



# ISTANBUL TECHNICAL UNIVERSITY



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# ITU AT A GLANCE

Founded in 1773 as a milestone in Turkey's modernization, Istanbul Technical University (ITU) has been leading technological progress. We've been shaping modern Turkey for approximately 250 years with the motto of "Pioneer through the Ages". ITU has been dedicated to education, research, knowledge generation, and innovation while preserving cultural and scientific heritage since its foundation.

ITU, the fourth oldest technical university of the World is devoted to developing a community of scientists, engineers, architects and artists who can make a difference beyond borders. Our graduates become decision-makers in Turkey and around the world, launching new industries and enterprises. ITU acts as a hub bridging international cooperation with leading institutions and creates the necessary environment for economic and technical growth. With more than 170.000 graduates, 40.000 students and 2.000 academicians, Istanbul Technical University pursues its mission by contributing to the development of engineering, innovation and art as a service to the nation and the world.



## RECTOR'S MESSAGE

Established in 1773, Istanbul Technical University is one of the world's oldest universities. Our university is located in Istanbul, a cosmopolitan and multicultural city, which connects the East and West.

ITU is building a unique vision of the future with its world-class studies. In recent years, our school gives more importance to areas such as R&D, innovation, education, international relations and digitalization. In this regard, we closely follow the information transformation around the world.

ITU is devoted to making positive differences in the World with the education and research it provides, and receives its strength directly from its members, whether being a student, researcher, academic or alumni. I invite you to be a part of this strength, to become a member and carry the pride of being a part of Istanbul Technical University

**Prof. Dr. İsmail Koyuncu**

## VISION

ITU's vision is to become a leading international university through its expertise and creativity in science, technology and art.

**Istanbul Technical University, one of the leading research universities in Europe and Asia, establishes the grounds of an active learning and research environment for change and improvement.** Analytical thinking and innovation, active learning, creativity, critical thinking, complex problem-solving, leadership and social impact are among the key themes of ITU's strategic vision in education and research that will lead to universal prosperity and quality of life; thus, improving humane living conditions in a sustainable world.



# ISTANBUL TECHNICAL UNIVERSITY SINCE 1773

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## 1773

Imperial School  
of Naval Engineering



“Imperial School of Naval Engineering” was founded by Sultan Mustafa III. The school was established as a step in the modernization policy of the Ottoman Empire with the aim to train shipbuilders and cartographers.

## 1795

Imperial School  
of Civil Engineering



The program of the school was broadened to train technical military staff to modernize civil engineering and architecture by the order of Sultan Selim III.

## 1909

College of  
Engineering



The university was organized as an independent public engineering and architecture school. “Journal of Engineering School” was published as one of the first academic journals of Turkey. The foundation of soil mechanics of the World were set by Terzaghi at this school.

## 1944

Renamed as Istanbul  
Technical University



The university was reorganized as an autonomous university under the name of Istanbul Technical University (ITU) with 4 faculties: Civil, mechanical and electrical engineering and architecture.

## 2002

ITU ARI Teknokent  
(Techno-Park)



ITU opened its doors to entrepreneurs and created a sustainable platform in which academy and industry cooperate. ITU ARI Teknokent, located at Ayazağa Campus, was founded as a science park which acts as the center of technology, innovation, R&D and entrepreneurship.

## 2012

ITU Seed  
(Incubation Center)



ITU Seed was founded as a fully-integrated incubation center for early-stage entrepreneurs where science, technology and design are brought together. A strong and dynamic connection between investors and start-ups are established.

## 2023

250th year in Higher Education



ITU will celebrate its 250th year on the 100th anniversary of the Republic of Turkey. The university is developing strategic plans parallel to cutting edge technologies in teaching and research to serve the society and enhance the quality of life.





# ORGANIZATIONAL STRUCTURE

## ITU LIFELONG LEARNING CENTER

### FACULTIES

Faculty of Aeronautics and Astronautics  
Faculty of Architecture  
Faculty of Chemical and Metallurgical Engineering  
Faculty of Civil Engineering  
Faculty of Computer and Informatics Engineering  
Faculty of Electrical and Electronics Engineering  
Faculty of Management  
Faculty of Maritime  
Faculty of Mechanical Engineering  
Faculty of Mines  
Faculty of Naval Architecture and Ocean Engineering  
Faculty of Science and Letters  
Faculty of Textile Technologies and Design  
Turkish Music Conservatory

### INSTITUTES

Graduate School  
Aviation Institute  
Energy Institute  
Eurasia Institute of Earth Sciences  
Informatics Institute  
Institute of Disaster Management

### ITU ARI TEKNOKENT ENTREPRENEURSHIP ECOSYSTEM

ITU GINOVA  
ITU INNOGATE  
ITU MAGNET  
ITUNOVA TTO  
ITU SEED

### LIBRARIES

Centre for Advanced Studies in Music (MIAM) Library  
Faculty of Management Library  
Faculty of Mechanical Engineering Ratip Berker Library  
Faculty of Architecture Library  
Maritime Faculty Library  
Mustafa İnan Central Library  
School of Foreign Languages Library  
Turkish Music State Conservatory Ercüment Berker  
& Prof. Ş. Şehvar Beşiroğlu Library Archive and  
Documentation Center

### RESEARCH CENTERS

Aerospace Technologies Application and Research  
Center (ITUARC)  
Agricultural and Environmental Informatics  
Application and Research Center (TARBİL)  
Artificial Intelligence and Data Science Research  
and Application Center  
Center for Entrepreneurship and Innovation (ITU  
GINOVA)  
Dr. Orhan Öcalgiray Molecular Biology-  
Biotechnology and Genetics Research Center  
(MOBGAM)  
Eastern Mediterranean Center for Oceanography  
and Limnology (ITU-EMCOL)  
Environment and Urban Planning Practice and  
Research Center  
National Center for High Performance Computing  
(UHeM)  
National Research Center on Membrane  
Technologies (MEM-TEK)  
Polar Research Center (PolRec)  
Prof. Dr. Adnan Tekin Materials Science and  
Production Technologies Applied Research Center  
(ATARC)  
Research and Application Center for Satellite  
Communications and Remote Sensing (ITU-CSCRS)  
Social Innovation Research and Application Center  
Water and Marine Sciences Technology Application  
and Research Center  
Women's Studies Center in Science, Engineering  
and Technology (ITU - WSC in SET)



# EDUCATION

Istanbul Technical University provides a technological & society focused education to **more than 35.000 undergraduate and graduate students** with **more than 2.000 academicians** in fields ranging from engineering, architecture, and design to economics, music and performance arts. At ITU, we act in a multilayered and creative environment of learning and research in **13 faculties** across **5 campuses**. There are **101 undergraduate and 183 graduate programs**.

Through more than 450 international agreements including Erasmus, Athens, T.I.M.E. and EELISA, ITU offers its students to study at a global scale with its international engagements.

Dual diploma programs offer students to study and work in two different countries while having the opportunity of two diplomas.

**more than**  
**35.000**  
**UNDERGRADUATE AND**  
**GRADUATE STUDENTS**  
////////////////////  
**ACADEMICIANS**  
**2.000+**





## Leading Turkish University in Engineering

ITU offers **101 undergraduate programs** from natural sciences to various disciplines of engineering, architecture, planning, arts, and design. ITU students gain strong academic background to develop required skills and creative thinking.

ITU students learn to explore the dimensions of academic landscape, develop necessary skills in leadership, complex problem solving, active learning and critical thinking. Besides their core curriculum classes, students design their own path of learning through electives in various fields in line with their own interests.

The basis of our educational philosophy is to combine theory and practice and allow for specialization in different topics.

**25.000+**  
UNDERGRADUATE STUDENTS

**13 Faculties**

**101**  
undergraduate  
programs

UNDERGRADUATE  
STUDY





Leading Partnerships with Global Aerospace Industries

## **FACULTY OF AERONAUTICS AND ASTRONAUTICS**

The objective of the Faculty of Aeronautics and Astronautics is to provide students with the fundamental principles and techniques necessary for success and leadership in the conception, design, implementation, and operation of aerospace and related engineering systems.

### **Programs:**

Aeronautical Engineering  
Astronautical Engineering  
Meteorological Engineering

[www.uubf.itu.edu.tr](http://www.uubf.itu.edu.tr)

14 ITU Faculty of Architecture  
1st School in the World Recognized Overseas by the National Architectural Accrediting Board (NAAB)

Landscape Architecture Program  
The First and Only Program in Turkey  
Accredited by International Federation of Landscape Architects (IFLA)



## **FACULTY OF ARCHITECTURE**

The Faculty of Architecture offers a unique research-based environment and education of international standing. Proudly operates in a splendid historic building, the faculty houses state-of-the-art studios, laboratories, workshops and libraries which provide an excellent research and learning environment. Recognized by NAAB and fully accredited by IFLA.

### **Programs:**

Architecture  
Architecture (Dual Diploma)  
Industrial Design  
Interior Architecture  
Landscape Architecture  
Urban and Regional Planning

[www.mim.itu.edu.tr](http://www.mim.itu.edu.tr)



**Faculty of Architecture**  
National Heritage Site Located  
in Downtown Istanbul





## FACULTY OF CHEMICAL AND METALLURGICAL ENGINEERING

The Faculty of Chemical and Metallurgical Engineering spans both science and engineering. It applies advances in science and mathematics to develop solutions to challenges faced by industry and society.

### Programs:

Chemical Engineering  
Food Engineering  
Metallurgy and Material Engineering  
Bioengineering (Dual Diploma)

[www.kmg.itu.edu.tr](http://www.kmg.itu.edu.tr)

Cutting Edge  
Material Research



## FACULTY OF COMPUTER AND INFORMATICS ENGINEERING

The students of this faculty develop their skills to design, build and operate IT systems in public and private corporations, apply their knowledge on computer and informatics engineering to address recent and future technological challenges in their careers, and to create technologies to meet the needs of society in their careers.

### Programs:

Artificial Intelligence and Data Engineering  
Computer Engineering  
Information Systems Engineering  
(Dual Diploma)

[www.bb.itu.edu.tr](http://www.bb.itu.edu.tr)

Artificial Intelligence  
for Society



## FACULTY OF CIVIL ENGINEERING

The faculty has a long tradition of educating engineers to design, build, and maintain the engineering systems that allow societies to function. Graduates are leaders in the engineering and construction industry around the world.

### Programs:

Civil Engineering  
Civil Engineering (Dual Diploma)  
Environmental Engineering  
Geomatics Engineering

[www.ins.itu.edu.tr](http://www.ins.itu.edu.tr)



## FACULTY OF MANAGEMENT

The faculty provides creativity and practice based training programs on management engineering, industrial engineering and economics. It is the right address for those who are interested in building a managerial career in business as experts of system analyzing, method developing and problem solving.

### Programs:

Economy  
Economy (Dual Diploma)  
Industrial Engineering  
Industrial Engineering (Dual Diploma)  
Management (Dual Diploma)  
Management Engineering

[www.isl.itu.edu.tr](http://www.isl.itu.edu.tr)





## FACULTY OF ELECTRICAL AND ELECTRONICS ENGINEERING

Significant and pioneering studies of the faculty are electrification of the whole country, the first high voltage laboratory, the first television broadcasting, the first stereo radio, the first microelectronics laboratory and microchip production. The faculty has a leading role in generating scientific and innovative know-how, integrating education and research with the industry for the benefit of the society and developing commercial technologies and products.

### Programs:

Control and Automation Engineering  
Electrical Engineering  
Electronics and Communication Engineering  
Electronics and Communication Engineering (Dual Diploma)

[www.ee.itu.edu.tr](http://www.ee.itu.edu.tr)



## FACULTY OF MECHANICAL ENGINEERING

The objective of Faculty of Mechanical Engineering is to produce expert engineers of mechanical systems who utilize their knowledge of mechanical engineering constructively for the benefit of mankind and the environment. Students are trained to identify, formulate, and solve engineering design problems that are encountered during design, system analysis and manufacturing processes.

### Programs:

Mechanical Engineering  
Mechanical Engineering (Dual Diploma)

[www.mkn.itu.edu.tr](http://www.mkn.itu.edu.tr)

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Globally Recognized Cutting Edge Program  
in Maritime Education Accredited by IMO



## FACULTY OF MARITIME

ITU Faculty of Maritime produces leading and useful knowledge in the field of maritime education and research with its structure adopting the principle of continuous development in line with the needs of the age while keeping its traditional structure as a legacy. Graduates of this faculty are getting ahead of their careers in maritime sector by catching attractive business opportunities in the world.

### Programs:

Marine Engineering  
Marine Engineering (Dual Diploma)  
Maritime Transportation and Management Engineering  
Maritime Transportation and Management Engineering (Dual Diploma)

[www.df.itu.edu.tr](http://www.df.itu.edu.tr)

Global Top #50 for Mining Engineering



## FACULTY OF MINES

Students are educated not only in well-equipped classes but also in field to discover the underground treasures such as petroleum, natural gas, coals, metals, gemstones, and so on. Its internationally recognized academics and world-class scholars prepare engineering students to support the needs of industry; the nation and the world by educating high quality graduates.

### Programs:

Geology Engineering  
Geophysics Engineering  
Mineral Processing Engineering  
Mining Engineering  
Petroleum and Natural Gas Engineering

[www.mines.itu.edu.tr](http://www.mines.itu.edu.tr)





## FACULTY OF NAVAL ARCHITECTURE AND OCEAN ENGINEERING

The Faculty of Naval Architecture and Ocean Engineering maintains a sustainable education program consisting of contemporary design and manufacturing techniques, together with mathematics, science and engineering fundamentals. All types of ships, offshore structures, floating marine vessels including submarines, physical oceanography, marine pollution and underwater acoustics are among the main study fields in the faculty.

### Programs:

Naval Architecture and Marine Engineering  
Naval Architecture and Marine Engineering (Dual Diploma)  
Shipbuilding and Ocean Engineering

[www.gidb.itu.edu.tr](http://www.gidb.itu.edu.tr)

An Industry Partner for Large Scale Naval Design, Research, Testing and Development



## FACULTY OF TEXTILE TECHNOLOGIES AND DESIGN

Students of this faculty are equipped with the knowledge of textile materials, textile and clothing technology, textile chemistry and finishing, and the functions of machinery in textile and clothing technologies. Students learn how they can manage textile production and solve the problems in a global scale.

### Programs:

Fashion Design (Dual Diploma)  
Textile Development and Marketing (Dual Diploma)  
Textile Engineering

[www.tekstil.itu.edu.tr](http://www.tekstil.itu.edu.tr)

Biomedical & Smart Textiles Solutions



## FACULTY OF SCIENCE AND LETTERS

Priority of the Faculty of Science and Letters is to educate students as individuals who have scientific and technical competence, who are problemsolvers and open to critical and analytical thinking. In the modern world, the definition of professions and the lines between professions are becoming ambiguous. The education given in the field of fundamental sciences is already providing training of professionals for professions of the future.

### Programs:

Chemistry  
Mathematical Engineering  
Molecular Biology and Genetics  
Physics Engineering

[www.fe.itu.edu.tr](http://www.fe.itu.edu.tr)



## TURKISH MUSIC CONSERVATORY

ITU Turkish Music State Conservatory is the first and leading conservatory in the field of Turkish Music. It was established in 1975 to carry out studies that perform, research, document and spread Turkish Music at a global level. The Conservatory carries out studies of both Turkish music and classical Western music, giving equal importance to studies using both scientific and artistic methods.

### Programs:

Composing  
Instruments  
Music Technology  
Musicology  
Theory of Music  
Turkish Folk Dances  
Voice Training

[www.tmdk.itu.edu.tr](http://www.tmdk.itu.edu.tr)





## Research Leadership & Social Impact Scientific Innovation: A More Interesting & Sustainable Society

Istanbul Technical University combines the benefits of its almost 250 years history and tradition with its innovative and forward-thinking approach. As a hub of innovation and exploration, the development of graduate studies form the basis of ITU strategies of being a research university. Thus, ITU continues its endeavor to train MA, MSc and PhD students with high-caliber academic and research skills to advance contemporary science and technology, and develop innovation.

Advanced programs of ITU promote intellectual activities and research across departmental and divisional boundaries. Graduate students of ITU transfer their inventions and ideas to the industry and the society through their studies in multidisciplinary labs, research centers, museums and extensive library collections. Students have the opportunity to work with leading academics and build a successful career inside or outside the academy.

**ITU offers 183 graduate programs at Graduate School. In addition to the Graduate School, research is also carried out at the ITU Institutes:**

- Graduate School
- Aviation Institute
- Energy Institute
- Eurasia Institute of Earth Sciences
- Informatics Institute
- Institute of Disaster Management

# GRADUATE STUDY





## GRADUATE SCHOOL

The mission of ITU Graduate School is to train academics and professionals who are academically competent in their field and can compete in the international arena; to develop interdisciplinary research by promoting university-public-industry cooperation at the uppermost level. ITU Graduate School serves more than 10,000 graduate students in 183 programs from 76 Departments; making ITU Graduate School the largest graduate school in Turkey.

ITU Graduate School graduates are highly qualified professionals and academicians at national and international level, contribute to the development of science and technology, and pioneers research and development studies for social needs. ITU Graduate School offers 100% English programs as well as "30% English minimum" programs depending on the applicants' preferences.

ITU Graduate School is fully aware of the importance of building strategic win-win partnerships with industry in research level. Therefore, ITU and its Graduate School initiated various long-term programs with major organizations both in the government and private sector to enhance the quality of its research work and its students' career success.

[www.lee.itu.edu.tr/en](http://www.lee.itu.edu.tr/en)

**10.000+**  
**Graduate Students**



# GRADUATE PROGRAMS

	MASTER'S PROGRAM (NON- THESIS)	MASTER'S PROGRAM (THESIS)	DOCTORATE PROGRAM		MASTER'S PROGRAM (NON- THESIS)	MASTER'S PROGRAM (THESIS)	DOCTORATE PROGRAM
GRADUATE SCHOOL				Earth System Science		✓	✓
Aeronautics and Astronautics Engineering		✓	✓	Earthquake Engineering		✓	✓
Aerospace and Materials	✓			Economics		✓	✓
Air Transport Management	✓	✓		Electrical Engineering		✓	✓
Apparel Retail and Fashion Management	✓			Electronics Engineering		✓	✓
Architectural Design		✓	✓	Energy Science and Technology		✓	✓
Architectural Design Computing		✓	✓	Engineering Management	✓	✓	
Architectural History		✓	✓	Entrepreneurship and Innovation Management	✓		
Architecture Non-Thesis	✓			Environmental Biotechnology		✓	✓
Art History		✓	✓	Environmental Control and Construction Technologies		✓	
Atmospheric Sciences		✓	✓	Environmental Sciences Engineering and Management		✓	✓
Automotive		✓		Estate Development		✓	
Big Data and Business Analytics	✓			Executive MBA	✓		
Biomedical Engineering		✓		Facade Design and Technology	✓		
Business Administration			✓	Food Engineering		✓	✓
Business and Technology Management	✓			Game and Interaction Technologies		✓	
Ceramics Engineering		✓		Geanthropology		✓	
Chemical Engineering		✓	✓	Geodynamic		✓	✓
Chemistry		✓	✓	Geographical Information Technologies		✓	✓
Coastal Sciences and Engineering		✓	✓	Geological Engineering		✓	✓
Computational Science and Engineering		✓	✓	Geomatics Engineering		✓	✓
Computer Sciences		✓	✓	Geophysics Engineering		✓	✓
Computer Engineering		✓	✓	Healthcare Systems Management	✓		
Construction Management		✓		Heat-Fluid		✓	
Construction Project Management	✓			History of Science and Technology		✓	✓
Construction Sciences			✓	Hydraulics and Water Resources Engineering		✓	✓
Control and Automation Engineering		✓	✓	Industrial Engineering		✓	✓
Cyber Applied Informatics		✓	✓	Industrial Design		✓	✓
Cyber Secur.Eng. and Cryptog.		✓	✓	Information and Communication Engineering		✓	✓
Cybersecurity Engineering and Cryptography		✓	✓	Information Technologies	✓		
Defence Technologies		✓		Information Techonologies in Construction Management	✓		
Disaster and Emergency Management	✓			Innovative Technical Textiles Program		✓	
Disaster Management	✓	✓					

	MASTER'S PROGRAM (NON- THESIS)	MASTER'S PROGRAM (THESIS)	DOCTORATE PROGRAM		MASTER'S PROGRAM (NON- THESIS)	MASTER'S PROGRAM (THESIS)	DOCTORATE PROGRAM
Instruments and Voice	✓	✓		Polymer Science and Technology	✓	✓	✓
Interior Architectural Design (International)		✓		Production Metallurgy and Technologies Engineering		✓	
Landscape Architecture		✓	✓	Project and Construction Management		✓	✓
Machine Dynamics, Vibration and Acoustics		✓		Radiation Science and Technology		✓	
Management	✓	✓	✓	Railway Systems Engineering		✓	
Management Engineering		✓	✓	Regional Planning		✓	
Management of Maritime Transportation	✓			Restoration	✓	✓	✓
Maritime Studies	✓	✓	✓	Rotor Aero Vehicles Technologies	✓		
Maritime Transportation Engineering		✓	✓	Satellite Communication and Remote Sensing		✓	✓
Materials and Manufacture		✓		Science, Technology and Society		✓	
Materials Engineering		✓		Shipbuilding and Ocean Engineering		✓	✓
Materials Science and Engineering		✓	✓	Smart Building & Facility Management	✓		
Mathematical Engineering		✓	✓	Soil Mechanics and Geotechnical Engineering		✓	✓
Mechanical Design		✓		Solid Mechanics		✓	
Mechanical Engineering			✓	Structural Engineering		✓	✓
Mechatronics Engineering		✓	✓	System Dynamics and Control		✓	
Metallurgical and Materials Engineering			✓	Telecommunications Engineering		✓	✓
Mineral Processing Engineering		✓	✓	Textile Engineering		✓	✓
Mining Engineering		✓	✓	Traditional Dances		✓	
Molecular Biology-Genetics and Biotechnology		✓	✓	Transport Engineering		✓	✓
Music	✓	✓	✓	Turkish Music		✓	
Music Theory and Composition			✓	Urban and Regional Planning			✓
Musicology		✓		Urban Design		✓	
Musicology and Music Theory		✓		Urban Planning		✓	
Nano Science and Nano Engineering		✓	✓				
Naval Architecture and Marine Engineering		✓	✓				
Occupational Safety and Health Management	✓						
Offshore Engineering	✓	✓					
Petroleum and Natural Gas Engineering		✓	✓				
Physics Engineering		✓	✓				
Political and Social Thoughts			✓				
Political Studies		✓					



# GLOBAL ENGAGEMENT



**Gate To The World**  
Times Higher Education Impact Rankings 2021:  
**#24 in Industry, Innovation, and Infrastructure in the World**

**#48 in Quality Education in the World**

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

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

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

Advanced Technology Higher education network (ATHENS)

Black Sea University Network (BSUN)

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

Community of Mediterranean Universities (CMU)

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

European University Association (EUA)

European Engineering Learning Innovation and Science Alliance (EELISA)

International Association of Universities (IAU)

International Association of University Presidents (IAUP)

International Association of Maritime Universities (IAMU)

Institutional Management of Higher Education (OECD/IMHE)

European Society for Engineering Education (SEFI)

Top Industrial Managers for Europe (TIME)

Balkan Universities Association (BUA)

International Road Federation (IRF)

European Network for Housing Research (ENHR)

\* For up-to-date information about international partnerships visit [international.itu.edu.tr](http://international.itu.edu.tr)



# DUAL DIPLOMA

A dual diploma program is an undergraduate program in which students spend half of their education abroad and half at ITU. These programs offer a highly unique experience and prepares the students for an increasingly globalizing world. Students study at two different countries and upon completion of the program, receive a diploma from each of these universities, enabling them to create a strong career path.

ITU International Undergraduate Dual Diploma Programs:



\* For up-to-date information about global partnerships visit [uolp.itu.edu.tr](http://uolp.itu.edu.tr)

# ACCREDITATIONS AND GLOBAL PARTNERS

The Istanbul Technical University actively upholds a strong commitment to expand relationships with select institutions abroad and promotes the international exchange of students and scholars. ITU is an active member of many global associations and takes part in developing new visions, strategies and programs to adapt to an ever-changing world. ITU makes a strong commitment to take the scientific and technological advancement to further levels, to work collectively with more than 450 peer institutions at the global scale.

One aspect of globalization at ITU is to maintain international accreditation of its teaching quality, provided by the institutions below:

Fundamentals of Engineering and Professional Engineering exams, accredited by NCEES, the only eligible university to hold the exams in Turkey.

25 engineering programs accredited by the Accreditation Board for Engineering and Technology (ABET).

Maritime College accredited by IMO/EMSA.

Architecture Program obtained International Recognition from NAAB.

School of Foreign Languages accredited by Commission on English Language (CEA).

Landscape Architecture Program accredited by IFLA.

**25** engineering programs  
accredited by  
**ABET**





# RESEARCH, INNOVATION & IMPACT

**15** RESEARCH  
CENTERS **400+**  
R&D LABS

32

Istanbul Technical University is among the most qualified research-oriented universities in Turkey. Its objective is providing smart solutions to issues at a regional and global scale by generating new ideas, developing perspectives and creating values through research & innovation.

ITU aims to create a new generation of technology and innovation to drive economic growth by applicable and value-added research, based on its strong foundation. Today, ITU's researchers conduct studies in the fields of engineering, fundamental sciences, earth/planetary sciences, architecture, design and social sciences. Some of these research areas include materials, nanotechnology, aeronautics, mechatronic, biotechnology, biomedical, renewable energy, sustainable building systems and design.

ITU lives its motto "Pioneer through the Ages" with distinguished technological projects in Turkey and the surrounding region. The first of each project in Turkey includes local helicopter "Arıkopter", cubesats "ITUpSAT1", communication satellite "Türksat3USAT", driverless car "Otonobil", hydrogen-powered boat "Marti" and electric mini bus.





# RESEARCH CENTERS

## **Aerospace Technologies Application and Research Center (ITUARC)**

The center specializes in guidance, navigation, control and avionics systems; aircraft modelling, dynamics and flight simulations; next generation composites and nano-materials; air traffic management and airspace modelling; unmanned aerial vehicles; man-machine, command-and-control and decision support systems in aerospace; trajectory optimization and data-driven problems in air transportation.

## **Agricultural and Environmental Informatics Application and Research Center (TARBİL)**

Supported by the Presidency of Strategy and Budget and Ministry of Agriculture and Forestry, the center makes use of collected data to increase agricultural productivity.

## **Artificial Intelligence and Data Science Research and Application Center**

The center aims to guide innovative research in artificial intelligence and data science, and develop advanced methods and technologies in this field. Subjects of the center are: natural language processing, computer vision, software quality, computer security, computer networks, robotics, autonomous vehicles, human-computer interaction, parallel and distributed computation-cloud computing, intelligent cities, gaming and interaction technologies, defense technologies, agriculture and forest computing. With its comprehensive R&D operations, the center aims to transform artificial intelligence and data science into commercial impacts.

## **Center for Entrepreneurship and Innovation (ITU GİNOVA)**

The center inspires the entrepreneurship culture through initiative based creativity and innovation for students and faculties by providing links for improving skills and abilities.

## **Dr. Orhan Öcalgiray Molecular Biology-Biotechnology and Genetics Research Center (MOBGAM)**

The center creates a unique atmosphere for multidisciplinary research with cooperative effort from researchers. It promotes research in molecular biology, genetics and biotechnology.

## **Eastern Mediterranean Center for Oceanography and Limnology (ITU-EMCOL)**

The center brings together trained scientists with advanced field and laboratory facilities in marine and lake studies. EMCOL operates and utilizes cutting edge technologies and equipment and trains in advanced methodologies in marine geology-geophysics, paleoceanography and limnology.

## **Environment and Urban Planning Practice and Research Center**

The center aims to find solutions to environmental and city planning issues in the country. The objectives are to review reports and project requests from public-private institutions and authorities.

## **National Center for High Performance Computing (UHeM)**

Funded by the Presidency of Strategy and Budget, the center provides supercomputing and data storage services to academic and industrial users.

## **National Research Center on Membrane Technologies (MEM-TEK)**

The center provides opportunities for researchers to study membrane technologies, thus contributing to global membrane science. Research is carried out to improve and develop techniques on membrane. The center supplies an infrastructure and technical knowledge required for industries.

## **Polar Research Center (PolRec)**

The first Turkish scientific polar research center, under the aegis of Turkish Presidency, and the support of Turkish Ministry of Science and Technology. The center leads polar research projects and expeditions of Turkey.

## **Prof. Dr. Adnan Tekin Materials Science and Production Technologies Applied Research Center (ATARC)**

The center maintains a long-term strategic relationship with the industry in materials science. It offers a wide range of technical expertise and services in areas of metallurgy, chemistry, mining, geology, mineral processing and destructive & non-destructive evaluation.

## **Research and Application Center for Satellite Communications and Remote Sensing (ITU-CSCRS)**

The center has a highly capable ground receiving station unit which is the first of Turkey to conduct application oriented projects in remote sensing and satellite communication technologies.

## **Social Innovation Research and Application Center**

The center aims to generate novel and effective solutions in addition to innovative ideas for social, economic and environmental issues by prioritizing social benefit. It targets carrying out multidisciplinary research and development projects in cooperation with internal and external stakeholders in order to develop solutions based on social innovation.

## **Water and Marine Sciences Technology Application and Research Center**

The center conducts research in the area of water and marine sciences and communicates the information and technology derived from research in national and international scientific meetings and programs.

## **Women's Studies Center in Science, Engineering and Technology (ITU - WSC in SET)**

The center aims to support gender equality in science, engineering, technology and art. The main goals are to increase accountability and related activities, expanding the database of female statistics, improving visibility and contribution of women in social and academic life.



# ENTREPRENEURSHIP ECOSYSTEM

Brighter Together;  
Where Pionering Ideas Shine and Stand Out

ITU ARI Teknokent, the center of technology, innovation, R&D and entrepreneurship, aims to be a global technology development area by;

- providing proper environment and opportunities to enable technology companies and entrepreneurs to develop and commercialize technologies,
- contributing technological development in Turkey and the success of generating entrepreneurial ideas,
- using ITU's academic power to accomplish innovation.

ITU ARI Teknokent believes in "planting culture" and "value adding" through its activities and the programs developed.

In order to be a leverage technology production in Turkey, ITU ARI Teknokent aims to:

- be a hub for R&D and innovation activities in Turkey, particularly Istanbul,
- support, improve and steer the synergy arising from ITU's academic knowledge and R&D companies.

As part of these aims, academicians are encouraged into working with the Teknopark companies for a **versatile, effective and sustainable academy-industry cooperation**.

Active in ITU Ayazağa Campus, ITU ARI Teknokent was founded on an area of **1,655,000 m<sup>2</sup>** with **10 buildings**, enabling over **2800+ successful R&D projects** (200+ of which are patented) and **\$357 million R&D exports** to contribute to the national economy.

Today at ITU ARI Teknokent, **280 R&D companies** that have reached a total of **2.4 billion TL (\$423 million)** turnovers with over **7900 employees** to develop more than **600 projects** annually.

ITU ARI Teknokent carries out various programs for companies and entrepreneurs under its roof to achieve its objectives, including:

- **ITU ÇEKİRDEK**, the world's 3rd and Europe's 2nd early-stage Incubation Center for entrepreneurs that want to turn their ideas into commercializable products or services.
- **ITU MAGNET**, Advanced-Level Entrepreneurship Center for entrepreneurs and start-ups that succeeded in turning their ideas into products,
- **ITU INNOGATE**, International Accelerator for companies that are to introduce their products to the global market,
- **ITUNOVA TTO**, the technology transfer interface of ITU that aims for commercialization and protection of the academic data and providing multi-purpose support to help them succeed.

ITU ARI Teknokent goes on working to be a techno-park that **establishes ecosystems and creates value**.



# IMPACT & INFLUENCE

## Leading Role of ITU

Today, ITU contributes to government policy-building and serves as a private sector model for knowledge transfer. The university is held in high-esteem by policy-makers, multi-sector stakeholders and opinion leaders for its interdisciplinary solution-building.

STEM & STEAM programs, social outreach initiatives for disadvantaged groups, and environmental engagement define the landscape of social innovation unique to ITU.

The entrepreneurial ecosystem of ITU has demonstrated a sustained impact on the economy with an export sum of 640 million USD. ITU is a chief participant in the effort to fortify and increase the Turkish economy by exporting its solutions, products and services.

ITU, with its 170,000 global alumni, disseminates a strong global brand of excellence and prestige. Around the world, ITU alumni hold important roles, as decision-makers and leading strategists; from presidents, to prime ministers, to ministers, to heads of global engineering and financial corporations. Moreover, our alumni can be found, leading on the communication and health sectors, internationally and at home.



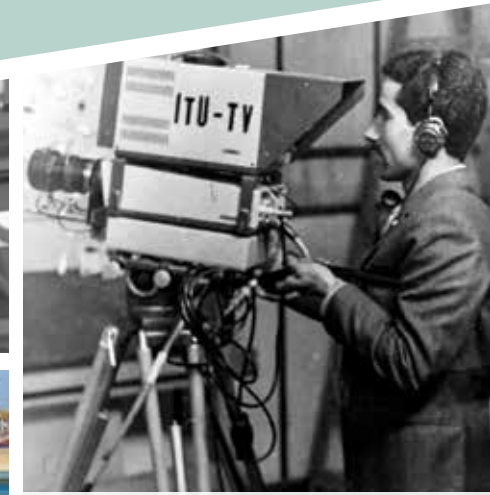
The First Cubic Satellite of Turkey: UBAKUSAT



8th President of Turkey



Aerospace Research Center



ITU TV: Turkey's First Television Broadcast



Humbolt Research Award



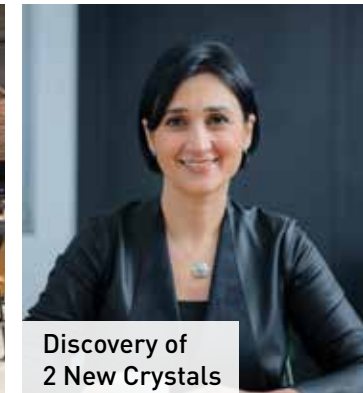
Young Scientist of the Year Award of 2019



9th President of Turkey



ITU Magnet Fab



Discovery of 2 New Crystals



Nanocomposite Foam & Improved Polymer Properties



ITU Vodafone Future Lab

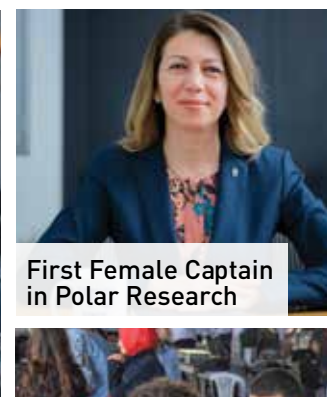


ITU Rover Team

**170.000+**  
Prominent Alumni



TÜBİTAK Science Award



First Female Captain in Polar Research



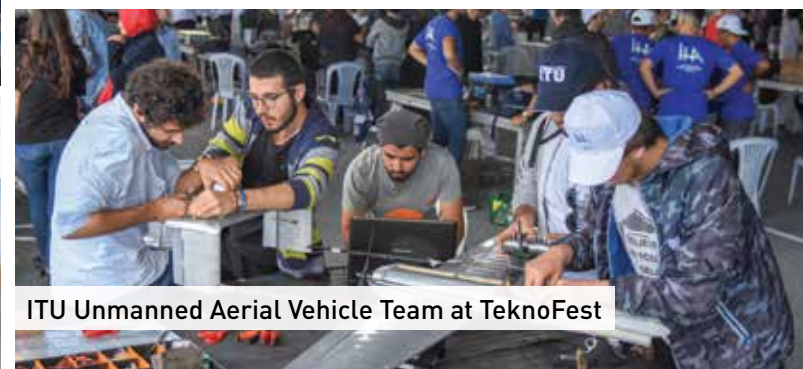
TÜBA-GEBİP Honoured



Wakeham Honoured



Unmanned Underwater Testing Instrument and Acoustic Monitoring Unit



ITU Unmanned Aerial Vehicle Team at TeknoFest



Autonomous Underwater Vehicle ROV



# ISTANBUL

## Location matters! 2 Continents, 1 City

ITU located in the cultural, industrial and financial capital of Turkey: Istanbul.

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Istanbul is geographically the only city linking two continents in the world. Located on the Bosphorus peninsula between Balkans and Anatolia, the Black Sea and the Mediterranean, Istanbul was the capital of Eastern Roman and Ottoman Empires. Each historical era engraved its marks on the city layers that are still visible and impactful despite the all-encompassing changes. Being an exceptional historical hub, Istanbul is also known with its fabulous natural beauties. One of the outstanding universal values of Istanbul -as coined by UNESCO- resides in its unique integration of architectural masterpieces that reflect the meeting of Europe and Asia over many centuries, and in its incomparable skyline formed by the creative genius of Byzantine and Ottoman architects.

With its approximately 15 million inhabitants, Istanbul is at the heart of Turkey's education scene. Istanbul hosts 61 out of Turkey's approximately 205 universities, 762.503 students and 34.235 academicians today. This makes the city a center for academic studies. In this sense; with a rooted history of almost 250 years, Istanbul Technical University is a pioneering state university steering engineering, science, art, technology, business and design education in Istanbul.



Maiden's Tower



Galata Tower



Panoramic View of Golden Horn



Vibrant City Life



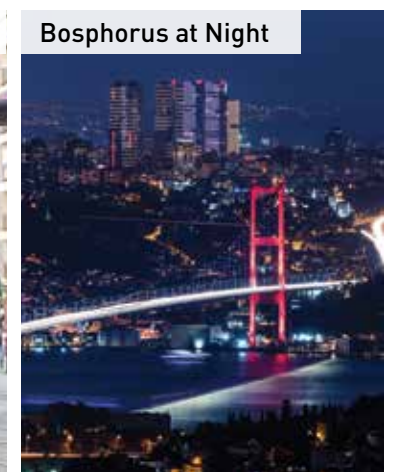
Historic Peninsula at a Glance



Rumeli Fortress & Bosphorus



Cultural Hub of Istanbul: Beyoğlu



Bosphorus at Night



Financial District of Istanbul: Maslak / Levent



# CAMPUS LIFE

## 24 hour Living Campus with 650.000m<sup>2</sup> of Green Area

ITU stretches across five campuses located in the financial, cultural, and historic districts of the city of Istanbul. Ayazağa is the main campus of ITU, located in Maslak, the finance district of Istanbul. At UI GreenMetrics Rankings, Ayazağa Campus is ranked in the top 100 universities of the world. ITU holds the title as being the first and only university from Turkey to be amongst the first 100. Our green campus is 71st in the world and the 37th in Europe. A pond fed by rainwater provides a calm walking, riding and running area for campus residents. Moreover, the campus waste is recycled into clean energy through the “Sustainable Energy Base” project. The sustainable life model is an example of Istanbul with all its infrastructure.

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Historical city campuses (Taşkışla, Maçka, and Gümüşsuyu) offer a unique environment for students to develop social and communicative skills while enjoying an urban cultural experience. The Tuzla Campus is located on the Anatolian side of the city and is at the seafront.

Dormitories on-campus supply accommodation for over 4500 students. ITU dorms are located in convenient locations allowing students to enjoy campus life. On-campus, various cafeterias provide both affordable and healthy meal options for students. All facilities provide access to campus services and are within close proximity to popular venues around Istanbul. The University has a multitude of athletics and social opportunities: tennis courts, gymnasiums, and an Olympic swimming pool. ITU has over 60 male and female teams competing in various levels in the university and in national leagues such as Sigortam.net ITU Basket Team which is at the Turkish Basketball First League as of 2019-2020 Season. ITU campuses are bike-friendly with a bike-sharing system, 6km bike road and the right of way for bikes.

With over 200 active student clubs and organizations on campus, plus varied resources of cosmopolitan Istanbul, student life at ITU is vibrant, educational, interactive and fun.

## ITU Green Campus 71st in the World, 37th in Europe in UI GreenMetric Rankings



ITU Basketball Team



Metallica at ITU Stadium



ITU Rectorate Art Gallery



ITU Pond



Active Campus Life



Inner Garden of Taşkışla Campus



Green Campus



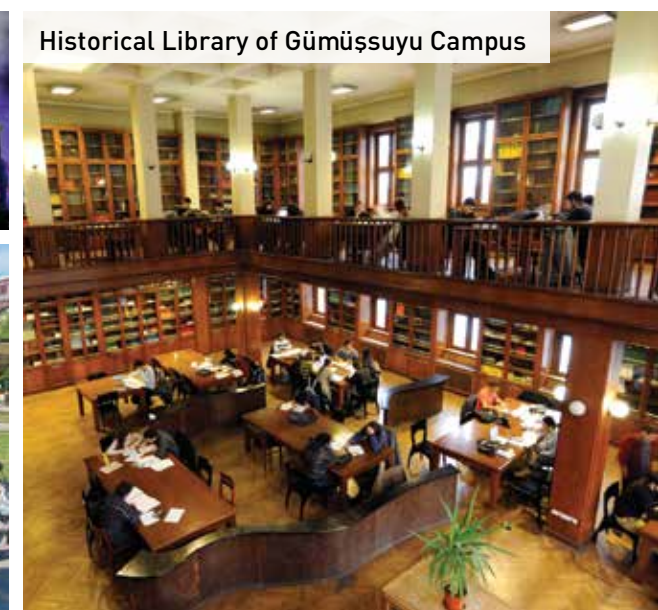
Urban Campus Life



ITU Student Clubs



ITU Dance Fest



Historical Library of Gümüşsuyu Campus



## ISTANBUL TECHNICAL UNIVERSITY

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