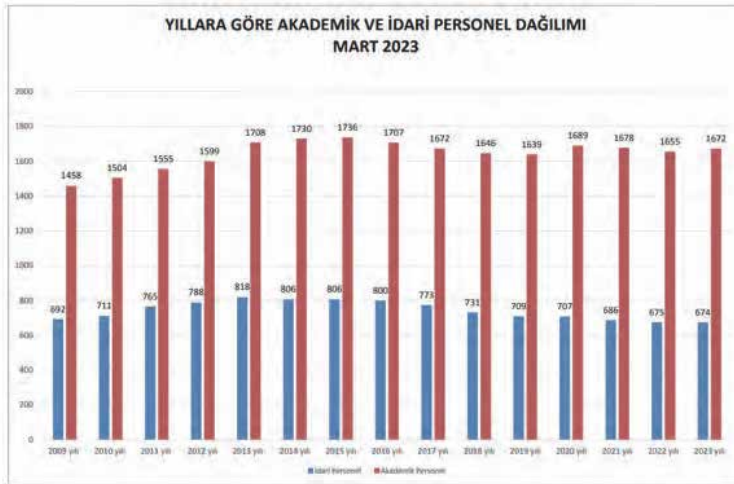


The 18th RLC days, which are organized every year with the cooperation of YTU IEEE Club students, were held in 2022. In the 18th RLC Days, the leading companies of the electrical-electronics and energy sector met with YTU students through panels and various events and shared their innovative developments and practices.



DECENT WORK AND ECONOMIC GROWTH

In addition to providing safe and secure working environments for all employees, especially women and disabled employees, who are employed in YTU activities, it also creates livable social conditions by protecting the rights of employees. According to the data of YTU Personnel Department, in 2022, there are a total of 2330 employees, including 675 administrative staff and 1655 academic staff. In addition to various supports for its employees, from in-service training to motivational events, celebrations on holidays and special days, award ceremonies to strengthen corporate belonging, and periodic evaluation meetings are organized.



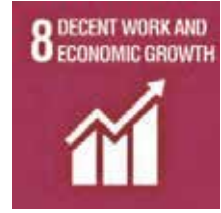


Academic Awards Ceremony in 2022



It is important that students, who are an important part of YTU's R&D ecosystem, should be guided with an approach that is correct, effective and has a high professional contribution, as it is the first place where their careers begin to form.





In addition to the events where students come together with companies from the sector, YTU Career Center (ÖRKAM) provides career counseling services for YTU students, graduates and personnel since the first day they started university. ÖRKAM services are provided with coaching and mentoring programs, career counseling and academic career opportunities, one-to-one and group studies on labor law, worker rights, training and seminars.

On the other hand, in the "Talent Fair" fair held in 2022, while YTU students get information about companies, internship and job opportunities, their talent and technical capacities provides equality of opportunity on campuses where YTU R&D is transformed into a product; entrepreneurship is supported and new entrepreneurial ecosystems are created so that students, researchers and employees can increase their contribution to innovative technologies and lead the developments that will lead to the sustainable economic development of the society and more employment.





 **R&D**

Yıldız Technical University establishes cooperation and partnerships for the product and commercialization of R&D, contributes to increasing economic efficiency by developing high innovative technologies for the activities carried out in order to ensure sustainable economic growth by considering its environmental effects. In 2022, 6 national and international projects started to be carried out in the field of decent work and sustainable economic growth, and 46 scientific publications were brought to the academic world.

The Finance, Corporate Governance and Sustainability Research and Application Center, which has been operating since 2013 in order to carry out and support research activities related to finance, corporate governance and sustainability in academia and business world, carries out various sustainable economy studies, organizes trainings and takes part in national international events. The Center attended the panel titled "How Sustainability Performance Affects Investment Flows?" at the Turkish Capital Markets Congress held in 2022.

YTU researchers and academics come together with different disciplines in order to develop their entrepreneurial skills, create new business opportunities and create innovative sectors that keep up with the needs of the age. The projects and studies that emerge as a result of these activities, in which knowledge, experience and experience are shared, are also reflected to YTU students as a scholarship and internship option.



YTU Innovative Startup companies continue to grow day by day with the investments and valuations they received in 2022.



Student

YTU, which encourages its students for entrepreneurship by providing them with technical and professional skills, and educates people with the necessary skills to contribute to employment and decent work, leads them with the internship programs it implements outside the education curriculum and activities where students get in touch with the leaders of the sector with the slogan "You can't become an engineer only by attending the lessons".

The YTU KOOP Model (COOP - Cooperative Education), implemented within the scope of Vocational Education in Business, introduces the student to the employer in the appropriate sector and prepares the student with the qualifications sought by the employer for business life during the KOOP Education. Thus, the KOOP-Model strengthens the bond between YTU and the business world in a more organic way, making the engineers it trains directly actors of the relevant sector.





In 2022, an application was designed and put into effect as a career portal for the rapid and effective coordination of students, YTU and contracted companies from the sector.

In addition, trainings are given to increase the capacity of students in job interviews, and they are informed accordingly.

Student clubs such as YTU Quality and Efficiency Club bring companies and students together through industry-specific events. "Supply Chain", which is organized every year and attended by the leading companies of the logistics industry, provides YTU students, researchers and academicians with a cooperation environment with these companies.





Event

Yıldız Technical University organizes joint training, seminars, public service announcements, promotion and awareness activities and develops collaborations with student clubs and other stakeholders in order to ensure equal access to employment and decent work for its employees, students, academics and researchers, to take an active role in the world of economy and to be a part of sustainable economic development.

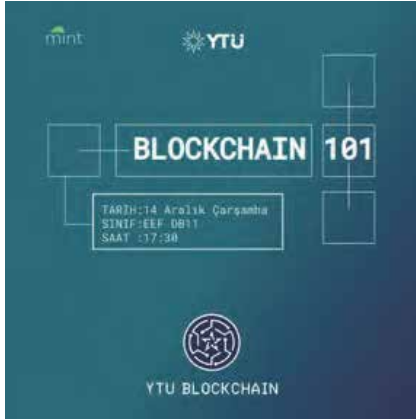
At the same time, trainings organized by YTU Continuing Education Application and Research Center are held for companies about topics such as equal pay for equal work in the markets, equal access to employment, decent job opportunities suitable for everyone, especially women and the disabled, supporting the elements of sustainable economy such as quality management, human resources management, etc.



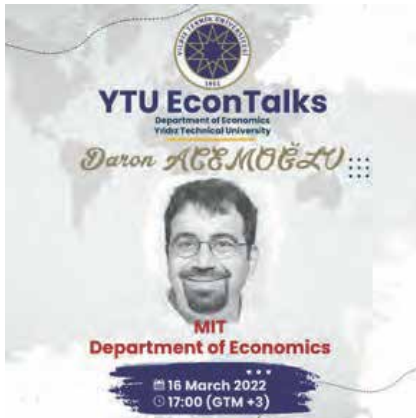
In 2022, YTU Economics Club organized certified "Technical Global Markets Training" and "Exchange Training" for students.



With the Speed Mentoring event organized by YTU TeknoPark with the focus on Access to Finance, YTU continued to accelerate its entrepreneurs, who shared 185 individual experiences with others.



Blockchain 101 event, organized by the YTU Blockchain Community organization, allowed students both to access more information about blockchain and to meet with participants from other universities related to this field.



Besides organizing interviews and conferences with national and international experts, YTU also introduced certificate programs for its students, employees and stakeholders to improve their capacity in 2022.

INDUSTRY, INNOVATION AND INFRASTRUCTURE

Yıldız Technical University contributes to the development of the country by providing competitive advantage focused on R&D, innovation and entrepreneurship at the international level. Actively involved in the solution of problems in the world, YTU stands out among the rest thanks to its quality, safe, sustainable and durable infrastructure, interdisciplinary studies and cooperation with public and industry.

Laboratory Services for Researchers and Institutions in the Sector in R&D studies with the Infrastructure of YTU Central Research Laboratory



The processes are carried out in a fast, easy and environmentally friendly way thanks to the application for the Central Research Laboratory.

YTU is involved in national and international networks established for the use and commercialization of R&D in industry by increasing the contact of its entrepreneurial ecosystems with each other.

In 2022, a leadoff meeting was held within the scope of the Smartnet Project, in which YTU is a part, and the steps for the development and progress of the project were discussed with other project stakeholders.





Transforming the R&D and innovative technologies into a product by using its powerfully equipped staff and technical R&D infrastructure, Yıldız Technical University carries out important cooperation studies in order to contribute to increasing the use of these products in the field of industry and technology. It develops projects and R&D activities with its partnerships in many fields, ranging from the aviation and chemical-metallurgical industries to the defence, maritime and electric-electronics industries.

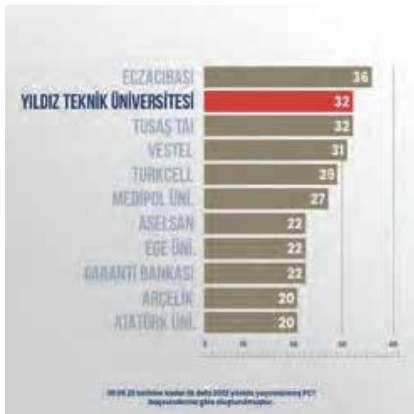
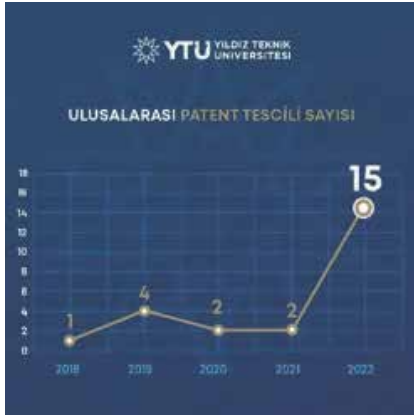




As a part of the R&D and industry cooperation ecosystem created by the collaborations developed by Yıldız Technical University, YTU promotes its entrepreneurs to reach an important position not only in Turkey but also in the commercial markets of the world.



A graduate education cooperation protocol was signed between Türk Reasürans and YTU, and an agreement was made for 30 students with full scholarships to conduct a non-thesis master's degree in the insurance industry.



R&D

Yıldız Technical University develops national and international projects jointly with many institutions from industry, production and trade sectors, and carries out R&D studies encompassing vocational education, information and communication technologies, technical, engineering and scientific programs with these institutions.

Viewed in this way, 28 national and international projects were created at YTU in 2022 to present innovative technologies to various industry branches, and these studies were presented to the R&D world with 98 scientific publications. According to the data in the first three quarters of 2022, YTU has become the second institution with the highest number of national patents.

With the 'YTU-EN-TEZ' project developed in cooperation with Yıldız Technical University Institute of Science and Technology and YTU Technopark, it is aimed to support more graduate and doctorate students with the projects determined in line with their needs with the commercialization of academic knowledge with university-industry cooperation and the development of industrialists as well as the development of the technology and R&D culture of the Turkish industry and increasing its competitiveness in international markets.

Yıldız Technical University carries out projects in the Researcher Training Program for the Defence Industry (SAYP) within the scope of the protocol signed with the Presidency of Defence Industries. Within this program, students who are to receive postgraduate education in the programmes required by the defence industry develop projects and new products in the field of defence. With the help of the events such as Defence Industry Days, YTU researchers are attracted to this sector.





Student

Aiming to train students with high technical and professional skills in order to ensure sustainable economic growth in industry and technology, YTU supports its students and researchers with internship programs, employment in R&D projects, information and activities in addition to the education curriculum. The newly opened undergraduate and graduate programs have been created based on the needs that emerged as a result of the cooperation of YTU with industry and sector representatives.



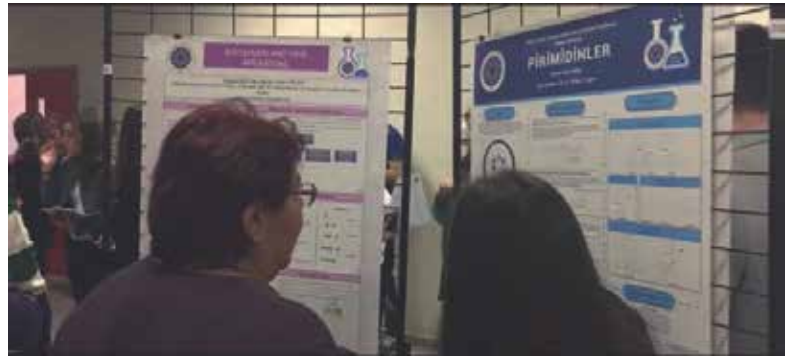


Founded in cooperation with YTU Technopark and the Ministry of Industry, YTU GamesUP, which creates and directs the sectors of the future by developing gaming and e-sports entrepreneurship, provides students with the opportunity to reveal their potential by promoting this field with workshops, hackathons and events.

During their education, YTU students become a part of the products and services developed within the YTU R&D ecosystem. They also offer significant contributions to the Turkish industry by their own graduation thesis projects as well as being employed in various projects.

In 2022, the students of the Department of Chemistry shared their completed work and Graduation Theses from the 2209A/2209B project with other students and stakeholders.

FUTURE BOOSTER'22		21 ARALIK DAVUTPAŞA TARİHİ HAMAM	
OTURUMLAR		WORKSHOPLAR	
11.00-11.40	SEDAT ANALI AÇE İFAA MERKULÜSİNE DİJİTAL DOKÜMANI	11.00-12.40	LEGO SERIOUS PLAY ÇÖZÜMLERİ
12.00-12.40	SERTAÇ KOMSUOĞLU MOLİBDE	13.00-13.40	WEB 3.0 AVATAR TASARIMI
13.00-13.40	ALI ERGUN VATAN MİTAN BİLGİSAYAR MİSAL KURULUŞU	14.00-14.40	ARABİTİK HİYE İNTERNETTEN BEYAZ EŞYA SATIM ALAYIMI
14.00-14.40	MUSTAFA ALPAY BLOCKCHAIN TEKNOLOJİSİ İNŞAAT İNŞAALARI GÖZLEMLİ		
15.00-15.40	ENES USTA MERZİGÖZ		
16.00-16.40	AYBUKE TURAN		
17.00-17.40	ESKİTİLMİŞ YAZ SOKULUŞU		



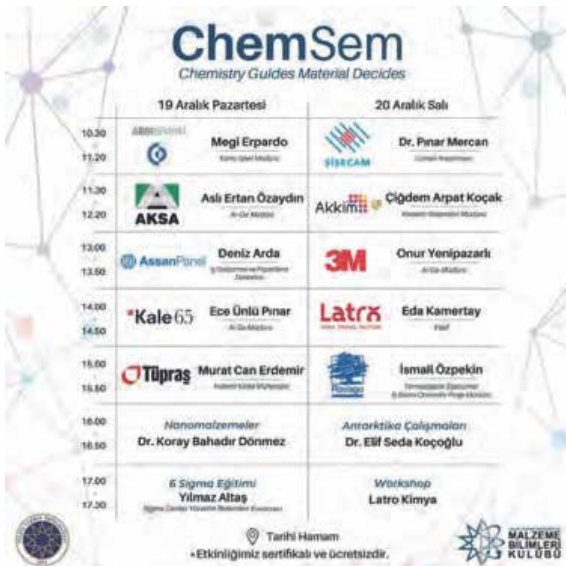
The "Future Booster", organized every year by YTU Quality and Efficiency Club, was held in 2022 with the theme of "Digital World".





Event

YTU encourages its students, employees and academics to keep up with the latest developments in technology, and supports them to establish cooperation and partnerships for the product and commercialization of R&D so that they can reach innovative and contemporary equipment and competencies. A series of seminars, training, conferences, information and events held on YTU campuses throughout the year lead YTU employees, students and academics to come together frequently with industry representatives and develop joint projects.



BIM4 TURKEY **DİJİTAL ENDÜSTRİYEL TESİS ZİRVESİ** **YTU**

Ayktut Türem
Ülke Müdürü
HEXAGON PPM

Cem Çalim
Merkez ve Güney Avrupa
Satış Müdürü
HONEYWELL

Hilmi Doğan
Kontrol Teknolojileri
Ülke Kanalı Yöneticisi
ABB

Hüseyin Fatih Aktaş
Altyapı, Çevre ve Enerji
Projeleri Direktörü
OPTIMAL PMO

Kerem Barlak
Endüstriyel Otomasyon İş Birimi
Genel Müdür Yardımcısı
SCHNEIDER

Murat Kurtlar
Bosch Endüstri 4.0
Projeleri Direktörü
BOSCH

Naim K. Hacıevliyagil
Genel Müdür
FABMETRICS

Sercan Kalyoncu
Proje Direktörü
KALYON HOLDİNG

Tolga Timirci
Endüstriyel Tesişler GMY
TEKFEN MÜHENDİSLİK

8 HAZİRAN 2022

YILDIZ TEKNİK ÜNİVERSİTESİ
DAVUTPAŞA KAMPUSU
KONGRE VE KÜLTÜR MERKEZİ

KAYIT: bim4turkey.com



With the YTU Designing My Robot project, students at YTU Schools prepared plans and sketches for their robots with the support of Visual Arts and ICT, using recycling materials. They made their robots movable with the tour at the Technopark Robot Science Centre.



REDUCED INEQUALITIES

Yıldız Technical University established policies to strengthen the fight against discrimination by providing equality of opportunity and initiated studies by Equal Opportunity and Anti-Discrimination Working Groups upon the foundation of Equal Opportunity and Anti-Discrimination Commission.

Yıldız Technical University determines the requirements for the effective participation of disabled students and staff in YTU activities and eliminates the problems they may encounter. YTU Disabled Students Coordinator coordinates the consultancy, support and mentoring activities for disadvantaged and special needs students and staff.



In 2022, direction signs for the disabled were placed in the corridors. Besides, a smart white cane was given away to visually impaired YTU students.



On the other hand, YTU aims to increase support programs such as scholarships, internships and employment for national and international students. For this purpose, YTU International Relations Coordinator provides coordination with relevant YTU units by meeting the needs, demands and requirements of foreign students coming from all over the world in the polyphonic campus environment of YTU.



R&D

Yıldız Technical University supports the reduction of inequalities with its employees, researchers, academicians and students. In order to support the reduction of the differences between societies by ensuring equality of opportunity, 4 projects started to be carried out in 2022 and 25 scientific studies were published.

The "bionic arm" designed by YTU students and researchers made it to the finals in the Technofest Barrier-Free Living Technologies Competition held in Trabzon.



In addition, YTU academics can both transfer their knowledge and experience to more trainers and reach more segments of the society with a multiplier effect by creating distance education system and modules for training of trainers so that everyone can access education opportunities equally.



Erasmus+ K2 project "Vocational Training of Adults with Disabilities" conducted by Dr. Özgür Demir started to be carried out under the coordination of Osmangazi Public Education Centre with participants from Bulgaria, Austria and the Czech Republic in 2022.



Student

Yıldız Technical University has such content as fundamental rights and freedoms in the education curriculum, law and legal regulations peculiar to the programs, thus offering equal education opportunities to everyone with its accessible campuses and unhindered faculty infrastructures.

Aiming to increase support programs such as scholarships, internships and employment for national and international students, YTU became the university that sent the most students to the European Union Erasmus program in 2022.

YTU students take part in the administration with the YTU Student Council, which consists of student representatives elected on a faculty basis. In addition, YTU management comes together with students and exchanges ideas and information.

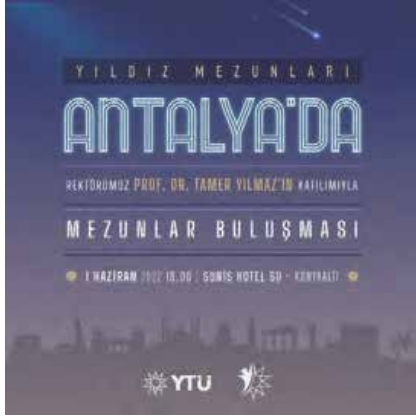


With the metaverse platform "YTU Starverse", which was tried for the first time in 2022, a new form of educational relationship between students and faculty members was introduced. YTU Starverse includes classrooms where students can take lessons and facilities such as a museum, art gallery and library where cultural activities will be held. Students and faculty members can log in YTU Starverse with their own computers, laptops and virtual reality glasses. The "Innovation and Entrepreneurship" course, which is the first course of the 2022-2023 academic year, was held on this platform, and a model application was performed for students and other participants to access science and information for everyone.



Innovation and Entrepreneurship” course was held on this platform, and a sample application was made for students and other participants to access science and information for everyone.





Event

Yıldız Technical University develop collaborations by organizing events to support students, employees and other stakeholders to have knowledge and awareness about reducing inequalities.

With its food organizations organized with employees, students and academicians, award and certificate ceremonies, nature walks, picnics and social gatherings outside the city, YTU contributed to the increase of its internal communication and information exchange in 2022.





With personal development trainings, psychological counselling support and culture-arts and sports activities, YTU students, employees, academics and stakeholders can participate in the society at an advanced level, where they have the opportunity to develop not only their technical capacities but also their social capacities.



In 2022, under the scope of cooperation with the Turkish Football Federation, 200 YTU students were given "Basic Refereeing and Position Training" and "Impartial Perspective Training". Students who complete their education analyse the critical positions sent to them by the Central Arbitration Board every week within the framework of certain criteria. Analysis results are evaluated within the framework of "Analysis of Public Perception in Critical Positions".

University students from different age groups, who are also fans of various clubs, evaluate the positions thanks to the training of impartiality they have received and reports are formed based on these evaluations. In this way, the perception of critical positions in the eyes of the public is determined.



SUSTAINABLE CITIES AND COMMUNITIES

Yıldız Technical University campuses take necessary infrastructural measures to be accessible to everyone and to facilitate access from all parts of the city. Every year, more and more YTU faculties receive the orange flag awards given by YÖK according to the accessibility criteria in the venue.



YTU Yıldız Technical University, which has designed its infrastructure to be based on resilience against disasters and to cope with them, conducts regular drills every year within the framework of the Disaster and Emergency Management Directive and informs students, employees and stakeholders. In addition, video trainings are provided through the YTU Disaster Awareness Training Portal, which was established within the framework of cooperation with the Disaster and Emergency Management Presidency (AFAD).





Yıldız Technical University Davutpaşa Campus includes buildings that allow natural lighting in a way that makes maximum use of daylight, taking into account the horizontal architecture, and the buildings are designed in an environment, human and animal friendly manner that will prevent energy and heat losses.



Registered historical buildings in YTU Campuses are restored and put into use with the understanding of sustainable building design.

YTU, which has established its sustainable infrastructure in a way to prevent the negative effects of all kinds of activities on the environment and people on the campus, where 48% of the total area consists of green and forest areas, uses clean and environmentally friendly solutions for transportation on its campuses.



Construction of a new library building at YTU Davutpaşa Campus



Yeşil Alan
0,59 km²

Orman Alanı
0,18 km²

YTU [A:1,22 km²]



R&D

Yıldız Technical University supports the policies and practices of the city where it is located by developing policies on the axis of resource efficiency, adaptation to climate change, mitigation of climate change and resilience to disasters. While providing technical knowledge and experience about sustainable city infrastructures to its students with the education curriculum it has created in its academic units such as the Faculty of Architecture, the Faculty of Civil Engineering, the Faculty of Economics and Administrative Sciences, it develops innovative applications for smart cities with its researchers and academics. Founded in 2019, YTU Smart Cities Application and Research Centre conducts research on sustainable cities and works to implement these innovative smart city practices on YTU campuses.



The new generation office design "Ecotone Innovation Center", which is under construction in the area between Yıldız Technical University and Technopark, consists of education, flexible co-working and meeting areas at the intersection of education and industry. With this hybrid area brought to Istanbul, it attracts attention in the world as an example of good practice, as well as encouraging innovation and the development of new technologies. Ecotone was the subject of a column titled "The Offices of the Future" in Time Magazine in 2022.



YTU Faculty of Architecture academics and students hosted the LiveArch event and held architectural conversations with experts and industry representatives from the departments of Architecture, Interior Architecture, Civil Engineering and ENTAS.

In transportation, which is an important element of spatial access, YTU academics and researchers take an active role and make significant contributions to its students, stakeholders, city managers and national transportation policies. In 2022, preparatory work for Turkey's Sustainable and Smart Mobility Strategy and Action Plan was initiated in cooperation with the Ministry of Transport and Infrastructure.



YTU academics and researchers contributed to the issue of sustainable cities by publishing 93 scientific studies, conducting 25 national and international projects as well as taking part in national and international events in 2022.





Student

Yıldız Technical University offers many of the sustainable infrastructures, ranging from bicycle paths and electric vehicles to electric vehicle charging points and smart water vending machines, to the service of its students and other stakeholders on its campuses. In addition to this, many more trainings are offered in such training programs as Urban Transportation Systems, System Performance and Efficiency Analysis in Urban Transportation, Urban Transportation Policies, Evaluation of Structural Wastes in the Building Life Process, Production-Use Cycle of Construction Products, Post-Disaster Shelter and Sustainability, Protection and Management of Cultural Heritage in Risk Situations. Thus, it provides its students with advanced knowledge, experience and innovative perspective, from sustainable building materials and city planning to the protection of historical buildings and cultural heritage, environmentally friendly buildings and architecture.





YTU guides its students with the vision of becoming a leading university in R&D with many interdisciplinary graduate programs and advanced-level specific subject-based interviews launched in 2022.



In the "Yeşeren Library" project, YTU students support the establishment of libraries in various schools with the books they collect.



urban loop [burkina faso]

a way of life produced by a curve that binds stand and comes itself

Have you ever thought about why the African built one in the shape of a circle? Throughout history, when humanity came together, one etc. it has usually formed a circle around a fire, and this shape represents unity, democracy and equality for people. When considering the African society and culture, we can mention that unity and togetherness are the most important characteristics that connect people. Our project in which we aim to bring together the elements symbolized by the circle and the elements of unity in African culture, is located in the village of Lioro, an oral settlement located in the Sahel region in the north of Burkina Faso, one of the poorest countries in the world.

In our design proposal, the common areas were placed at the center of the design (see circle), where people can receive their values and feel belonging to a community, to ensure all they can identify and perform activities that will build bridges between themselves and the community.



As we move away from the center outwards in the circle we have formed, there is a transition from socially to individuality. Families will be able to produce together in a common agricultural area following the common activity zone. These are houses in the following sense that will meet the housing needs of families in the backyard of the houses, there are individual agricultural areas for families and a lawn for farming. While the settlement we have created is a circular one, according to the possible population growth and needs, modularly designed houses can be added to complete one full circle.



Yıldız Technical University Architecture students Ece İrem Tuncer, Hatice Bahar Çoklar and Okan Temür participated in the international student idea competition called Great Green Wall (GGW) as a team and won the Honorable Mention award.



Student clubs such as YTU Alternative Energy Systems Club (AESK), Yıldız Rover and YTU SPARK achieve success in such platforms as electric vehicle races, robotics races and Technofest.



Event

Yıldız Technical University includes sustainable buildings by applying building materials and techniques certified in national and international standards and revising existing structures accordingly. Thus, it raises awareness about the activities it organizes on its campuses and the work done on this subject and contributes to the development of the technical capacity of its national and international stakeholders.



With the cooperation of Turkish Aerospace Industries, a panel was held at the Conference Hall of the Faculty of Electrical and Electronics, and students were informed about the production of national combat aircraft and helicopters, unmanned aerial vehicles and new generation vehicles such as airplanes in 2022.



The ATAG-25 Workshop, which brings together many researchers and studies from different institutions and disciplines related to Active Tectonics for disaster-resistant structures and resilient cities, was held at YTU. Researches on Active tectonics of Turkey and its surroundings, Paleoseismology, Seismology – Seismotectonics, Tectonic Geodesy, Tectonic Geomorphology, Monitoring and Modeling of Crust Deformation, Tsunami, Archaeoseismology, Geophysical methods used in Active Tectonics, active basin development and modelling, hazard/risk analysis and modelling, engineering studies related to active tectonics are presented and discussed in this workshop.





YTU has brought a new dimension to NFT, Metaverse, Blockchain and Gaming technologies by carrying its knowledge and experience in city designs to the virtual world. With the hackathon, organized for the first time in Turkey by The Sandbox, more than 30 developers and game studios designed and gamified the symbols of Istanbul for two days.



Yıldız Technical University Rector Prof. Dr. Tamer Yılmaz shared his valuable views with the participants at the "Green Buildings and Cities" summit hosting nearly 40 experts in their fields and organized by the Environmentally Friendly Green Buildings Association (ÇEDBİK).



RESPONSIBLE CONSUMPTION AND PRODUCTION

Yıldız Technical University acts within the framework of the policies it has created to ensure the sustainable management and efficient use of natural resources, especially in procurement processes such as procurement, construction and service procurement at every stage of its activities.

The basic policy adopted by Yıldız Technical University on zero waste management is to plan the implementation processes in such a way that if the generation of waste cannot be prevented, it will stay within the economic cycle, reduce waste generation and reuse.



Prevention and Reduction of Waste Generation



Glass cups and water dispensers have been introduced in the cafeteria, and purification devices are used for drinking water in the kitchens of the units.

In addition, water dispensers are used in the corridors of several buildings. An "open area water vending machine", suitable for outdoor use and pandemic hygiene conditions, has been placed in the garden.

The books collected in the book donation box are distributed to the needy.

Upon the repair to waste computers, they are donated to schools, and computer laboratories are set up in schools.



YTU prepares waste computers for reuse and donates them to schools.



Waste Recycling / Recovery



The wastes from the dining hall, suitable for animals, are separated and used as food for dogs in YTU campuses.

Dining hall and kitchen wastes are transported to the Istanbul Metropolitan Municipality (IMM) Biomethanization Facility within the scope of the protocol signed with İSTAÇ, where electrical energy and fertilizer are produced by converting to biogas.

Using separate collection boxes for blue caps, the caps are delivered to the Spinal Cord Paralysis Association of Turkey.



In the compost machine located in the Waste Temporary Storage Area, compost is produced from some kitchen wastes such as fruit and vegetable peels and garden wastes such as grass and leaves. The compost produced is packaged and presented to YTU visitors.



The Recovery Test and Research Centre (GETAM) is being established within the framework of a General Directorate of Development Agencies (ISTKA)-supported project. The project, carried out in cooperation with Çevko and Unilever, will be a first in Turkey, and this centre will contribute to the development of more innovative and environmentally friendly products, together with academic knowledge and industrial practices. In the centre to be established, whether the products and packages are recoverable at the targeted rates will be determined scientifically by conducting the necessary tests.

Activities for Raising Awareness



Zero waste awareness activities are organized.

By designing zero waste promotional products and products promoting zero waste, YTU contributes to increasing the awareness of students and campus visitors. These promotions are distributed to students who register for the first time in the fall semester of 2022, providing a nice welcome at the green campus YTU and contributing to the prevention of plastic waste generation.

A video on zero waste has been prepared and published in the YTU account.

Which waste?	What is being done?	What gains are made for the environment?
Packing Wastes	Separate collection at source	2.800 kg Plastic, 3.600 kg Paper-Cardboard Separation
Park and Garden Wastes	Composting	360.000 kg of compost
Kitchen and Dining Hall Waste	Reuse Biogas Production	4.300 kg Dog food 4.500 kWh Energy/Year 8.000 kg Fertilizer/Year
Mixed Wastes	Energy Recovery	273,700 kWh Energy / Year
Hazardous Wastes	Energy Recovery	Energy production by licensed company
Waste Electrical and Electronic Equipment	Recycling & Recovery	Reuse 200 Computers donated. recycling by Mechanical Chemical Industry Inc. (MKE) MKE tarafından geri dönüşüm
Waste Batteries	Collection & Recycling	Reused by Portable Battery Manufacturers And Importers Association (TAP)
Medical Wastes	Energy Recovery	Energy is reused at the facility.
Waste Vegetable Oils	Energy Recovery	Energy is reused by the company.
Textile waste	Reuse & Recycle	Reused by the county municipality
Construction and Demolition Waste	Separate collection at source	Reused by the contractor

ZERO WASTE



R&D

YTU, which carries out R&D studies to contribute to the efficient use of resources and keep them in its economic cycle, is involved in national and international projects on more effective and efficient waste management and the development of innovative approaches to waste. It encourages its students, researchers and academics to develop new ideas and sustainable solutions on alternative resources with its new and high multiplier effect ecosystems of good practices and projects. In this context, YTU students, researchers and academicians developed 26 national and international projects and published 112 scientific studies on responsible production and sustainable consumption habits in 2022.

Recycling Test and Research Centre (GETAM), a General Directorate of Development Agencies (ISTKA) supported project, aims to develop academic knowledge and industrial practices on recycling with the cooperation of Çevko and Unilever. In addition, the required tests will be conducted to determine scientifically whether the products and packages that will contribute to the development of more innovative and environmentally friendly products at the Centre are recoverable at the targeted rates.





YTU Glass Research Group, on the other hand, examines the basic properties, glass formations and structures of different glass systems (e.g. tellurite, antimonite, silicate and phosphate systems) to explore their potential for use in various functional applications. Research group conducts studies on heavy metal oxide glasses, radiation shielding glasses, chemically strengthened ultrathin glasses, lanthanide and materials such as LEDs, optical temperature sensors, 3D displays and Agri-PV applications, and luminescent solar concentrators focused on energy, environment and advanced communication systems.



Organizing a seminar for the students of YTU Cultural Heritage Conservation and Restoration Department, Dr. Duygu Çamurcuoğlu gave information about the "Beirut Glass Conservation Project", which is at the British Museum.

Why PV4Plants?

- Creation of an adaptable knowledge framework to involve end users in the agriPV implementation and promote synergies between agricultural and photovoltaic infrastructure facilities.
- Development of a highly replicable methodology to elucidate crops performance under different light spectrum conditions.
- Adapt the modular initial PV4Plants design to the specific pilot requirements and implement agriPV system based on glass-based colour converters (GCC) and bifacial solar panels.
- Proactive Facility Control and Operation (PFCO) for optimised operation of the agriPV system.
- Increase the recyclability and reuse materials during the entire lifecycle of the agriPV system and provide circular local economy models.
- Demonstrate agriPV system solutions under different conditions (e.g. weather, geography, solar irradiation, type of crops, etc.)
- Development of policy brief as suggestion for EU policy makers in order to develop an EU-wide framework for the scalable deployment of agriPV projects.

Consortium

Funded by the European Union

EU supported "Climate, water and light spectrum controlled Agri-PV system Project for safe, healthy and advanced crop production" in which YTU Glass Research Group is a part.



STUDENT

Yıldız Technical University, while carrying out its activities designed by using more durable, reusable and recyclable clean technologies, where natural resources are used as little as possible, offers a stimulating education curriculum to its students that will guide the world of R&D and technology that is growing day by day. While YTU reduces the amount of waste that is disposed of by regular storage with its own activities, it makes significant contributions to the city and country's circular economy system with its students who have production technologies and consumption habits in this regard.



YTU students create big impacts with small awareness movements.



Educational seminars organized with the contributions of YTU Environment Club provide students with important gains for sustainable waste management and the protection of the economic cycle of natural resources.



Workshops that support the awareness of YTU students are important in that they cause more waste to remain in the economic cycle instead of landfills.



In the workshop held in 2022, attention was drawn to the production of wristbands from textile waste and the reuse of wastes.






Green Sector sessions are held by YTU Environment Club every year as a platform where participants from different sectors convey environmental good practices to students.


BioSem

Stay With Science

📍 YTÜ Kimya-Metalurji Fakültesi Konferans Salonu

	10.30 - 11.20	11.30 - 12.20	13.00 - 13.50	14.00 - 14.50	15.00 - 15.50	16.00 - 16.50
4 Nisan Pazartesi	 Engin Narinç <small>CEO</small>	 Kübra Kömürcü <small>Katıyıcı Yönetim Müdürü</small>	 Begüm Esra Aytan <small>Kurucu</small>	 Canberk Asarkaya <small>Genel Müdür Yardımcısı</small>	 Murat Elçin <small>CEO</small>	 Fatih Uysal <small>Satış ve Pazarlama Direktörü</small>
5 Nisan Salı	 Özgül Gök <small>Acıbadem Üniwersitesi Fizyoloji Öğretim Üyesi</small>	 Gökhan Güngör <small>Kurucu</small>	 Yunus Akyüz <small>Katıyıcı Operasyonlar Direktörü & Menkul Müdür</small>	 Emel Sokullu <small>Co-Founder</small>	 Arda Deniz Dokuzoglu <small>Kurucu</small>	

*Etkinliğimiz sertifikalı ve ücretsizdir.

 / ytumbk
ytumbk.com





With the BioSem'22 event organized byYTU Materials Sciences Club, YTU students have the opportunity to learn the latest technologies closely from authorized people from leading companies in emerging fields such as bioengineering, biomaterials, biotechnology, tissue engineering and genetics.



Event

Yıldız Technical University aims to ensure that its stakeholders have knowledge and awareness about production and consumption processes compatible with the environment and nature, especially waste management, prevention, reduction, recycling and recovery of waste generation.



For this purpose, YTU takes part in many events throughout the year, as well as organizes many collaborations, joint projects and events such as conferences and panels.

These regularly organized events provide participants with their knowledge, skills and experience on sustainable waste management, responsible production and conscious consumption habits, while providing new perspectives with good practice examples on YTU campuses.





CLIMATE ACTION

Yildiz Technical University aims to reduce its carbon emissions to zero by 2030. It has determined its policies to reduce greenhouse gas emissions and prefer resilient practices in the face of disasters, especially in procurement processes and activities such as procurement, construction and service procurement, and designs its activities and processes in a way to protect the natural life, soil, water, air, vegetation and biodiversity in the campus, taking into account the effects on climate change.

YTU contributes to the reduction of emissions originating from energy and transportation, which are the main emission sources, and prevents possible waste-related disasters with the zero waste system implemented by reducing emissions from waste and reducing the effects of waste on climate change.

Emissions	Amount [ton CO _{2e}]	Reductions	Amount [ton CO _{2e}]
Supplied Energy		Renewable Sources	
Electricity	3.120	Renewable energy sources in campus	1.554
Natural Gas	3.834	Biogas from organic waste	3
Transport		Incineration	152
Davutpaşa-Yildiz Shuttles	7	Carbon Sequestration	
In-Campus Shuttles	301	Trees in campus	640
Davutpaşa Cevizlibağ Shuttles	149	Forestation	440
Personnel Services (Mini bus)	21	Carbon Mitigation	
Personnel Services (Bus)	11	Reduction in emissions from waste management	869
Vehicles entering the campus	733	Reduction in emissions from water management	234
Total	8.176	Total	3.892
Net Emissions	4.283 ton CO_{2e}		

YTU monitors energy and transportation emissions every year by calculating them according to the 2006 IPCC National Greenhouse Gas Inventory Method Guidelines. Emissions originating from waste and water supply are also taken into account in the emission calculations. On the other hand, measures taken to reduce emissions are taken into consideration. Emissions per capita are calculated by evaluating the gains from zero waste management and the reduction in emissions due to the use of alternative water sources, recycling water and rain water on the campus, tree planting activities, and the sink area characteristics of the green areas and forests on the campus.



According to this, annual per capita emission in YTU is 156.8 kg CO₂e, which decreased by 38% compared to the previous year.

KABEV (Energy Efficiency in Public Buildings) Project- 11 buildings on YTU campuses will be made energy efficient within the scope of KABEV with the support of the Ministry and energy will be produced with SPP. In this context, a list of measures was prepared for each building and planning was made in three different focuses: energy production, energy efficiency and improvement of comfort conditions. While electricity generation with the rooftop Monocrystalline PV system is the focus, energy efficiency is focused on measures such as LED conversions, maintenance, repair, replacement of central heating and cooling systems, and replacement of main entrance doors with a revolving door system.



Emission Reduction with Renewable Energy Investments

With the installation of a 4 MW capacity PV Panel on a total area of 15,655 m², almost all of the total electricity consumption of the campus will be met.





Green areas, which make up 48% of YTU campuses, are important sink areas of the city for emissions. YTU supports the reduction of emissions by planting more trees every year.



R&D

Yıldız Technical University develops national and international cooperation and projects in order to strengthen its resilience and adaptation capacity against climate change-related hazards and natural disasters. In this context, YTU researchers and academics developed 16 national and international projects and published 70 scientific studies in 2022.



YTU academicians will contribute to the establishment of the Carbon Monitoring Unit and online Carbon Radar, which will benefit all sectors, in the Project of Strengthening Environmental Sustainability in the Ready-made Clothing and Textile Sectors, carried out with the support of İSTKA.



Dr. Levent Kuzu and his team, from Yıldız Technical University Faculty of Civil Engineering Department of Environmental Engineering, aim to create a real-time map of air pollution caused by vehicle traffic with the project they developed.



Student

Yıldız Technical University offers an environment with low carbon density and high quality of life to all its employees and students. It has integrated its environmental and quality policies into national and international climate change policies and supports the active participation of its students, employees and stakeholders in resistance, reduction and adaptation activities against the negative effects of climate change. Many programs in the YTU education curriculum, ranging from renewable energy and waste management to smart transportation systems and green economy, directly contribute to climate change action.



At the "YTU Davutpaşa Smart Campus Student Workshop" held by YTU Smart Cities Application and Research Centre (AŞUAR) at Davutpaşa Congress Centre, smart solution proposals for the "YTU Smart and Green Campus" that make campus life easier for students were evaluated. "A Day on Campus" event was held for YTU students, who are active users of the campus.



The year 2022 theme of the Cartoon Contest organized by the YTU Dean of Students on environmental sustainability themes such as climate change, environmental problems, and protection of natural life for YTU students was "Cultural Heritage and Sustainability".



YTU students and administrators took an active part in awareness studies by participating in the 81 billion steps event in 81 provinces organized by the Ministry of Environment, Urbanization and Climate Change on World Environment Day.



Event

Yıldız Technical University, which raises awareness and sensitivity to all its stakeholders on issues such as combating climate change, resilience to disasters, reducing greenhouse gas emissions, adapting to climate change, thus increasing public awareness on this issue, raised awareness to participants from public, private sector and non-governmental organizations, starting from its own employees and students with the events, workshops and briefings it organized in 2022.



The Green Startups'22 event, organized for the first time by Yıldız Technical University Environment Club with the motto "to keep nature alive with technology" in 2022, threw the founders and officials of companies known in the field of sustainable entrepreneurship and environmental problems, YTU students, employees, academics and stakeholders together with a technological point of view.



At YTU Sustainability Summit'22, where good models of environmental sustainable development were explained and representatives from different sectors shared their experiences, YTU students had the opportunity to closely experience the contributions of companies to the UN Sustainable Development Goals.



Another YTU student club, Food and Healthy Nutrition Club, organized a Climate Change and Sustainability Summit before the Stars of Food Award Ceremony they organize every year. The Stars of Food Award was designed from waste to draw attention to climate change. Event invitations, on the other hand, are composed of small eye-catching notes written by students on dry leaves collected from YTU gardens.

14 ARALIK İKLİM DEĞİŞİKLİĞİ VE SÜRDÜRÜLEBİLİRLİK ZİRVESİ	
PRÖGRAM AKIŞI	
10.00 10.40	AÇILIŞ KONUŞMASI
10.40 11.00	ÜLKER Süheyl Aybar Kıble ve Sürdürülebilirlik Sorumlusu
11.00 11.20	FAO Dr. Ridvan Kurtipek Uluslararası Program ve Operasyon Uzmanı
11.20 11.40	BALPARMAK Didem Doğan Sürdürülebilirlik Direktörü
11.40 12.00	MİGROS Cansu Erçün Sürdürülebilirlik Yürütme Grup Başkanı
12.00 13.00	ÖĞLE ARASI
13.00 13.20	DANONE İlker Taygan Sürdürülebilirlik ve Su Kurumları Başkanı
13.20 13.40	LÖSEV Ayşe Ertugrul Sürdürülebilirlik ve Çevre Sorumlusu
13.40 14.00	ULUDAĞ İÇECEK Dr. Hande Hayraboluolu Kıble Sorumlusu
11.00 11.20	AFRO TURCO Gül Bakırtaş Pazarlama Direktörü
11.20 11.40	KAHVE ARASI
11.40 12.00	ABDİ İBRAHİM Müge Erardo Kıble Sorumlusu
12.00 12.20	METRO Betül Bıldık Sürdürülebilirlik Müdürü
12.20 12.40	YTÜ Prof. Dr. Bestami Özkaya YTÜ Rektörü Yardımcısı
12.40 13.00	KAHVE ARASI
13.00 13.20	GIDA KURTARMA DERNEĞİ Berat İnci Yürütme Kurulu Başkanı
13.20 13.40	ELİF AMBALAJ Dr. Betül Türel Erbay Sürdürülebilirlik ve Çevre Sorumlusu





LIFE BELOW WATER

Yildiz Technical University contributes to the protection of the water ecosystems of the city where it is located, with effective, efficient and inclusive water management. Rainwater in the campuses is collected completely separately, some of it is collected in warehouses to be used for irrigation of green areas, while the unused part is transmitted to nature through separate rainwater collection channels. Wastewater is further treated at the city's treatment plant with separate sewage channels, while some of it is used as recycling water to irrigate trees in YTU campuses, while the other part is discharged into nature.

While supporting the preservation of the water cycle in nature, YTU carries out activities for the restoration of aquatic habitats, especially the ponds on its campuses, and for the continuity of aquatic life.

Natural environments that clean and renew themselves without disturbing the balance in nature with biological ponds, and whose aquatic flora and fauna are maintained without the need for chemical treatment and drugs

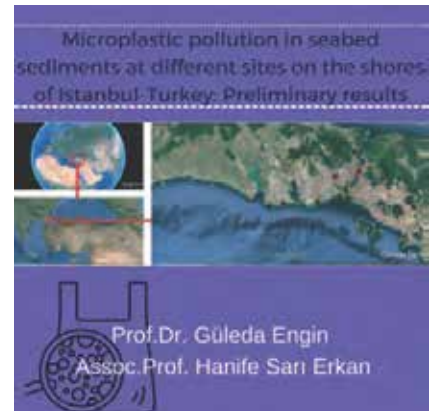


Water consumption due to irrigation of green areas in YTU campuses has an important place in annual YTU water consumption. In this respect, being aware of the world's water scarcity, YTU carries out applications such as xeric landscaping applications that aim to protect natural water resources by minimizing water needs. Using methods such as smart irrigation systems, drip irrigation, use of rain water, and evaluation of spring water and recycling water as infrastructure ensure the efficient use of water in the campus.



R&D

With the awareness of many years of experience in water collection, water efficiency, wastewater treatment, recycling and reuse technologies, YTU develops cooperation with stakeholders from different institutions and carries out joint projects. In 2022, YTU researchers, academicians and students developed 5 national and international projects and published 22 scientific studies.



A research project was carried out on the detection of micro plastic pollution in marine sediments in Istanbul.

AR-GE BAŞARISI



Doç. Dr. Afşin ÇETİNKAYA

Koordinatör

SHORE:EmpOweR Students
as the agents of change
HORIZON-MISS-2022-OCEAN-01

Araştırmacılar:
Prof. Dr. Bestami ÖZKAYA
Prof. Dr. Güleda ENGİN
Doç. Dr. S. Levent KUZU



Çevre Mühendisliği Bölümü öğretim üyemiz Doç. Dr. Afşin ÇETİNKAYA ve ekibi Ufuk Avrupa Programı, Okyanus ve Suların Restorasyonu Misyonu 2022 çağrısından 3 milyon Euro hibe almaya hak kazanmıştır. Öğretim üyelerimizi kutlar, başarılarının devamını dileriz.



ytu.insaat.fakultesi | ytu-insaat-fakultesi
ytuinsfkl | www.ins.yildiz.edu.tr



STUDENT

Yıldız Technical University has many educational content, from the use of alternative materials and the design of ships and marine vessels that will have less environmental impact on the waters to micro plastics and alternative energy sources, which includes and supports the protection of water management, oceans, seas, lakes, rivers and marine resources. It paves the way for its students and researchers for R&D and product designs in its innovative ecosystem.

YTU Hydrodynamics Laboratory and Research Centre was opened in 2022 and offered to students, academicians and researchers. As one of the best examples of the interdisciplinary R&D capacity of the Hydrodynamics Laboratory and research centre, underwater and surface unmanned sea vehicles, wave-wind energy, tsunami, it will host ship-sea technology and coastal-port research.





YTU students make a significant difference in the environmentally friendly designs of the vehicles used in sea transportation and in the alternative transportation systems in the seas. The National Ship and Yacht Design Competition, which is organized every year by the Ship Yacht and Services Exporters' Association, was held in 2022 with the theme of "Next Generation Coaster Ship" and in the competition, YTU and MAU students Nedir Ymamov and Tunahan Sert won the first prize with their project named "Vaquita".





Event

YTU carries out awareness studies in order to increase the knowledge and skills of its students, staff and stakeholders on the sustainable use of water.

Labels have been designed to raise awareness at points where water is used, such as WCs, sinks, and kitchens on campuses.





In addition to the purification devices in the kitchens and drinking water dispensers in the corridors, the use of drinking water vending machines and water flasks placed in the garden in 2022 is encouraged, thereby the attention of students, employees and all stakeholders is drawn to the reduction of plastic use.





The National Seafarer Students Summit was held for the 11th time this year by the Seafarer Students Association (DÖDER) in cooperation with YTU, where more than 2000 seafarer students from many provinces of Turkey came together with industry representatives.

LIFE ON LAND

Yildiz Technical University protects the forests, wetlands and ecosystems on campuses and ensures their sustainable use and maintenance.





Developing policies for the protection of hundreds of plant and animal species on its campuses, YTU supports terrestrial life with the birdhouses placed in 2022.





Pamuk tarlalarında afara zamanı

1. 25 insanın yaptığı işi tek başına yapabiliyor.
2. Uluslararası patentli robot
3. Elektrikli ve çevreci
4. %100 Yerli ve milli üretim

YERLİ ÜRETİM **TÜRK PATENT** **YILDIZ**



Yıldız Tekno GSYO

Yıldız Tekno GSYO A.Ş., bir YÜ Yıldız Teknopark kuluçka girişimi olan **Afara Kalıntı Pamuk Toplama Robotu** projesine **1.870.000 TL** yatırım yaptı.

afara **fonlabüyüsün**

Following the traces of Aristotle's peripatetic school, YÜ added trekking path to its students, staff and academics within the framework of its own educational philosophy, including learning and mental gymnastics, which the teacher performs together with thinking, and paved the way for mental activity for them.





STUDENT

Yıldız Technical University supports its students to increase their technical capacity without harming existing plant and animal species in nature by including applications that will least affect forests, wetlands, ecosystems and biological diversity while developing innovative technologies and engineering approaches. In this respect, YTU education programs cover many content from reducing waste, reusing plastics, digitizing education to prevent paper use, and architectural design suitable for nature.

YTU students see that the techniques they learned in these training contents are applied on YTU campuses, and they learn about the importance of sustainable environment in production, industry and technology from the participants at the symposiums, seminars and conferences.



Plants were planted in coffee cups at the Volunteer Carnival event organized by YTU Social Responsibility Club.



In addition to the natural environment of YTU campuses, YTU students also take part in nature walks and activities organized by student clubs such as YTU Mountaineering Club, YTU Travel and Camping Club and YTU administration.



EVENT



YTU 111th Anniversary Memorial Forest was created and 10 thousand saplings were planted on 60 acres in Arnavutköy Durusu.

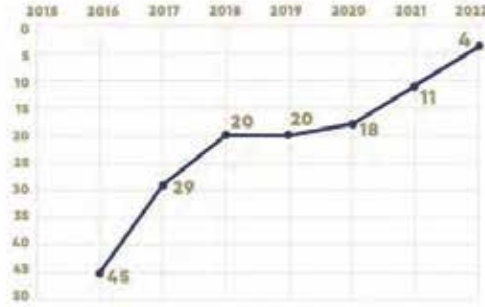
PEACE, JUSTICE AND STRONG INSTITUTIONS

Yıldız Technical University, which has an effective, accountable and transparent institutional structure at all levels, increases the representation of students, employees, academics and other stakeholders in corporate decision-making processes.

According to data of the university satisfaction survey conducted in 2022, Yıldız Technical University has risen to the fourth place.



TÜMA-YTÜ'nün
Öğrenci Memnuniyeti
Genel Sıralaması



ÜNİVERSİTE
ARAŞTIRMALARI
LABORATUVARI
www.uniar.net

Tablo 6. Devlet Üniversitelerinin Genel Memnuniyet Sıralaması

Sıra	Üniversite	N	Genel Memnuniyet Puanı	Düzye
1	Abdullah Gül Üniversitesi	138	527	A+
2	İzmir Yüksek Teknoloji Enstitüsü	200	522	A+
3	Yıldız Teknik Üniversitesi	380	520	A+
4	Ege Üniversitesi	425	500	A
5	Gebze Teknik Üniversitesi	182	498	A
6	Gahtasaray Üniversitesi	139	495	A
7	Türk-Alman Üniversitesi	141	487	A
8	Muğla Sıtkı Koçman Üniversitesi	337	486	A
9	Çanakkale Onsekiz Mart Üniversitesi	404	481	A
10	Erciyes Üniversitesi	416	481	A

TÜRKİYE ÜNİVERSİTE | TÜMA
MEMNUNİYET ARAŞTIRMASI | 2022
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YTU Protection and Security Directorate, which creates safe campuses for students, employees and stakeholders, monitors and controls campuses 24/7 with both its personnel and equipment.



All kinds of complaints, requests, requests and suggestions are received and forwarded to the relevant units via YTU Star Line.



R&D

YTU researchers and academics are represented in Faculties Management and University Management. In addition, YTU activities are published in YTU Annual Reports with their data every year, ensuring institutional transparency and accountability. YTU expands its sustainable policies by developing projects and collaborations. In this context, YTU researchers and academics developed 9 national and international projects and published 67 scientific studies in 2022.

Student

Yıldız Technical University offers its knowledge and R&D experience, which it has developed on subjects such as the use of innovative technologies in the field of national security, the evaluation of scientific data for judicial proceedings, for the benefit of non-discriminatory laws and policies for sustainable development. While YTU students learn the legal aspects of the relevant program in their education programs, they can also learn about the different security infrastructures that have emerged with the new digital age.

In 2022, the new interdisciplinary graduate education program "Cyber Security and Cryptography" was presented to researchers and students.



"Cloud&Security" training given by Engin Yükselen from the company of Turkcell was organized for YTU students.



Yıldız Cyber Society, operating within YTU, organizes various trainings and seminars for students on this new generation security.



YTU students experienced new developments in data and network security techniques in the workshop held in 2022.

YTU carries out activities and awareness projects in order to respond to the continuous development and new security needs that arise with changing technology in order to protect the fundamental freedoms necessary for sustainable development.



Event

Yıldız Technical University has established its principles and commitments to reduce all kinds of violence, abuse and torture, and has determined the security measures to be taken in extraordinary situations such as disaster management plans and procedures such as documentation, archiving and protection of official correspondence.

YILDIZ 2 SİBER GÜVENLİK ZİRVESİ

YTU

16 NİSAN CUMARTESİ
ONLINE

11.30		Tülay YILDIRIM Head of Electronics Division at YTU Electronics and Communications Engineering	Siber Güvenliğin Geleceği
12.00		Emin İslam TATLI Director of Cyber Security at Turkcell	Ofansif Güvenlikte Kariyer ve Turkcell Zafiyet Avcılığı Programı
13.00		Ömer ÇITAK Founding Partner at StrixEye, Author	Secure Development Lifecycle
14.00		Muttalip TULGAR Cyber Security Specialist at TÜBİTAK BİLGEM	IoT Security
15.00		Şükrü Güçlü DUTLUCA Country Cyber Security Officer at Siemens	OT and Product & Solution Security
16.00		Sibel KÜNDEŞ Talent Acquisition & Employer Branding Manager at Doğuş	Güçlü Bir Kariyer İçin HR Tavsiyeleri

 /yildizsiber 

Digital security systems were discussed with all their dimensions at the Cyber Security Summit held in 2022.

PARTNERSHIPS FOR THE GOALS

Within the scope of national sustainable development goals, Yıldız Technical University, which provides policy and strategies, future modelling, monitoring and reporting studies, and an effective sustainability management, shares it with other universities, institutions and organizations on its Smart Green Campus page.

Bringing new dimensions to its sustainability journey with the partnerships and collaborations it has established, YTU also proposes a sustainable development model to the stakeholders of the city where it is located, to national and international entrepreneurs from different sectors, and to industrial and commercial organizations.

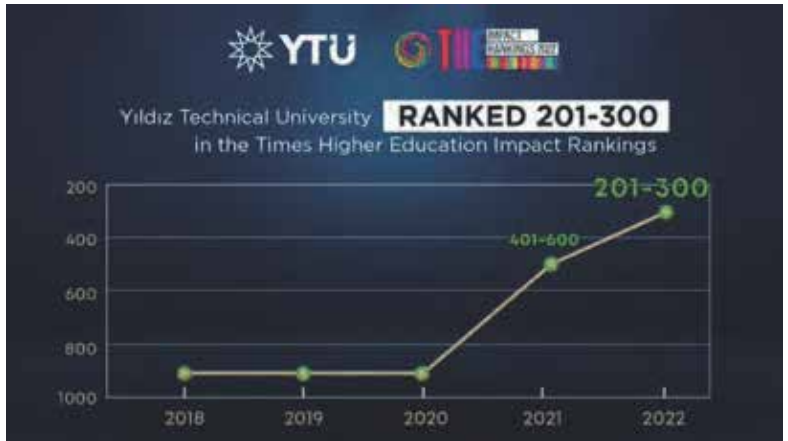
YTU Greenstars Certification Program has advanced significantly since 2021, supporting the sustainability efforts of more institutions with new certifications in 2022.





R&D

Continuing to rise to the top of the national and international platforms by increasing national and international R&D studies and joint projects on sustainability, YTU came to the fore in the sustainable campus rankings in 2022.



A detailed Partnership for Purposes Report has been prepared for the projects, scientific publications, collaborations, meetings and organizations carried out by YTU researchers, academics and students with different national and inter-national institutions that contribute to sustainable development. (APPENDIX-Y-TU_17.SDG_REPORT)



 **STUDENT**

In addition to education programs for directly sustainable development such as Sustainable Energy Systems, Sustainability and Circular Economy, Yıldız Technical University has innovative technologies in its curriculum and many other supporting content such as digital systems, renewable energy, innovative materials, environmentally friendly architecture, building materials, which are an important part of sustainability.

In this regard, YTU students increased their awareness many times over and continued to be informed about the social, economic and environmental aspects of sustainability in 2022. The fact that the innovative technologies they have developed are deemed worthy of awards in a wide range from biotechnology to electric vehicles, from renewable energy to herd robots in national and international fields is an indication of how wide the capacities of YTU students are in this field.





Event

Trainings, seminars, conferences and summits organized by YTU in order to increase the participation and contribution of students, staff and all stakeholders in sustainability studies open up significant horizons for all participants who are stakeholders of the YTU ecosystem.

Conferences



Conferences for information sharing



Summits organized to share sector-based sustainability studies



Trainings



Competition and Workshops



Workshops for sector training



YILDIZ TECHNICAL UNIVERSITY

SUSTAINABLE DEVELOPMENT GOAL 17: PARTNERSHIPS FOR THE GOALS

Strengthening the Means of Implementation and Revitalizing the Global Partnerships for Sustainable Development



“LEAVING NOBODY BEHIND!”

Supporting the United Nation’s call for all countries and institutions to ensure global development, Yildiz Technical University is one of the breathing points of the city through its sustainable campuses, and with the vision of “Leader in Research & Development”, Yildiz Technical University develops strong, inclusive and integrated collaborations with the students and employees through scientific studies, projects, events, trainings and organizations for sustainable development.



PARTNERSHIPS FOR THE GOALS

Parties to the United Nations Framework Convention on Climate Change have made a commitment to reduce greenhouse gas emissions, collaborate on research and technology, and protect sink areas such as forests, oceans, and lakes. These countries has determined its sustainability policies and targets according to the principle of “common but differentiated responsibilities and relative capabilities” by taking into account their own development priorities and specific conditions (<https://unfccc.int/>). As Yildiz Technical University, within the framework of the same principle, national and international projects and research studies are carried out, collaborations at the national and international levels are established, distinguished academic outputs are achieved. Additionally, both online and face-to-face conferences, classes, seminars, training programs, information and awareness activities were held. Moreover, events with the national and international stakeholders were organized to contribute to the goal of “strengthening the tools of implementation and reviving the global partnership for sustainable development”.

Yildiz Technical University is a 111-year-old university with 1,770 academic staff, 11 faculties, 2 graduate schools, 293 laboratories, 26,551 undergraduate students, 65 student clubs and 679 administrative staff. The university aims to form collaborations to support the Sustainable Development Goals. This report gives a glimpse on the various research and education activities and collaborations by the university, and presents examples to disseminate more sustainable practices.

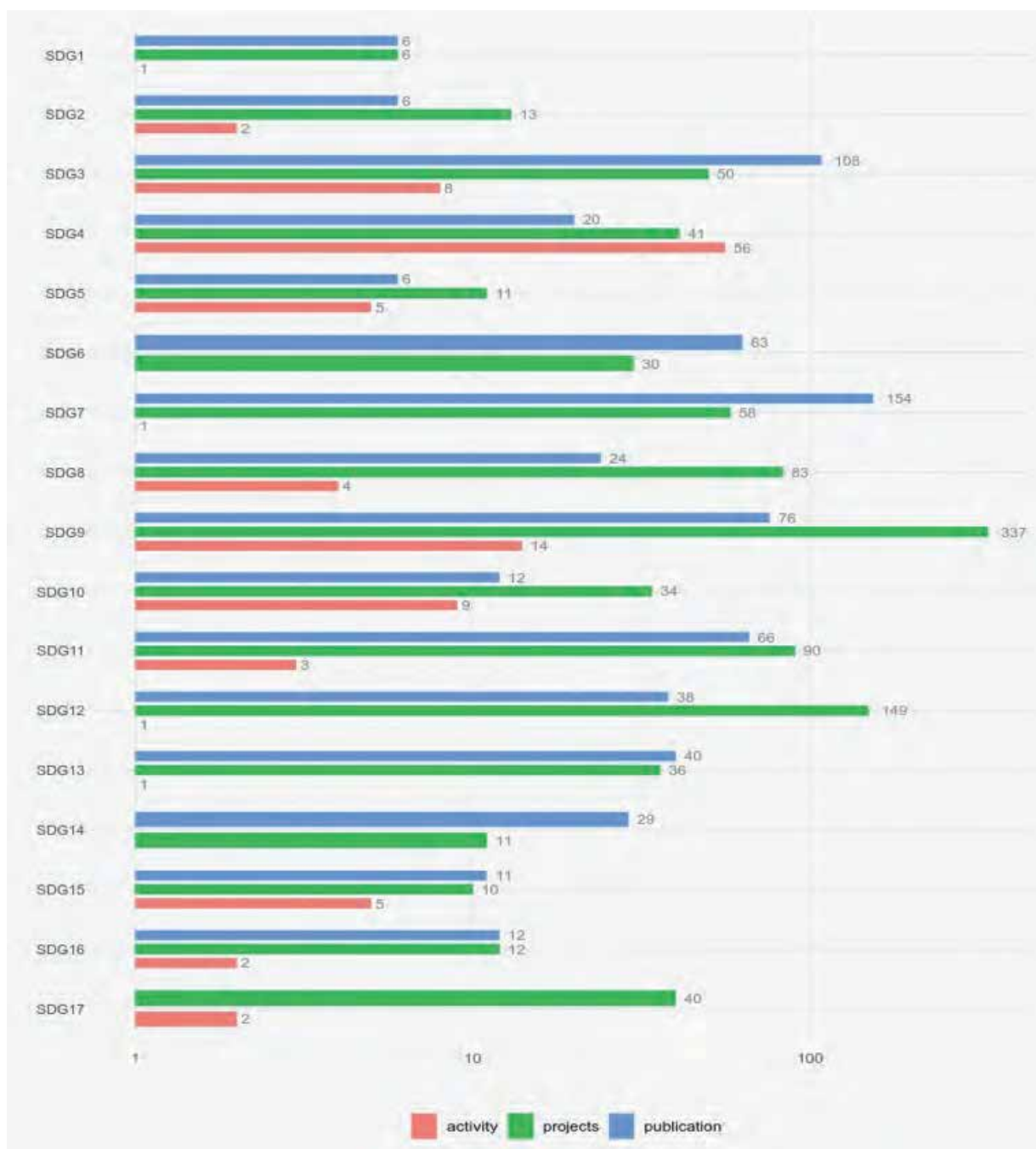
RESEARCH

COOPERATION
AND
ACTIVITIES

SUSTAINABILITY

EDUCATION
AND
TRAININGS

Overview of Research, Publications, Activities and Projects per SDG that formed SDG 17





RESEARCH

Yıldız Technical University (YTU), which ranks the 5th among the Turkish universities with high-level research performance, has a total of 31 research centers. The university has been putting research and development (R&D) studies at the forefront in its strategic plans for the last 12 years, and it shows the performance of an R&D university with its publications, projects and entrepreneurship activities.

In line with the entrepreneurial university model of the 21st century, which contributes to the R&D activities of our country, the activities of forming a technology development zone were initiated and YTU Yıldız Technopark was established in 2003. Technopark continues its efforts to become an international cooperation center that takes part in all stages of the process of transforming new ideas into value-creating outputs. There are more than 500 companies operating in YTU Yıldız Technopark, where more than 8,000 R&D personnel are working. More than 4,000 projects have been carried out since the establishment of the Technopark. YTU Technopark has been holding the highest rank in the Technology Development Zones Performance Index for the last 3 years (<https://www.yildizteknopark.com.tr/tr/duyurularimiz/bizden-haberler/haber-detay/teknoparklarin-yildizi-ytu-yildiz-teknopark-oldu>).

The Technology Transfer Office (Yıldız TTO Inc.) within YTU Yıldız Technopark takes innovation one-step further with its collaborations and projects. Adopting mutual trust and sustainable cooperation between academics and industrialists as its main purpose, the office serves as an interface to create the necessary platforms for the use of academic knowledge, science and know-how at Yıldız Technical University in line with the needs of the industry in order to make positive contributions to the country's economy. The aim of the establishment of Yıldız TTO Inc. is to contribute to the transformation of academic knowledge into value-added outputs by contributing to the development of collaborations of YTU academics with different research institutions and industrial organizations. Yıldız TTO Inc. is responsible for following up of the contracts for the granted projects/collaborations. In addition, it is also responsible for the management of the administrative and financial processes of the projects. Since the foundation of Yıldız TTO Inc., YTU has initiated 750 projects with a budget of approximately 60,000,000 TL, by academics from different institutions and organizations. Currently, Yıldız TTO Inc. has started 110 new projects with a budget of approximately 15 million in 2022 and continues its activities by following the administrative and financial processes of the ongoing projects.

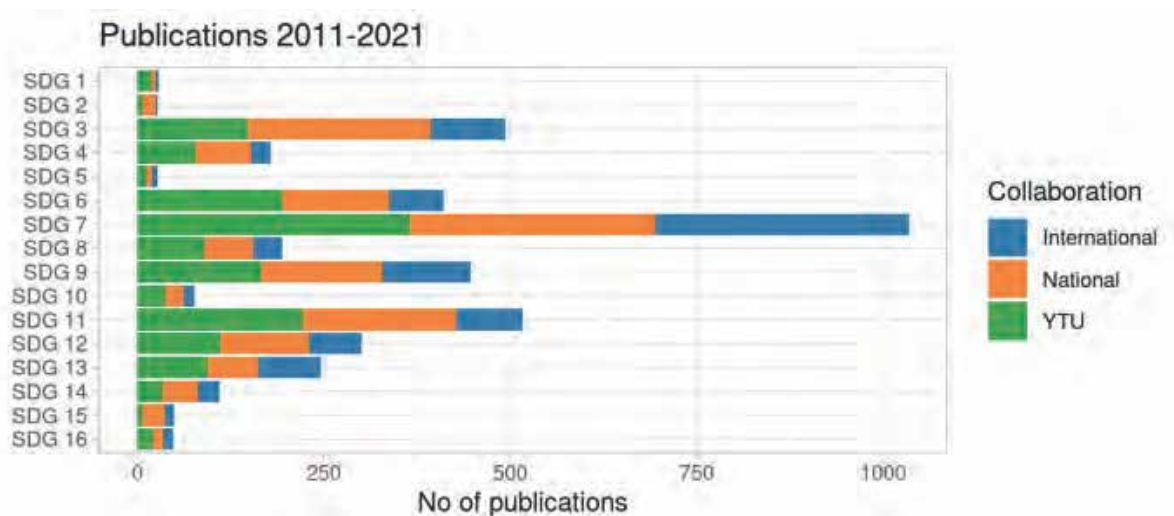
YTU carries out several activities to develop collaborations with different international institutions and academicians in line with its internationalization vision. As of the end of 2021, a total of 36 projects have been initiated from funds such as European Union Framework Programs, Era-Net, Erasmus+, Bilateral/ Multiple Cooperation Programs, IPA. In 2022, a total of 11 new projects, 3 of which are Horizon Europe Programme, were initiated with the total budget of 1,739,951€. YTU has also partnered with the UN agencies in multiple projects.

YTU also has many research centers and laboratories that are fully equipped with the latest technology. More detailed information about research at YTU can be found at <https://research.yildiz.edu.tr/>

With 1,770 academic staff, YTU has a reputation for producing high impact academic outputs. The university also provides opportunities for collaboration across multiple disciplines and departments within the university, and provides opportunities for national and international collaboration. YTU is one of the few member Turkish universities of EURAXESS, "a platform for researchers, entrepreneurs, universities and businesses to interact with each other and a joint initiative of the Commission with the 40 countries participating in the European Union's Horizon 2020 Program for Research".

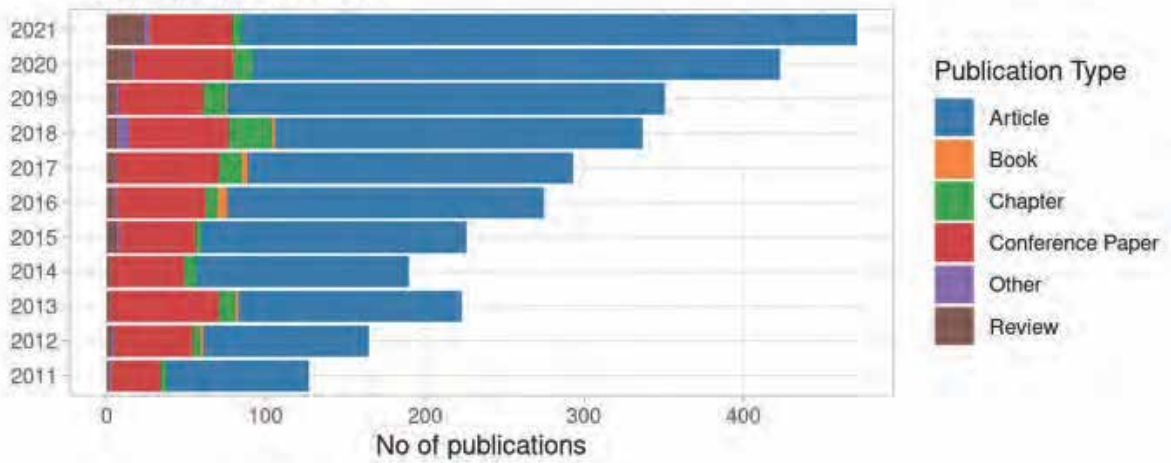
Academic Outputs: Based on the data that were extracted from SCOPUS, below figures show YTU's academic outputs and collaborations in numbers. Total number of YTU academic outputs between the years of 2011 and 2021 is 3,081.

Total number of academic outputs in year 2021 is 471. 386 research articles, 52 conference papers and 24 review articles were published in 2021. Below figure shows the distribution of academic outputs that were created with national and international collaborations as well as collaborations among YTU academicians in 2021.



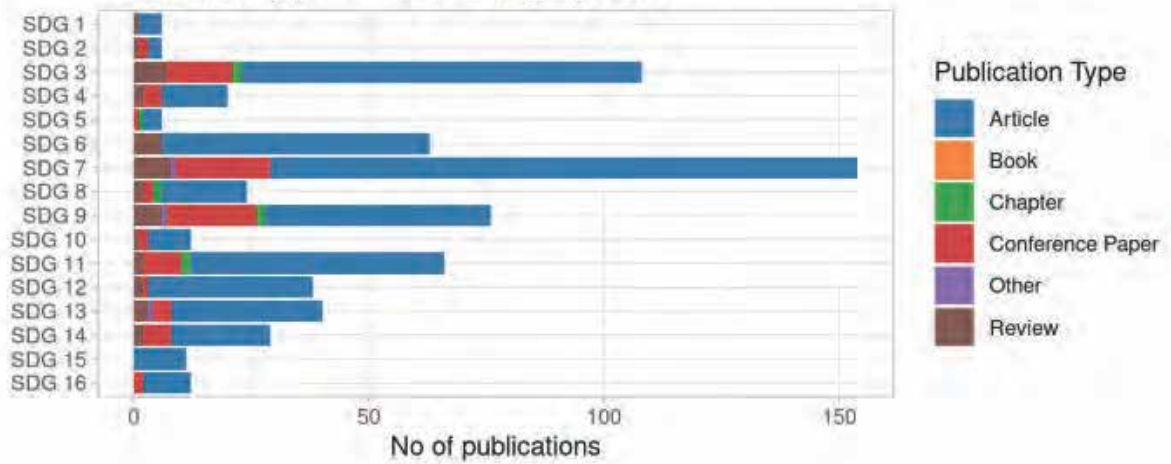
Below figure shows the distribution of academic output types from 2011 to 2021.

Publications 2011-2021



The break up of academic output types per SDG in 2021 is shown below.

Publication Type vs. SDG Category 2021



Below table lists the top 10 countries, which have the highest number of academic outputs published in collaboration with YTU academicians (between years 2011-2021).

Country	Number of Co-Authored Outputs
United States	164
Canada	122
United Kingdom	61
Portugal	60
Iran	42
Netherlands	37
Germany	28
Austria	26
France	25
Italy	24

Below table lists the top Top 10 countries that have the highest number of publications published in collaboration with YTU (in year 2021).

Country	Number of Co-Authored Outputs
Canada	24
United States	20
Iran	12
China	7
France	6
Ireland	6
Malaysia	6
Portugal	6
United Kingdom	6
Denmark	4



**Patent Trends In The
Shipbuilding Industry**



**Patent Trends In The Field Of
Earthquake- Resistant Building
Materials**



Vaccine Technologies

In 2021, total number of academic outputs were 471, of which 116 of them were international outputs. Out of all international outputs, 23 of them were between low or lower-middle income countries. Thus, proportion of academic outputs with co-author(s) from low- or lower middle-income countries is 19.8%.

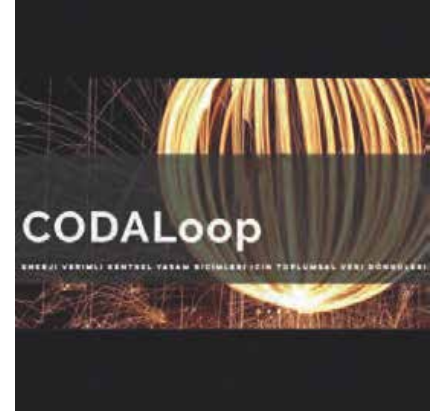
Patents: According to the data from the Turkish Patent and Trademark Office, YTU is one of the universities with the highest number of patent applications in Türkiye. YTU also made the highest number of international patent applications among the universities in Türkiye. In 2021, 41 invention notifications were received at YTU, 35 national patent applications and 52 foreign patent applications were made. 12 national patent registrations and one US patent registration were achieved. More information can be found on <https://research.yildiz.edu.tr/>

COOPERATION and ACTIVITIES

Yıldız Technical University is the 3rd oldest university of Türkiye with its history dating back to 1911. The university constitutes strong and deep-rooted relationships with the Turkish government and regional non-government organizations (NGOs) through research, projects, consulting, conferences, and various programs for the students, and development of educational resources. Some of the best practices and approaches that are currently in use are explained in this section.

Research Projects: YTU academic personnel conduct research projects in the national level with the other Turkish universities, provincial and district municipalities, the ministries and the NGOs, and within the international level by conducting projects funded by the European Commission, Erasmus+, the Joint Programming Initiative Urban Europe, and the British Council Newton Fund. For instance, YTU carries out the project of Establishing a Sustainable and Smart Mobility Strategy and Action Plan in partnership with the Ministry of Transport and Infrastructure. Within the framework of Fatih Municipality and YTU Research Project Protocol, YTU academic personnel offers method suggestions on Research, Analysis, Synthesis and Urban Design Guide Code Development for the Preparation of Urban Design Guide for the Historic Peninsula (Fatih District). YTU College of Education is in collaboration with the district municipalities. For example, a protocol was signed between the College of Education and Başakşehir District National Education Directorate to increase the quality of education and training activities in the district. In addition, protocols were signed and various projects were carried out between the College of Education and primary/secondary schools in Istanbul city in order to establish social and scientific cooperation.

YTU academicians conduct research projects that are funded by the national and international or European institutions. At the national level some of these institutions are the Scientific and Technological Research Council of Türkiye, the Ministry of Agriculture and Forestry, the Ministry of Environment, Urbanization and Climate Change, the Ministry of Health, the Ministry of Culture and Tourism, Istanbul Metropolitan Municipality, Bursa Metropolitan Municipality, Sivas Municipality, Arnavutkoy Municipality, Didim Municipality, Avcılar Municipality Urban Transformation Directorate, Istanbul Development Agency, Trakya Development Agency, and the Turkish Energy, Nuclear and Mineral Research Agency. Examples to these projects are "Textile Waste for Sustainable Design and the Usability of Textile Waste in Cement Based Composites" and "A Model Proposal for Ensuring Intra-Voice Illumination with Daylight in the Context of Sustainability", where undergraduate YTU students are being the project manager under the supervision of YTU faculty members were accepted within the scope of the Scientific and Technological Research Council of Türkiye (TUBITAK) University Students Research Projects Support Program. The project entitled "Establishment of Compliance and Impact Indices for Sustainable Development Goals for Financial Institutions to Support Sustainable Financial System and Economy" was also funded by TUBITAK.





At the international level, most of the projects have been funded by the European Commission, Erasmus+, the Joint Programming Initiative (JPI) Urban Europe, and the British Council Newton Fund. One example to these international projects is "Community data-loops for energy-efficient urban lifestyles" funded by JPI Urban Europe in collaboration with University of Amsterdam, Graz University of Technology, Delft University of Technology, PlusOneMinusOne, Planbureau voor de Leefomgeving, Amsterdam Economic Board/Amsterdam Smart City, Nudge, District Municipality of Kadikoy, Yurtici Kargo, Energie Steiermark AG, StadtLABOR, City of Graz/Stadtbaudirektion, and HORN Consult (<https://yildiz.edu.tr/universite/ytu-duyurular/enerji-verimli-kentsel-yasam-bicimleri-icin-toptumsal-veri-donguleri>).

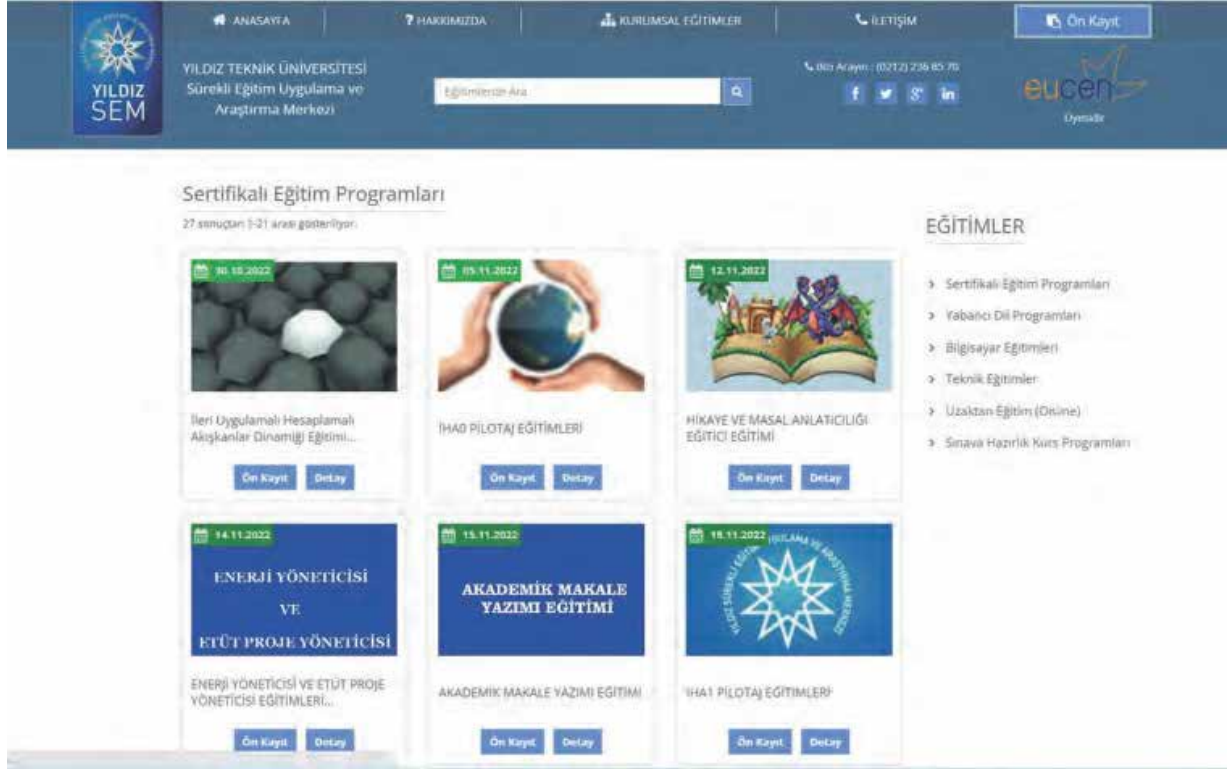
Research Centers and Laboratories: There are several research centers and laboratories established within YTU to help support and improve research and development activities. Some activities that are held at these centers and laboratories are described in this section.

- The Science Technology Application Research Center (BITUAM): BITUAM cooperates with universities abroad and forms partnerships with research institutions on R&D issues. This center is used as a working environment to conduct scientific research projects from the European Commission, the Scientific and Technological Research Council of Türkiye, the Turkish Academy of Sciences. BITUAM has provided research and development services to the governmental institutions (e.g., Turkish Standards Institution), the public and private universities (e.g., Boğaziçi University, Istanbul University, and Yeditepe University), the public hospitals (e.g., Istanbul Başakşehir Çam and Sakura City Hospital) and the district municipalities (e.g., Bayrampaşa Municipality Science Center). More information can be found at <http://www.merklabyildiz.edu.tr/>
- The Social Innovation Applied Research Center (SOSYOPARK): Sosyopark is aiming at effective collaboration with other stakeholders who are taking part in social innovation activities in the society. <http://www.sosyopark.yildiz.edu.tr/en>

• Settlement and Architectural Sciences Application Research Center (YERMİM): YERMİM conducts research, practice and provide trainings on economic, political, administrative, social, demographic, physical, architectural, technical and artistic issues related to buildings and settlements. (Below figure was taken from https://www.instagram.com/yermim_ytu/?igshid=YmMyMTA2M2Y%3D)



•International Center for Urban Studies (ICUS): ICUS conducts joint studies and develops collaborations with universities and city-related institutions in the international arena, with countries with common cultural characteristics. For detailed information: <http://www.icusyildiz.edu.tr/>



The screenshot shows the website for Yildiz SEM (Sürekli Eğitim Uygulama ve Araştırma Merkezi). The header includes navigation links for ANASAYFA, HAKKIMIZDA, KURUMSAL EĞİTİMLER, İLETİŞİM, and an 'Ön Kayıt' button. The main content area is titled 'Sertifikalı Eğitim Programları' and displays a grid of training programs. Each program card includes a date, a title, a description, and 'Ön Kayıt' and 'Detay' buttons. The programs listed are:

- 10.10.2022: İleri Uygulamalı Hesaplamalı Akışkanlar Dinamiği Eğitimi...
- 09.11.2022: İHA1 PİLOTAJ EĞİTİMLERİ
- 12.11.2022: HİKAYE VE MASAL ANLATICILIĞI EĞİTİCİ EĞİTİMİ
- 14.11.2022: ENERJİ YÖNETİCİSİ VE ETÜT PROJE YÖNETİCİSİ
- 15.11.2022: AKADEMİK MAKALE YAZIMI EĞİTİMİ
- 18.11.2022: İHA1 PİLOTAJ EĞİTİMLERİ

On the right side, there is a section titled 'EĞİTİMLER' with a list of categories: Sertifikalı Eğitim Programları, Yabancı Dil Programları, Bilgisayar Eğitimleri, Teknik Eğitimler, Uzaktan Eğitim (Online), and Sınavla Hazırlık Kurs Programları.

• Continuing Education Application and Research Center (SEM): SEM provides trainings for both the YTU students and academic personnel, and non-YTU people. YTU SEM is a member of the European University Continuing Education Network. The trainings at SEM has a wide range from statistics or software related courses to corporate sustainability trainings. The center also provided academic development program training to Azerbaijan State Economics University. For detailed information: <https://sem.yildiz.edu.tr/>

• Energy Application and Research Center: Energy Application and Research Center was established to raise awareness among students, engineers and technical personnel. With this center, theory, practice, and experiment opportunities in the area of energy efficiency will be held for the city of Istanbul. The center is also officially recognized by the Ministry of Energy and Natural Sources as an authorized center, which means certificated trainings, certification of the green buildings can be provided by the center. The center is the first Clean Energy Center in Türkiye. Energy Efficiency Coordination Office within the center assigned a building energy manager responsible for energy efficiency of each building of YTU to control and monitor the energy efficiency status of the buildings every two months. For more information: <https://enerjuygar.yildiz.edu.tr/en>.

• Finance Labs: There are two finance labs currently located within the Faculty of Economics and Administrative Sciences. Finance Laboratories contribute to university-industry cooperation by providing scientific and technological infrastructure for innovative projects and ideas developed in the field of finance and economy that the private sector and the public will be in need.

Academic Consultancy: YTU academicians provide consultancy to the government institutions, the ministries, the municipalities, and to public and private institutions. Some examples to these institutions are Istanbul Metropolitan Municipality Smart Cities Directorate, Istanbul Metropolitan Municipality Directorate of Migration and Integration, Fatih Municipality Zeyrek Academy, and Buyukcekmece Municipality. Some of the YTU academicians also work as the advisory board member for the provincial and district municipalities. For instance, one YTU academic personnel served as the Beşiktaş Municipality-City Council/Women's Council advisory board member and another one served as the advisory board member for the Istanbul province in the restoration of Hagia Sophia, Selimiye and Blue Mosques.





Conferences: YTU hosts conferences in partnership with the other academicians/researchers from other institutions. The City and Regional Planning Department was the host institution for the Istanbul Meetings in partnership with Mimar Sinan Fine Arts University, Istanbul Technical University and the Union of Chambers of Turkish Engineers and Architects-Chamber of Urban Planners Istanbul Branch. The department was also the host for the Türkiye Urban Planning Congress in partnership with the Union of Chambers of Turkish Engineers and Architects-Chamber of Urban Planners and support from Istanbul Planning Agency (<https://sbp.yildiz.edu.tr/images/files/Kongre.pdf>).

Programs for the Students: YTU provides various programs for the students to ace the student learning and experiences.

• **Cooperative Education (CO-OP):** CO-OP, also known as YTU KOOP Education Model, aims to develop cooperation between the university, public institutions and the business world. YTU is one of the few universities in Türkiye implementing this special program. Some of the collaborators of YTU through the CO-OP education model are the Scientific and Technological Research Council of Türkiye Informatics and Information Security Research Center (TUBITAK BILGEM), Schneider Electric, AVL, MAPit, and Santlab. For more information about CO-OP <http://www.koop.yildiz.edu.tr/en>.



<https://ins.yildiz.edu.tr/universite/ytu-duyurular/koop-anlasmalari-yapmaya-devam-ediyoruz>

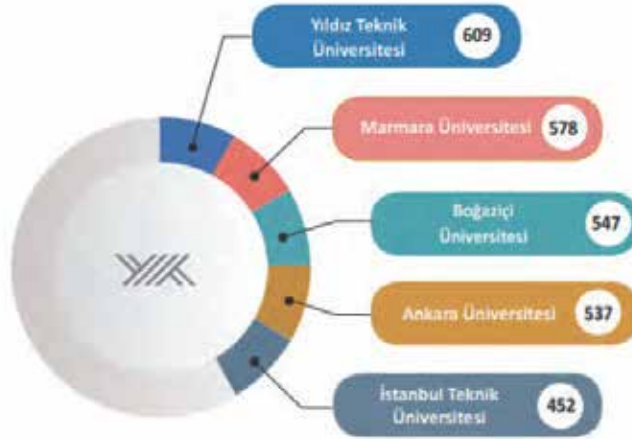


<https://elk.yildiz.edu.tr/universite/ytu-duyurular/ytu-koop-egitim-modeli-isletmede-mesleki-egitim-protokolu>



<https://elk.yildiz.edu.tr/universite/ytu-duyurular/ytu-koop-egitim-modeli-isletmede-mesleki-egitim-protokolu-0>

• **National and International Exchange Programs:** YTU students and faculty members can participate in Erasmus+, Mevlana, Farabi, and International Credit Mobility programs. Erasmus+ is a program that encourages cooperation between higher education institutions of European Union countries and candidate countries. Within the scope of the Erasmus+ program, YTU students and lecturers are provided with the opportunity to spend some of their education and training activities abroad and participate in joint research projects every year. Within the scope of the Mevlana Exchange Program, YTU undergraduate and graduate students can participate in student exchange at higher education institutions in Türkiye that have signed the Mevlana Exchange Program Protocol. Farabi Exchange Program is an exchange program that enables YTU students and faculty members to receive education at undergraduate and graduate levels for one or two semesters within universities and high technology institutes among the higher education institutions they have agreements with. International Credit Mobility (ICM) is aimed for both students (learning) and academic personnel (for teaching and training) between EU programme countries and non-EU partner countries in both directions (i.e. outgoing and incoming). According to the Council of Higher Education 2021 data, YTU has the highest number of students participating in the international exchange programs, compared to other universities in Türkiye as shown in the figure below.



Note: This figure is an excerpt from Council of Higher Education university monitoring and evaluation general report 2021, p. 98 (<https://www.yok.gov.tr/Documents/Yayinlar/Yayinlarimiz/2022/universite-izleme-ve-degerlendirme-genel-raporu-2021.pdf>)



ANA SAYFA

İLETİŞİM



• **YTU and Turkish Aerospace Cooperation:** A cooperation protocol was signed between YTU and Turkish Aerospace in order to train human resources to meet the needs of the defense industry and to develop joint projects for the establishment of university-industry cooperation (<https://www.tusas.com/medya-merkezi/haberler/tai-ve-ytu-arasinda-savunma-sanayi- ihtiyaclarinin-gelecegine-yonelik-protokol- imzalandi>). Additionally, within the scope of the graduate academic cooperation protocol signed between YTU and Turkish Aerospace, Avionic Engineering Master's Program has been established (<https://fbe.yildiz.edu.tr/media/files/Fbe%20b%c3%bciten%202018-ekim-v2.pdf>).

• **Bosch Electric Mobility Training Program:** The program was organized in partnership with Bosch Türkiye (<https://yildiz.edu.tr/en/node/37>). YTU and Bosch signed a cooperation in order to train the human resources that will be needed in the field of electric cars (<https://www.bosch.com.tr/kesfet/2020/2020-11-24-boschtan-yildiz-teknik-ueniversitesi-oegrencilerine-elektrikli-mobilite-egitimi/>).

• **Fide (Seedling) Acceleration Program:** It is a program in partnership with YTU and Ziraat Bank, aiming to raise initiatives that develop innovative and innovative solutions for institutions and organizations providing services in the fields of banking and finance. Detailed information can be found on : <https://fide.yildizkulucka.com/>

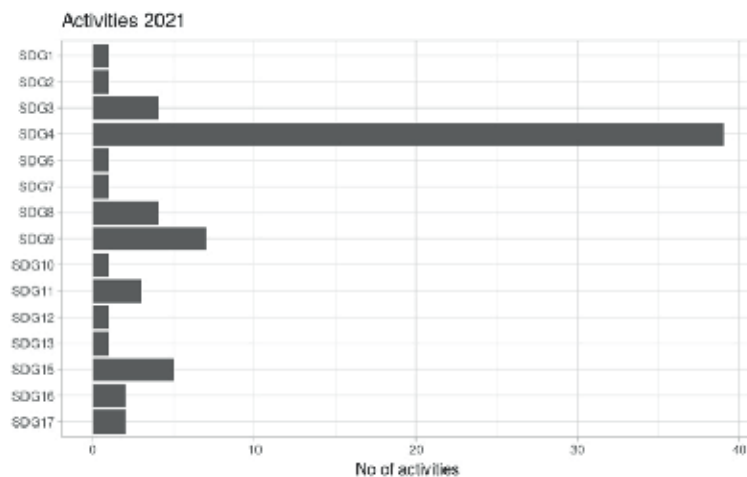


• **STAR BIGG:** In partnership with YTU, TÜBİTAK and Istanbul Sabahattin Zaim University, TÜBİTAK 1512 Entrepreneurship Support Program (BIGG); Entrepreneurs turn their technology and innovation-oriented business ideas into qualified business plans and enable them to become companies with a capital support of up to 450,000 TL. Program applications are made through the partner organizations, and entrepreneurs are provided with support for collecting and evaluating business idea applications and preparing a business plan to turn them into a successful venture. More information can be found on: <https://www.starbigg.com/>

• **YTU Youth Office:** YTU has established a Youth Office in cooperation with the Ministry of Youth and Sports, where training and activity opportunities are offered to YTU students. (https://www.instagram.com/gsb_gencofisytu/?igshid=YmMyMTA2M2Y%3D)



• **Dean of Students' Office:** The office aims to solve the life problems of undergraduate and graduate students during their education at Yıldız Technical University and to provide them with the necessary support to spend a peaceful, productive and successful university time. The office provides services and communication in the areas of academic resources, accessibility, careers, school rules and legal issues, financial and administrative support and assistance, health and counseling resources, international students, security, student community cohesion. They also provide trainings on the sustainability issues and perform activities with students. Examples of these trainings are "Sustainability in the Age of Globalization" and "The Future and Sustainability of Food". The office also performs studies to create awareness and permanent solutions for the homeless people, such as "Have Salt in the Soup". The office's activities distributed to each SDG and presented in the below figure



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- **Student awards/grants:** YTU students receive national and international awards/grants on the projects focusing on the sustainability issues. One of the YTU Master's students won awards on the Healthy Living Place design competition as shown below.



Achievements of Our Students

Our graduate and Master's student Saffet İlkey Kaya has won the Equivalent Award and Special Jury Award among 35 projects at the Home as a Healthy Living Place design competition organized by Baumit.

- **Student clubs:** Trainings, activities and projects in many different fields are carried out in student clubs, which are managed by YTU students and supported by YTU academicians, so that students can spend their free time according to their interests, develop themselves socially and culturally and gain the habit of having fun. More information: <https://yildiz.edu.tr/en/node/42>



- **YTU GamesUP:** With the support from Istanbul Development Agency, YTU Yıldız Technopark launched the largest incubation center within the region of Istanbul in the field of mobile games and e-sports. By creating a game and e-sports ecosystem in YTU Yıldız Technopark, it is aimed to contribute to the development of Türkiye's Gaming and E-sports Ecosystem, thus contributing to the development of game developers from Türkiye to the global.

SUSTAINABILITY

YTU organizes trainings and activities for students and academic staff in achieving the sustainable development goals of the United Nations. For instance, a nation-wide student cartoon competition on the theme of Climate Change was held at YTU (see figure below). For sustainability-related activities and sustainability reports (<https://kampus.yildiz.edu.tr/>).



YTU is committed to establish best practices and raise awareness for sustainable development. One of the best practices developed by YTU to tackle the SDGs is the GreenStars project. GreenStars was developed in 2021 by YTU on environment, sustainability and energy; in line with the Sustainable Development Goals (SDGs) of the United Nations; it is a certificate program that will increase adaptation and resistance to climate change, contribute to the improvement of the environment and human health, ensure education and social equality, contribute to the circular economy by supporting economic growth and is used to define environmental performances. GreenStars is carried out within the scope of a cooperation protocol between YTU, Yıldız Technology Transfer Office, an international certification company and a private digital platform technology company. More information on the GreenStars program can be found at <https://greenstarscertification.com/>



Social Responsibility: Within the scope of the information technologies recycling project initiated by YTU with a sense of social responsibility, 8 computers/monitors to the Kahramanmaraş city Türkoğlu Beyoğlu Şehit Abuzer Doğan Secondary School, 5 computers/monitors to the Siirt city Pervari Belenoluk Secondary School, 10 computers/monitors to the Tokat city Erbaa Gökal Gökdere Secondary School, 1 copy machine to the Istanbul city Beykoz Şehit Hasan Kaya Secondary School, 8 computers/monitors to the Kahramanmaraş city Afşin Ortaklı Atatürk Primary School, 10 computers/monitors to the Amasya city Göynücek Gediksaray Şehit Sold Salıdıcı Primary/Secondary School, 10 computers/monitors to the Şanlıurfa city Viranşehir Sakarya Primary School, 5 computers/monitors to the Siirt city Pervari Belenoluk Secondary School, 10 computers/monitors to the Batman city Kozluk Anatolian Imam Hatip High School, 10 computers/monitors to the Şırnak city Cizre Şehit Polis Ahmet Toprakoğlu Secondary School, 3 computers/monitors to the Istanbul Bahçelievler 15 Temmuz Şehitleri Primary School, 3 computers/monitors to the Istanbul city Çatalca Karacaköy Secondary School, 8 computers/monitors to the Bolu city Mudurnu Hacimusalar Primary/Secondary School, 5 computers/monitors to the Kars city Kağızman Karakuş Şehit Ahmet Doğan Primary School, 7 computers/monitors to the Gümüşhane City Merkez Arzular Primary School, 10 computers/monitors to the Bitlis city Mutki Açıklan Village Imam Hatip Secondary School, 10 computers/monitors to the Erzincan City Merkez Mollaköy Secondary School, 2 computers/monitors to the Erzincan city Tercan Atatürk Primary School, and 8 computers/monitors and 1 printer to the Kastamonu city Cide Atatürk Primary School were donated in 2021.





Equal Opportunities:

- YTU offers its academic and administrative staff, retired staff, and students and graduates discount opportunities in health, shopping, tourism, education, food and beverage, hotel/accommodation and different services. For more information: <https://firsat.yildiz.edu.tr/>
- YTU provides lodging opportunities for their academic and administrative staff, and graduate students and their families.



- **YTU Schools:** YTU Schools were established by the president of YTU in partnership with YTU, Yıldız Technopark and YTU foundation. YTU Schools are private schools providing education to the kindergarten and primary school students. A 60% discount on education and training fees is applied for YTU academic and administrative staff's children, 40% discount for YTU students and graduates' children, 40% discount for the children of all personnel working at the companies at Yıldız Technopark, and 20% discount for the children of all academics working at other universities and for the children of teachers working public and private schools. For more information: <https://www.ytuokullari.com/en/homepage>





Protection of Cultural and Natural Heritage: Within the boundaries of YTU campus, there are many historical buildings such as the restored historical bath from the 19th century, the military barracks and the Hünkar Pavilion (OTAĞ-I HÜMAYUN), and these buildings are actively used today. YTU allocates a budget for the maintenance and restoration services of the historical buildings on the campus.



EDUCATION and TRAININGS

Courses: YTU provides core and elective courses in the undergraduate and graduate levels. Some of these courses are "sustainability in construction", "sustainable development and education", "sustainable marketing", "post-disaster housing and structural sustainability". More information on the courses can be found at <http://www.bologna.yildiz.edu.tr/>

Trainings and Seminars: YTU academic personnel provides trainings, seminars, and undergraduate and graduate level core and elective courses. For instance, within the scope of Architectural Design 7 course, online seminars entitled "Development of Sustainable Architecture" and "Climate Change and Historical Underground Water Systems" were given. Below figures shows the announcements to some of these trainings.



Academic Events

Within the scope of the series of Planning IV Studio (Anamur) seminars, Prof. Doğanay Tolunay carried out a seminar themed "The Relationship Between Climate Change and Land Use" on 13 April 2021.

Training and seminars are also provided at the YTU Continuing Education Application and Research Center (SEM). For detailed information: <https://sem.yildiz.edu.tr/>

International Students: Approximately 10% of the students who enroll to YTU every year are international students. For details: <https://ogiyildiz.edu.tr/ogil/1/%C3%96%C4%9Frenci-%C4%B0statistikleri/75>

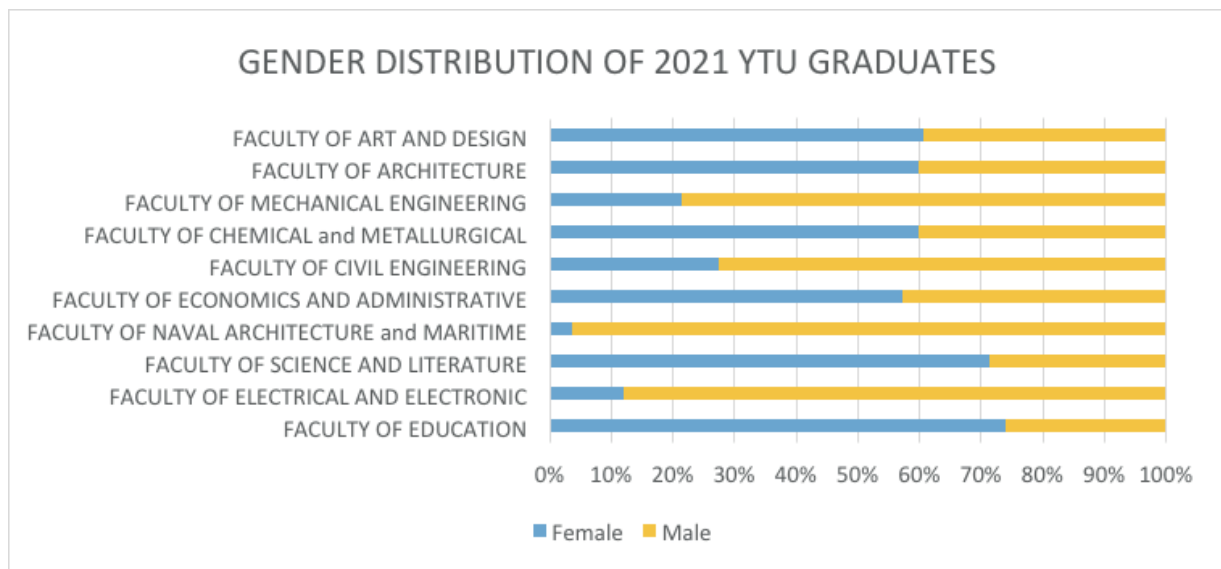
Graduates: 3,986 undergraduate students graduated from YTU in the year of 2021. Below table shows the numbers of female and male graduates from each faculty. Following figure shows the female/male ratios of graduates from each faculty. In 2021, a total of 1,819 graduate students, 587 from the Institute of Science and 1,232 from the Institute of Social Sciences, graduated from YTU.



Academic Events

Within the scope of the series of Planning IV Studio (Anamur) seminars, City Planner Özge Karagöz carried out a seminar themed "Evaluations on City of Mersin" on 6 April 2021.

Faculty	2020-2021		
	Female	Male	Total
FACULTY OF EDUCATION	369	130	499
FACULTY OF ELECTRICAL AND ELECTRONIC ENGINEERING	74	542	616
FACULTY OF SCIENCE AND LITERATURE	345	139	484
FACULTY OF NAVAL ARCHITECTURE and MARITIME ENGINEERING	4	107	111
FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES	196	146	342
FACULTY OF CIVIL ENGINEERING	102	269	371
FACULTY OF CHEMICAL and METALLURGICAL ENGINEERING	403	271	674
FACULTY OF MECHANICAL ENGINEERING	114	417	531
FACULTY OF ARCHITECTURE	141	95	236
FACULTY OF ART AND DESIGN	74	48	122
Total	1822	2164	3986



Scholarships: Scholarships are given to YTU students by government, by the university itself and its foundation, and other individuals, foundations, institutions and organizations. These scholarships are organized by the YTU Scholarship Coordinator. In the 2020-2021 academic year, a total of 15,533,830,00 scholarships were provided to 2,939 YTU students. Students apply for scholarships online and applications are evaluated according to the set criteria. The number of scholarships given by the YTU foundation increases every year.



**YILDIZ TECHNICAL
UNIVERSITY**

2022 SUSTAINABILITY
REPORT