STRATEGIC PLAN 2019-2023

İzmir Institute of Technology

Contents

Strategic Plan at a Glance

The main headings showing the general summary of the updates and renewals made within the scope of the Izmir Institute of Technology (IZTECH) 2019-2023 Strategy Plan are stated below.

Mission, Vision and Core Values

IZTECH's mission, in line with its founding law, is to "conduct advanced research, education, training, production, publication, and consultancy in the fields of science and technology."

IZTECH Vision is "To be a pioneer in science and technology, original in education, and a respected research university in the world."

Its statement expanded according to the primary strategic axes that constitute the IZTECH Vision is;

- Pioneering in disseminating the high technology of its founding purpose to its preferred national priority areas,
- Making a unique and qualified contribution to digital transformation and technological change by providing collaborative, student-oriented, and hands-on learning opportunities in the working environment in education,
- Sustainably protecting environmentally and human-sensitive development,
- To be a respected research university in the thematic fields it leads in the world.

IZTECH Core Values determined in this direction are as follows (Figure 1):

- *Innovative*: Transforms technological innovation coming from scientific research power into modern initiatives.
- *Entrepreneur*: Paves the way for innovations by providing the necessary support environment that encourages stakeholders with ideas.
- *Original*: Supports research and education environments that explore, add value, are different, creative, and prioritize imagination, gives importance to intellectual rights and freedoms.
- *Participatory:* It makes it possible to find value in all kinds of ideas that pave the way for innovation and entrepreneurship and to participate in management processes at all levels.
- *Pioneer*: With its scientific success, it determines its position to lead the developments in the research and innovation environment in its country, to become the technology base of the firsts by instilling a brave and aggressive character to students and researchers, and makes attempts in this direction.
- *Responsive:* Acts respectfully and sensitively to the local community around it and to the sustainability of natural and cultural assets.

Figure 1. IZTECH Mission, Basic Values and Vision performance organization

Aims and Objectives

The goals and objectives of the current strategy plan have been updated in line with the vision and core values, as well as the plan period and medium-term trends. Each main strategic development axis consisting of 'Scientific Research', 'Innovation Ecosystem', 'Education and Training', 'Institutional Development and Social Contribution' is monitored in terms of vision achievement through directorates and coordinatorships (Figure 2).

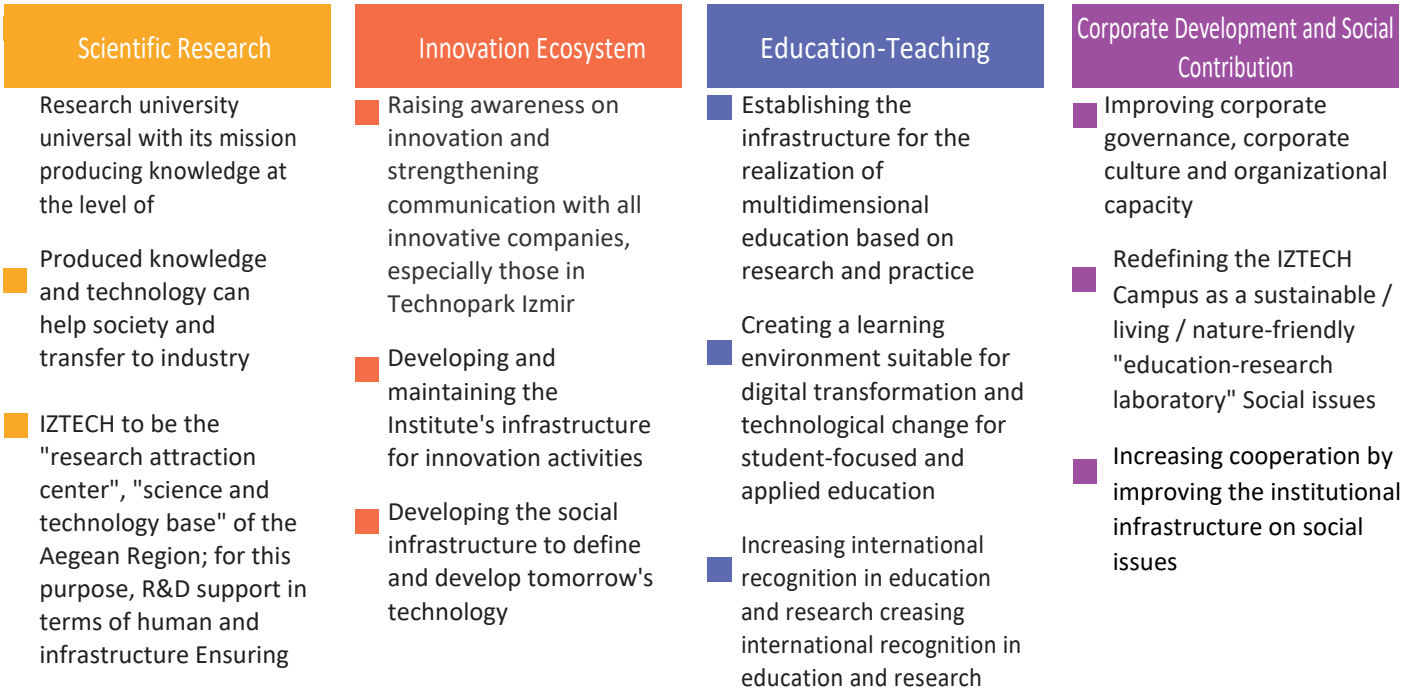


Figure 2. Updated strategic goals and objectives around Vision, Mission and Core Values

1. Strategic Plan Preparation Process

IZTECH's strategic planning studies are carried out in accordance with the Public Financial Management and Control Law No. 5018 and the Regulation on Procedures and Principles Regarding Strategic Planning in Public Administrations prepared based on the provision of Article 9 of this Law and under the guidance of the Strategic Planning Guide for Public Administrations; It is carried out with the will and participation of all units and the Senior Management under the guidance of the Strategy Development Department and the Strategy Plan Coordinatorship.

The first strategic planning studies at our Institute were initiated in the 2008-2012 period, followed by the 2014-2018 Strategic Plan, which was carried out with broad participation. Finally, the third plan prepared covers the 2019-2023 period.

In the process of preparing the 2019-2023 Strategic Plan, the Institute has benefited from the experience gained in the previous plan preparation process. The fact that the 2014-2018 Strategic Plan was carried out with intensive interaction and broad participation with internal stakeholders served as a guide for the interviews with internal stakeholders in this direction, and the opinions of all administrative and academic units were asked and their contributions were received in updating the opinions. In addition, face-to-face interviews were held with the managers of academic units to enrich the process. For external stakeholders, participatory studies were carried out to ensure the contributions of those who benefit from the services of our Institute, industry representatives, alumni, non-governmental organizations, public institutions and organizations and all other relevant parties, and surveys and focus group meetings were held for these groups. External stakeholder participation was ensured at a sufficient level and quality.

Strategic Planning Coordinatorship was formed by the Strategy Development Department, senior management representative and expert academic staff, and stakeholder analyses were carried out by this coordinatorship.

IZTECH strategic planning process started with the preparation period; meetings and activities such as surveys, focus group studies, face-to-face interviews, workshops, advisory board studies were planned; a timeline showing the dates was prepared; the resource needs required by the process were determined by taking into account human resources, organizational structure, technical equipment and similar issues, and the necessary process planning was made (Table 1).

In the planning of the whole process, the issues that differed from the previous period were carefully brought to the agenda, taking into account the changes in our country and the issues concerning our Institute. The selection of IZTECH as one of the 10 priority research universities in Türkiye in 2017, and therefore the "Candidate Research University Self-Assessment Report" and the goals and objectives identified in the outputs of this report formed the backbone of the updated strategy plan.

In line with the changes outlined above, updates were made in the structure of the strategic development axes and related strategic goals, objectives and strategies in the IZTECH 2019-2023 Strategic Plan, and the appropriate number and quality of goals and objectives were determined in terms of monitoring and performance program. Performance indicators for the objectives were determined, the value of the current situation and the desired levels to be achieved were determined, and resource cost tables for the strategies to achieve the goals and objectives were included.

Table 1. Strategic Plan preparation process schedule (December 2017- May 2018)

	December	January	ebruary	larch	April	May
1. Evaluation of the Implemented Strategic Plan						
2. Obtaining unit/department opinions for internal eholders						
3. Identification of external stakeholders, preparation of icipation tools and implementation of a survey						
4. Determining the new plan period strategies to be wed by the University						
5. Internal stakeholder interviews and External eholder Workshop and consolidation						
6. Organization of main goals, objectives and strategies						
7. Identification of Performance Indicators						
8. Consolidation of opinions and comments by opening Draft Strategy to Senior Management and Stakeholders						
9. Budgeting and time planning of strategies linked to ormance Indicators						
10. Finalizing the IZTECH Strategy Plan						

2. Situation Analysis

2.1. Institutional History

Izmir Institute of Technology, consisting of the Faculty of Science, Faculty of Engineering, Faculty of Architecture and the Institute of Engineering and Science, was established on 11.07.1992 with Law No. 3837.

Our Institute started its activities on 16.11.1992 in the building owned by Petkim in Basmane district of Izmir. However, with the establishment of the faculties, the existing building was not sufficient and the Institute was allocated the Gülbahçe Campus Area, most of which belongs to the treasury. The Institute units started to move to this area in 1998, and the "Izmir Technology Development Zone" established within the borders of the campus started to receive company applications in February 2004.

The Department of Foreign Languages was established in 1995 and the Department of General Culture Courses in 2001. The Department of Foreign Languages became a college in 2010. The language of instruction at IZTECH is English in all departments and programs.

In IZTECH, which gave its first undergraduate graduates in 2002, education activities are carried out in 12 undergraduate programs, 23 master's programs, 5 of which are interdisciplinary, in 20 main disciplines, and 17 doctoral programs, 3 of which are interdisciplinary.

The programs, which were designed as interdisciplinary and where intensive research was carried out and which had research outputs to direct today's technology, were transformed into departments with a strategic decision in order to increase the number of critical researchers and to use the existing laboratory and equipment infrastructure effectively. In line with this decision, the Faculty of Engineering opened the Department of Materials Science and Engineering in 2012, the Department of Bioengineering in 2013, the Department of Energy Systems Engineering and the Department of Environmental Engineering in 2014.

Current graduate education continues in these fields, which have been transformed from programs to departments. In the Faculty of Science, the Department of Photonics was opened in 2015 and the Department of Neural Sciences in 2016. Only graduate education is provided in the newly opened departments.

As of 2018, there are 504 academic and 375 administrative staff, 192 of whom are faculty members, and 3549 undergraduate students in three faculties, 1373 master's and 443 doctoral students in the Institute of Engineering and Natural Sciences.

2.2. Evaluation of the Strategic Plan Being Implemented

In the 2014-2018 Strategic Plan of our Institute, 14 strategic objectives and 29 strategic goals and 110 actions have been established in order to achieve these objectives in a total of 5 main strategic development axes, and the realizations of the 2014-2018 period have been determined at the level of development axis, strategic goal and strategic goal-action planning by considering the annual report, performance program and unit evaluations.

Among the goals and action plans established in the main development axis of scientific research; the goals of establishing a fund to meet the contributions of the institution in international projects, increasing the number of IZTECH supported research projects and the shares allocated from the budget, structuring the existing thematic research centers as official centers, and opening new centers with university-industry cooperation have been postponed considering the developing conditions. Since incentive and success criteria such as the Regulation on

Academic Incentives and COHE Outstanding Achievement Awards have been established at the national level, there was no need to establish science incentive, award and success criteria at the institutional level, and the Izmir Institute of Technology Foundation Publication Incentive System, which was an institutional arrangement, was terminated. On the other hand, IZTECH "Research Directorate" (IZTECH-AD) was established with the Senate Decision No. 4 dated 25.02.2014 in order to better organize and manage the activities on the development axis. The main field of activity of the Directorate has been determined as determining and updating the research and development policies and objectives of the Institute and regular monitoring and operation of research activities.

The goal of participating in national exchange programs, which is included in the axis of education and training development, could not be realized effectively due to the fact that the language of instruction in our Institute is English, and the distance education application, which is included under the goal of actively using technological innovations in education, was started in the 2011-2012 Spring Semester, but was terminated in 2015. The number of undergraduate departments that started CO-OP application is 3 (Chemical Engineering, Electronics and Communication Engineering and Department of Chemistry) and "ID 540 Cooperative Education Course" course was added to the Industrial Design Master's Program in the Fall Semester of 2017-2018 Academic Year.

Institutional arrangements were made for the goal of taking initiatives to increase the weight of patenting activities in academic promotion criteria under the strategic goal of establishing the Institute's infrastructure for innovation activities on the axis of technology, innovation and creativity development. Izmir Institute of Technology Intellectual and Industrial Property Rights Policy and Directive on Intellectual Assets Management was accepted by the Institute Senate Decision dated 12.01.2016 and numbered 3, and the IZTECH-FSHM Evaluation and Support Board, which was appointed for 3 years, started its work. The Board includes the Rector, Research Director, TTO Manager, Industry Representative and Patent Expert. Patent support is provided in this context.

Within the main axis of institutional development, in line with the action of determining the procedures for the works, transactions and workflow carried out in administrative and academic units, the establishment of the Internal Control System of our Institute was completed at the end of 2017, and work to improve the system continues. Although the creation of an e-forum where complaints, requests, suggestions and creative ideas are collected in order to activate the principle of transparency has not been fully realized, a form has been organized to receive the suggestions and opinions of all academic/administrative units on issues such as the reorganization of the institution's web page, and a system including the senior manager has also been created. "IZTECH Sustainable Campus Coordinatorship", which is on the same development axis and aimed at the green campus target, was established in 2014. The actual working and organizational structure of the coordinatorship has not yet been established. Within the scope of the project with a total budget of 2.5 million TL for the utilization of natural resources on the campus, it was planned to install 1 wind turbine with a capacity of 250 KW, and during the plan period, the electricity consumption of the units was regularly measured and announced on the internet. As new buildings were put into service in our Institute, there was no decrease in electricity and water consumption. In accordance with the legal obligation, IZTECH Buildings Energy Audit Preparation and Energy Identity Certificate Preparation work was started in 2016 and energy efficiency studies continued in 2017 and 2018.

In the main axis of social service, the "IZTECH Social Responsibility Projects Coordinatorship" envisaged in the plan was established in 2014, and social responsibility activities were carried out in selected areas in line with the Coordinatorship Directive.

In general, when the whole plan is evaluated, although there is a high level of realization regarding the implemented strategy plan, some differences are observed in the realization of some of the strategic goals and actions determined due to the significant changes that occurred during the plan period (Research Directorate (IZTECH-AD), Technology Transfer Office, Izmir Technology Development Zone (Technopark Izmir), selection as a Research University), and it can be mentioned that the new structures will play a more effective role in undertaking the mentioned activities in the next plan period. The areas where the

implemented strategy plan sheds light on the new plan are briefly summarized below:

- New actions and indicators that were not foreseen in the current strategy plan but were reflected in the vision and the new plan as a whole due to the fact that IZTECH became a research university in 2017 were added.
- The main axis of scientific research was embraced by IZTECH-AD, which was established in 2014, and also started to provide an interface function with the IZTECH-AD Innovation Ecosystem. Although not foreseen in the current plan, based on the performance provided by this structure, a new structure under the name of 'Education Directorate' has been proposed in the new plan to contribute to the main axis of Education.
- There have been changes in the Technology-Innovation-Creativity axes due to new structures established during the plan period. In order for the university, technology transfer office and technopark to work in harmony, this axis has been reorganized as 'Innovation Ecosystem' and its scope has been expanded.
- Analyses and conclusions regarding external stakeholders and alumni, which were limited in the current plan, have been addressed in the new plan in a way to expand the emphasis on the innovation ecosystem, and especially in line with the feedback received, clarifications and improvements have been made on SWOT analysis and core values.
- The institutional development and social service axes, which were separate axes in the current plan, have been combined as institutional development and social contribution in the new plan, based on the proximity of their objectives and the need for integrated work.
- It was observed that the Sustainable Campus Coordinatorship and IZTECH Social Responsibility Project Coordinatorship, which were established from the main axes of social service and institutional development, could not be effective in terms of functioning and improvements were suggested for a more effective role in the new plan.

2.3. Legislation Analysis

The powers, duties and responsibilities of higher education institutions are regulated by Article 130 of the Constitution of the Republic of Türkiye and Higher Education Law No. 2547. Article 130 of the Constitution defines higher education institutions as "having public legal personality and scientific autonomy, consisting of various units to provide education and training at various levels based on secondary education, scientific research, publication and consultancy, and to serve the country and humanity in order to train manpower in accordance with the needs of the nation and the country in an order based on modern education and training principles".

In parallel with the provisions of the Constitution, Article 3 of the Law No. 2547 on Higher Education defines a university as "a higher education institution with scientific autonomy and public legal personality, which provides higher level education, scientific research, publication and consultancy, and consists of faculties, institutes, colleges and similar institutions and units" and defines the purpose of higher education, main principles and duties of higher education institutions.

With the Public Financial Management and Control Law No. 5018 adopted by the Grand National Assembly of Türkiye on 10.12.2003, the objectives and basic principles of public financial management were determined to ensure the effective, economic and efficient acquisition and use of public resources, accountability and financial transparency. In line with the objectives and basic principles of the Law, strategic planning and performance-based budgeting have been envisaged and it has been made compulsory for public institutions to prepare strategic plans. Universities are among the "institutions with special budget" shown in Table No. 2 attached to the Law.

2.4. Top Policy Documents Analysis

Tenth Development Plan

As the preparations for the Eleventh Development Plan are nearing completion as of the current period, the main objectives and policies of the Tenth Development Plan, which covers the 2014-2018 period, regarding higher education institutions are as follows:

- The main objective of the R&D and innovation policy is to contribute to the transformation of technology and innovation activities into benefits by increasing the focus on the private sector, to commercialize research results by creating an innovation-based ecosystem, and to contribute to our country's achieving high competitiveness on a global scale with branded technology-intensive products.
- Measures will be taken to facilitate and encourage university and private sector cooperation and interfaces will be created. In this framework, care will be taken to encourage R&D and entrepreneurship activities of academics and students in the restructuring of higher education.
- A quality assurance system will be established in higher education.
- Higher education institutions will be encouraged to transform into an output-oriented structure that attaches importance to technology production in cooperation with industry, and entrepreneurial activities and income sources will be diversified.

2018-2020 Medium-Term Program

In the 2018-2020 Medium Term Program prepared by the Ministry of Development, which includes priorities and expenditure policies in public expenditures, the policies that the education sector will refer to do not differ from the previous 20172019 program. When the main issues are summarized;

- Under the heading of effectiveness of public investments, education investments to improve human capital and R&D infrastructure investments to increase technological capacity and capabilities are prioritized,
- In line with the main objective of creating a qualified labor market that can compete with global markets under the heading of increasing the quality of human capital and labor force, under the sub-target of increasing the quality of education, specialization of universities is the main objective, specialization of pilot universities selected within the framework of the regional development mission in the areas announced will be supported, the research universities specialization program will be implemented, measures will be taken to improve quality in universities through the Higher Education Quality Board, physical space standards will be established in universities and efficient use of spaces will be encouraged,
- Under the same heading, special attention will be paid to the development and dissemination of digital content in education,
- Under the sub-heading of adaptation to digital transformation and technological change, the sectors, professions and skills that will undergo transformation or emerge in the future will be identified and the labor market will be adapted to these developments in order to turn the mentioned change and transformation into opportunities,
- Under the main heading of high value-added production and the subsequent sub-heading of R&D and innovation infrastructure, increasing the number and quality of researcher manpower, especially in basic sciences, attracting qualified researchers from abroad, continuing to support national-scale research infrastructures, and establishing new research infrastructures in critical areas where there is no infrastructure, Training researchers in the fields of biotechnology, information and communication technologies and advanced material technologies, which have the capacity to transform many sectors; establishing researcher infrastructures; establishing R&D support and commercialization programs; supporting clustering activities with priority for energy, health, automotive, rail systems, IT and defense sectors,
- Under the sub-heading of information and communication technologies, arrangements will be made in higher education program qualifications to provide qualified human resources needed by the sector,
- It is stated that the effective use of layered production, robotics, internet of things, big data, artificial

intelligence, augmented reality technologies, which are included in the digital transformation roadmap of the manufacturing industry, and domestic production will be encouraged.

TÜBİTAK 2018-2020 Strategic Plan

TÜBİTAK, which provides important contributions to higher education institutions in Türkiye's scientific and technological transformation, has analyzed important strategies covering universities in its 2018-2022 corporate strategy plan;

- R&D and public R&D projects will be supported in priority areas and national critical and strategic issues,
- Within the scope of reverse brain drain programs, more qualified researchers will be supported to conduct research in Türkiye,
- International mobility of researchers will be supported and the number of postgraduate fellows supported in priority areas will be increased,
- Researchers will be encouraged to apply for international support funds.

2.5. Determination of Fields of Activity and Products and Services

An overview of the products and services structured according to the main strategic development axes of Izmir Institute of Technology is given in Table 2.

Table 2. Main products, services and fields of activity

FIELDS OF ACTIVITY	PRODUCTS AND SERVICES
Education - Teaching	1. Foreign Language Preparatory Education 2. Undergraduate Education 3. Postgraduate Education
Scientific Research	1. National and International Research Projects 2. Industry Supported Projects 3. Research Centers and Thematic Laboratories 4. Patents 5. SCI, SSCI and AHCI Indexed Journal Publications 6. Conferences and Seminars 7. Postgraduate Theses
Innovation Ecosystem	1. Technology Transfer Office 2. Technopark 3. Innovation Center 4.Research Directorate 5. Izmir Technology Base and Internationalization 6. Revolving Fund
Insitution Development and Social Contribution	1.Sustainable Campus Coordinatorship 2.Continuing Education Center 3.Coordinatorship of Social Responsibility Projects

2.6. Stakeholder Analysis

The stakeholders of our Institute were determined by analyzing the persons/groups/institutions/organizations that are directly or indirectly, positively or negatively affected by the activities and services carried out by our Institute within the framework of its mission and service definitions (Figure 3).

Internal Stakeholder: Employees and students within the institution, who are affected by the institution and affect the institution.

External Stakeholders: Persons, institutions and organizations outside the institution that affect and are affected by the institution. Those who benefit from the services of the institution are identified as external customers and those who provide services are identified as suppliers.

Internal stakeholders were sent an evaluation of the current strategy plan and asked to update their opinions and suggestions for the new plan period and performance indicators for their work and services, and the results obtained were consolidated by the Strategy Development Department and forwarded to the Strategic Plan Coordinator. In addition, the Strategic Plan Coordinator held face-to-face meetings with the managers of the academic units and provided information in terms of updating the strategic goals, objectives and actions and developing new suggestions.

After the stakeholder analysis, the relevant external stakeholders were identified by the Strategic Planning Coordinatorship team in coordination with the units, and stakeholder opinions and suggestions were received and evaluated through external stakeholder surveys, alumni surveys and focus group meetings. During these evaluations, opinions on the future of IZTECH in the new plan, situation analysis and differentiation strategy were received (Figure 4).

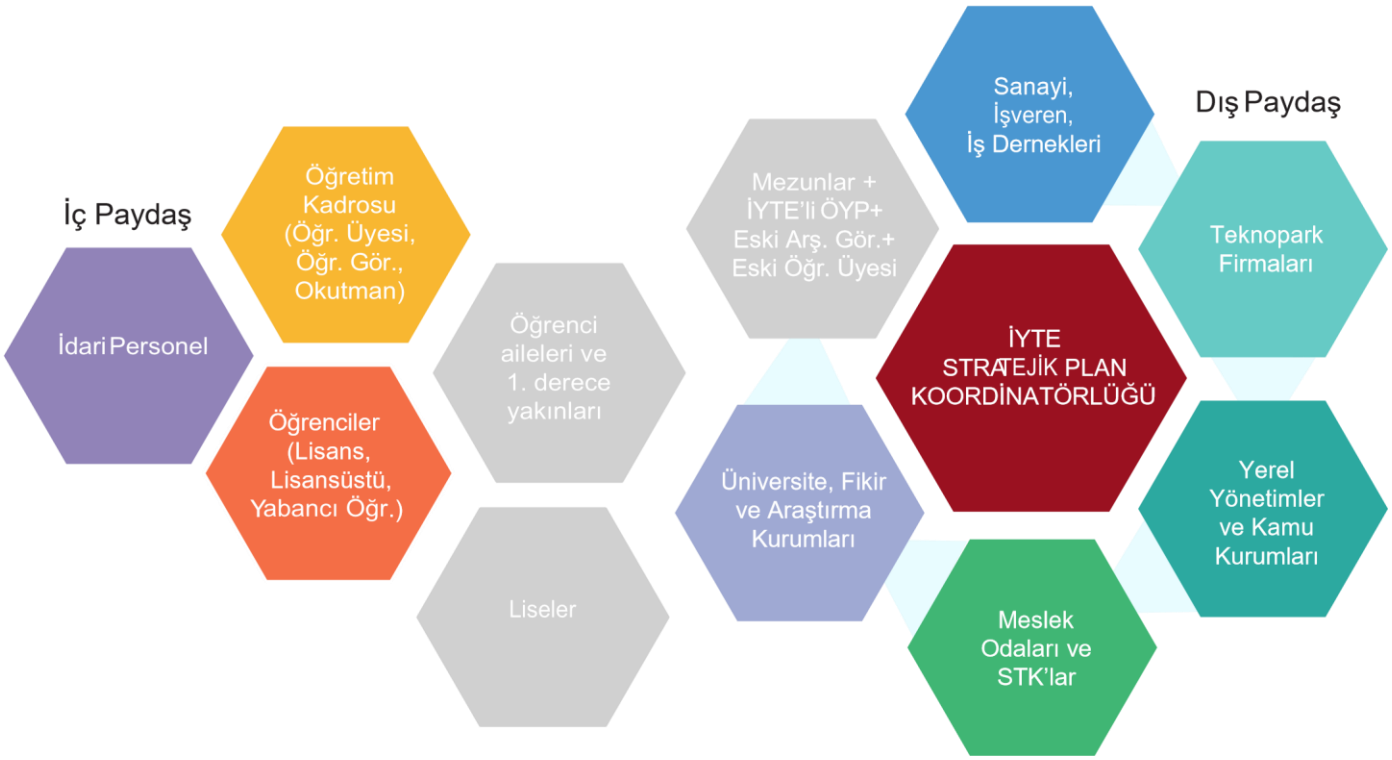


Figure 3. Internal and external stakeholders diagram

(a) (b)

Figure 4. IZTECH according to (a) External Stakeholder focus group meeting and (b) Alumni and External Stakeholder survey

2.7. In-House Analysis

Human Resources Competency Analysis

The research staff of the Institute are located in the Faculties of Engineering, Science and Architecture, the Institute of Engineering and Science, and the Research Centers affiliated to the Rectorate. The Institute employs 504 academic and 375 administrative staff, 192 of whom are faculty members. The general characteristics of the academic and administrative staff are as follows:

- 9 of the academic staff are foreign nationals.
- 51% of the faculty members are from the Faculty of Engineering, 33% from the Faculty of Science and 16% from the Faculty of Architecture.
- 40% of the academic staff (200) are research assistants.
- 37% of the faculty members are professors, 27% are associate professors, 36% are assistant professors; their average age is 50, 45 and 41.
- 61% of the faculty members completed their doctoral education abroad, and 23% (45) received their doctoral degrees from universities ranked in the top 100 in the Times Higher Education (THE) rankings.
- There are 27 students (18 undergraduate and 9 graduate students) per faculty member and 10 students per academic staff.
- In the last 5 years, the number of faculty members has increased by 8%; although the number of undergraduate students per faculty member has changed slightly, the number of graduate students has increased from 5.9 to 9.
- 76% of the administrative staff are higher education graduates and 99 staff are in technical services.

The procedures for academic staff appointments at Izmir Institute of Technology are carried out by the Personnel Department within the scope of the provisions of the Regulation on Promotion and Appointment to Faculty Members of the Higher Education Law No. 2547. In our institution, the provisions of the "IZTECH Minimum Principles on Academic Promotion and Appointment Criteria" are applied for faculty members, and the provisions of the "Regulation on the Procedures and Principles Regarding the Central Examination and Entrance Examinations to be Applied in Appointments to Academic Staff Positions Other than Faculty Members by Transfer or Open Appointment" are applied for other personnel. Special attention is paid to ensure that the scientific performance of all academicians who start working at the Institute is above the world average. For this reason, "decision support systems" are used effectively. In order to coordinate the faculty member application-appointment process, the "Academic Human Resources Initial Transactions Unit" (AİKİB) was established under the Rectorate. Academic staff appointment processes are organized through this unit. The process for the support applied to newly appointed academics at IZTECH, appointment promotion procedures and the principles adopted, etc. issues are detailed in the IZTECH Research University Self-Evaluation Report (2017).

The most important components of the Institute's research activities are researcher quality and research infrastructure. The optimization of the processes of determining/following/revision of research strategy and objectives is carried out by IZTECH -AD. The main field of activity of the Directorate is the determination and updating of the research and development policies and objectives of the Institute and the regular monitoring and operation of research activities.

The weekly course and project loads of faculty members are optimized with the "Capacity Planning Model Program" developed by IZTECH. The need for faculty members is also determined by the aforementioned model. The courses given by faculty members, the projects they take, the theses they direct and their academic incentive points are included in the model. In the model, a load coefficient in hours is created for each faculty member based on course, laboratory, thesis and administrative workload, class sizes, year of establishment of the department, etc. Resource allocation planning is also made by taking into account the total score of the department.

Within the framework of researcher human resources knowledge, skills and competence development and improvement policies, the Institute determines the 3 faculty members who publish the most international articles and gives awards to these faculty members at the opening ceremony every year. In the same context, the Institute allocates an additional travel budget in order to increase the participation of researchers in conferences and scientific activities in Türkiye and abroad. Faculty members are supported to spend their academic annual leaves in certain periods at distinguished universities abroad for research and experience in their fields of specialization. In addition, faculty members can benefit from teaching mobility under the ERASMUS program. These supports ensure that the already strong international collaborations continue to increase. According to SciVal data, 43% of IZTECH publications between 2014-2016 were international, which is an indicator of this policy.

For the professional and personal development of students, who are the most valuable human resources, activities involving science, art and current events are organized through academic / administrative units and student societies, and it is aimed that our students are not only good scientists who are free-thinking and open to innovations, but also good people with social sensitivity. For this purpose, the Career Office was structured as IZTECH Career Support Center (KARDES) in 2018 to provide career guidance and career counseling services to our students during their education and after graduation. The center carries out activities and programs to increase internship and job opportunities in coordination with student communities, and cooperates with internal or external experts. It organizes Technology and Career Day in order to meet the need for qualified human resources required by public and private sector organizations by graduates or students of our Institute. It brings our students together with companies that provide these services in various events in order to inform them about resume, cover letter creation and interview processes. In addition, it has transformed career support into a corporate service by bringing the private sector together with the web-based student resume bank.

Institution Culture

Current Institution Culture

Participation in management at Izmir Institute of Technology is organized through mechanisms established at various levels. For example, IZTECH-AD organizes "topic-oriented" strategy meetings by inviting researchers from all relevant departments with the focus group method, organizes meetings and private meetings with relevant companies and researchers in Technopark Izmir to evaluate the research potential, and presents statistical analyses and forward-looking projections based on the data and research outputs obtained to the senior management.

As another basic participation mechanism, surveys are organized on an annual basis, staff satisfaction is measured, and the results of the surveys guide the personnel policies to be followed. At the end of each academic semester, an evaluation survey is conducted for each course and the results of the survey are shared

with the instructor. After the establishment of the Education Directorate, it is expected that the type and number of these activities will increase and the quality of the courses will improve with the evaluation of the data obtained. In addition, research and survey results conducted by independent institutions are also monitored. Our Graduate School ranked first among public universities with an A+ in the "Türkiye University Satisfaction Survey"[1] and "Foreign Student Satisfaction Survey"[2] conducted in 2017.
The senior management supports participation in all possible activities, from web page development to strategic plan studies, through surveys, asking for opinions, and idea generation. The Student Council representative attends Senate meetings as an invited member and Quality Commission meetings as a natural member.

The quality of services/support provided in the departments is monitored by commissions and/or departmental boards established within the department. Through these commissions and boards, working teams are formed and opinions are formed on issues that require cooperation. Accreditation institutions are also useful for departments to collaborate with other relevant departments. For example, the Chemical, Mechanical and Computer Engineering departments within the Faculty of Engineering, which are MÜDEK accredited, are regularly evaluated by MÜDEK and the experience produced here is shared. Information about the institutional functioning is regularly shared with the employees of the institution. IZTECH provides e-mail services tailored for staff, academic, undergraduate and graduate students. For example, the electricity consumption of the Institute units is regularly measured every month and announced via corporate e-mail accounts. In addition, current evaluations on the functioning are made through active discussions in these groups. The General Secretariat and the Public Relations Unit announce current events, scientific conferences, etc. both inside and outside the institution. Advisory meetings are held at various levels on themes and topics deemed necessary to effectively support internal decision-making processes. The Institute's advisory board meetings are held regularly on an annual basis.

In the corporate governance policies established by IZTECH in 25 years, it is aimed to reduce errors in business and transaction processes by increasing the efficiency and professional competence of employees, to create effective time use and service continuity, and to ensure employee and service recipient satisfaction. In this direction, many research centers and departments organize seminar programs on a semester basis and provide environments that will enable employees to improve their knowledge and skills and meet new subjects and people. For example, IZTECH Design, Architecture and Urban Studies Center has organized a series of seminars under the titles of "History Next to Us, Researches Next to Us and Portraits Next to Us", which pioneered the development of the Institute's relations with its geography. In addition, seminars organized by the Department of Engineering Management and IZTECH Continuing Education Center focused on managerial experiences and skills.

In terms of human resources management, "Academic Human Resources Initial Operations Unit" (AİKİB) and IZTE Career Support Center (KARDES) are active in the management of institutional continuous improvement.

For one-to-one communication, communication channels such as electronic Rector-Request Forms, which are submitted to the evaluation of the Rector personally, have been established. In addition to one-to-one communication, the communication of the employees of our Institute with the administration is carried out regularly through the traditional Rector-Staff and Rector-Student Meetings. An Orientation Program is organized for new students with the participation of senior management and administrative units.

As part of the corporate culture, basic strategies and orientations are determined by organizing regular meetings with the institutions in cooperation. IZTECH produces its decisions in continuous interaction with internal and external stakeholders in the main strategic axes in which it operates. For example, while determining the research strategy of IZTECH, strategy meetings attended by all units, IZTECH-AD direction

[1] Türkiye University Satisfaction Survey (TÜMA), ÜNİAR, 2017.
[2] Foreign Student Satisfaction Survey (YÖMA), ÜNİAR, 2017.

determination meetings, TÜBİTAK 1000 Strategy Document preparation meetings, COHE 100/2000 field determination meetings, subject-oriented meetings and special meetings with Technopark İzmir companies, situation assessment meetings with the Institute Advisory Board, cooperation meetings with industrialists, Senior Management Consultation meetings have been and are being held. The knowledge accumulated at the Institute, details of academic outputs, statistical data are collected, analyzed, projections are made and strategies are determined in IZTECH-AD and Measurement and Evaluation Unit. In the process of preparing the IZTECH Strategy Plan, information is shared on the 'Strategic Planning' home page, and active participation in the process is encouraged through mechanisms such as face-to-face interviews, collecting department/unit opinions, focus group and stakeholder meetings.

Student societies and project market events enable new ideas to be seen and discussed within the institution. In the external environment, close cooperation with Technopark Izmir is realized in following the innovations. With the direction-setting meetings organized by IZTECH-AD, clues for the future positioning of the Institute are revealed.

IZTECH Corporate Strategy Plan is carried out with the support of the senior management and the structures established. Senior management actively contributes to the shaping and monitoring processes of the plan with the Strategic Plan Officer, Strategic Plan Coordinator, Strategic Plan Executive Board, Strategy Advisory Board. In addition, there are unit officers for the strategic plan and they take part in the coordination of the plan within their units.

Within the framework of researcher human resources knowledge, skills and competence development and improvement policies, IZTECH determines the 3 faculty members who publish the most international articles every year and gives awards to these faculty members at the opening ceremony. In addition, academic and administrative staff who have retired from the Institute and completed 10 years of service, as well as successful administrative staff are also rewarded. With the 'Rector's List' application, the names of the fourteen students who have graduated from undergraduate programs and have the highest grade point average are announced on the board at the entrance of the Rectorate, and various awards are given to the students invited by the Rector with their families. In addition to activities such as picnics and nature walks to strengthen the sense of togetherness, the Spring Festival is organized regularly every year with the participation of academic and administrative staff and students.

Future Vision of Institution Culture and the differences with the current corporate culture
Preserving the thematic superiority, agile/dynamic structure and qualities of IZTECH will be one of the most important issues in carrying the corporate culture to the future and managing change. In particular, it will be aimed to use the adaptation capacity to today's rapid transformations as an advantage. Among the objectives of the current strategy plan, 'creating a competent corporate identity for defining and developing the technology of tomorrow, enriching the working and living environment' should be considered as a prerequisite for this development. Along with the Research Directorate (IZTECH-AD), it will be effective to form thinking teams that aim to define the problems of tomorrow and make foresight through structures such as the Education Directorate (IZTECH-ED) envisaged in the new plan.

Technology and Information Infrastructure Analysis

IZTECH Research Directorate is the interface between Atmosfer TTO, which was established within Technopark İzmir within the scope of TÜBİTAK 1513 Technology Transfer Office Support Program, and IZTECH researchers[3]. IZTECH-AD is responsible for the coordination of issues such as collecting/evaluating all research data at IZTECH, including studies on technology transfer, directing the relevant studies to TTO, and ensuring that TTO's activities spread especially among IZTECH researchers and penetrate the research ecosystem. The

[3] In accordance with the decision of the Board of Directors dated 14.11.2017 and numbered 33/8, IZTECH Atmosphere Technology Transfer Office project has been transferred from Izmir Technology Development Zone A.Ş. as of 31.12.2017 to İZTEK Izmir Technology San. Tic. A.Ş. as of 31.12.2017.

unit organizes TTO's fields of activity in line with IZTECH's strategic plan, records the competencies of researchers, provides training and consultancy services on legal, administrative, technical and budgetary issues in the application, realization and commercialization processes of the projects carried out or partnered by faculty members and coordinates the relevant units. It carries out trademark-patent-utility model application procedures on behalf of the Institute in coordination with Atmosfer TTO and TPI Information and Documentation Unit, informs researchers by organizing training events on Intellectual and Industrial Property Rights (IPR), provides consultancy services on national and international support programs, follows the calls for these projects and organizes project-specific workshops and trainings.

IZTECH-AD monitors the technology infrastructure of the institution, manages the changes in the device inventory in this context, and organizes the replacement of aging devices with new ones. The most important basis in these matters is the Senate decision dated 18.04.2017 and numbered 3, which regulates the Principles and Principles of TÜBİTAK ARDEB Institution Share Expenditures. All research centers and technological infrastructures are affiliated to IZTECH-AD and its Director is the Vice Rector responsible for research.

Materials Research Center (IZTECH-MAM) was established in December 2001 as a unit under the Rectorate. The most important feature of the center is that it provides services to all universities and industry by gathering the necessary analysis devices for advanced material characterization under one roof. Geothermal Energy Research and Application Center (JEOMER) was established on May 11, 2005 within the scope of the project supported by the Ministry of Development. IZTECH is the only university in Türkiye that has a geothermal field within its campus area. In this context, JEOMER conducts geological, geophysical, geochemical and hydrochemical researches for the activation of the geothermal field. Environmental Development Application and Research Center (Çevre R&D) was established in December 2007. The main purpose of the center is to plan, design and implement the systems and components needed by public institutions and organizations and the private sector in the field of environment together with the industry, as well as to provide information and infrastructure support to graduate and undergraduate students at the Institute, primarily in environmental research. The Biotechnology and Bioengineering Application and Research Center (BİYOMER) was established in 2011 as a project of the Ministry of Development. The center provides infrastructure support for scientific projects in the fields of genomics, industrial biotechnology, biomedical and bioengineering, as well as for graduate and doctoral studies. The Design, Architecture and Urban Studies Application and Research Center (TAMİKAM) was established in 2015 to support the Institute's Faculty of Architecture and related disciplines. Since 2015, the center has been working on projects for the preservation of urban historical environments and planning basins in Izmir province. The Mass Spectrometry Center was established with the project support provided by the Ministry of Development in 2008-2009. The center provides analysis support to medical faculties, other university researchers and pharmaceutical companies. The Center for Applied Quantum Research (UKAM) was established within the scope of a project supported by the Ministry of Development in 2009-2010. The Center is the most equipped laboratory in the Aegean Region in the field of experimental solid state physics. The Composite Materials Research Center was established in 2009 with the project support of the Ministry of Development. It serves as a research laboratory by providing analysis support to researchers from within and outside the Institute.

There are 144 laboratories in the Institute, which are equipped with the technology that will enable education and training and all kinds of research to be carried out, and which were established with in-house budget facilities or external budget support. In addition, Infared and Microelectronics Materials Research Center (IRMAM) was established within the Faculty of Science within the scope of the Growing a Buffer Layer on an Alternative Base (GEDIZ) Project, which was signed between Aselsan and the Undersecretariat for Defense Industries and the Institute on November 23, 2012. The Energy Efficiency Training and Application Laboratory, which aims to train Energy Managers, was established in 2010 with a protocol signed between the Izmir Branch of the Chamber of Mechanical Engineers and the Institute.

IZTECH Integrated Research Center (IZTECH-TAM), which will be put into service in the second half of 2018, with an area of 6250 m2, will gather the existing Research and Application Centers and newly opened thematic advanced research centers under the same roof. Research centers are open to all researchers from within and outside of IZTECH and support industrialists and many large and small companies looking for solutions to their problems.

Technopark Izmir (Izmir Technology Development Zone) was established in 2002 on the IZTECH Campus with an area of approximately 214 hectares and an additional area of 6.4 ha. in 2004. Izmir Technology Development Zone ranked 6th in the 2017 Technology Development Zones Performance Index of the Ministry of Science, Industry and Technology. Currently, 160 domestic and foreign R&D companies, approximately 900 researchers and support staff work in the zone.

With the aim of carrying out technology transfer activities comprehensively and under a single roof, IZTECH Technology Transfer Office (IZTECH Atmosphere TTO) has been entitled to be supported for 10 years with the project submitted jointly with Technopark Izmir within the scope of TÜBİTAK 1513-Technology Transfer Offices Support Program. Within the scope of the program, the Institute was among the first 20 universities to receive support.

The Innovation Center was put into service in May 2016 with the support of Izmir Development Agency and Technopark Izmir guided project. ClassBoom, one of the largest incubation centers in Türkiye, provides free office space for 80 techno-entrepreneurs, as well as consultancy and mentoring support. Entrepreneur candidates in ClassBoom, located in Technopark Izmir Innovation Center, can benefit from the services of Atmosfer TTO for promotion, patenting and technology transfer, expert support in areas such as accounting, finance and law with the stakeholders office, trainings in the Innovation Center, and rapid prototyping activities with the technical workshop created to support training, production and R&D activities.

IZTECH is one of the 10 universities designated as a research university by the Council of Higher Education (CoHE) and the only university from the Aegean Region to make the list. In line with the goal of specializing in strategic areas such as nanotechnology and biotechnology, the information infrastructure practices followed by the Institute to measure research performance can be listed as follows:

- Academic Information System (AKBIS) software is a software that aims to create curriculum vitae information of academic staff and to produce outputs in different formats in line with this information.
- Educational performances are monitored through the IZTECH Course Evaluation Questionnaire, which is filled out by the students taking the course for each course at the end of the semester through the Student Information System (SIS).
- Details about IZTECH researchers are tracked through programs such as AKBIS, SciVal, Web of Science, etc. Izmir Institute of Technology has taken an initiative to create a "Data Research Information System" (VARBIS) for effective research management. In this way, an integrated "institutional research information system" that is integrated with the existing automation systems within the institute, compatible with international standards (EuroCris Cerif standard), and capable of exchanging data with similar systems around the world has been established. This system is an open source software and will be integrated into IZTECH's existing personnel, student, library and financial automation software. The system will set an example for IZTECH at the local level and for the whole country (TRCRIS) at the macro level.

Physical Resources Analysis

IZTECH has physical infrastructure facilities that are developing, strengthening and renewed every year. The Institute provides education with an education standard above the average of Türkiye with 274 different qualified education units with advanced technological equipment in 39.504 m2 education area. In 2015, a significant increase in the physical education capacity will be realized with the completion of the Faculty of Engineering Electrical and Electronics Engineering Department building with an area of 10,980 m2, the Food

Engineering and Bioengineering Department building with an area of 13,850 m2 and the Faculty of Science Laboratory with an area of 4000 m2 (Table 3).

Table 3. Spatial capacity of education areas

Education Area	Capacity						TOTAL
	0-50	51-75	76-100	101-150	151-250	251- Over	
Amplifier	1	2	2	1	-	1	7
Class	107	17	2	-	-	-	126
Computer Labs	17	-	-	-	-	-	17
Research Laboratories	123	-	1	-	-	-	124
Meeting Rooms	19	1	-	-	-	-	20
Conference Hall	5	1	2	-	1	-	9

The Institute Library is a pioneering, innovative library that has realized many firsts in the field of librarianship in Türkiye. These applications can be listed as the first mobile library website, the first facebook application, the first mobile library catalog browsing application, the use of a smart toolbar, and the ability to search library records in Google books and the world catalog. Our library ranks among the best university libraries in Türkiye in terms of its physical conditions and the up-to-dateness of its collections, the information technologies it uses, and the fast and easy access to a rich collection of databases and electronic resources at world standards. In 2008, according to a study conducted by LIBER (European Libraries Association), it was among the 29 best library buildings built in Europe in the last 4 years, including the relevant year. IZTECH Library serves researchers and students as one of the top 10 university libraries with the highest number of database subscriptions.

Izmir Institute of Technology is the only Turkish partner of the OpenAIRE project, an EU scientific technical infrastructure project designed to help researchers, research managers and project coordinators comply with EU Open Science and Open Access policies. IZTECH Academic Archive System "DSpace@IZTECH", which started to work in June 2013 in connection with the OpenAIRE project, stores all academic resources such as books, articles, theses, dissertations, papers, reports produced within IZTECH in digital environment at international standards and offers them as "Open Access" by paying attention to copyrights in order to increase their impact. Currently, approximately 70% of the scientific studies addressed to IZTECH are shared with the whole world via DSpace@IZTECH as open access. In addition, all publications made by IZTECH researchers and theses prepared by our students are made available on the Library website.

Meeting and Conference Halls; In the academic units of our Institute, there are 24 meeting halls with a maximum capacity of 50 people, 5 conference halls and 4 conference halls that exceed this capacity. In addition to all kinds of scientific and social activities, weekly movie screenings are also held in the 250-seat multi-purpose conference hall located in the library building. Prof. Dr. Erdal Saygın Amphitheater, named after our Founding Rector, hosts many events such as social and cultural meetings, opening ceremonies, etc.

Health Facilities are carried out under the Department of Health, Culture and Sports. The Health Center provides dental clinic, emergency response, laboratory and psychological counseling/guidance services. No. 7 IZTECH Family Health Unit serves within the Health Center Building.

Social, Cultural and Sports Facilities; IZTECH Campus was established at the intersection of Çeşme-Karaburun Peninsula, 50 km from Izmir and 15 km from Urla, in an area far from urban settlement. It was aimed to put the facilities offering social life opportunities to students and employees into operation as soon as possible, and in the first stage, the Central Cafeteria and lodgings were put into service in 2002, Student Dormitories in 2005, Sports Hall and outdoor sports facilities in 2008. Lunch service is provided to the staff and students of our Institute in the central cafeteria with a capacity of 5000 people. There are eight administrative-academic unit canteens and three cafeterias with a total area of 8806 m2 that serve students, staff and guests and are

operated by renting. In addition, there are student dormitories with a capacity of 1032 people affiliated to the Credit Dormitories Institution.

Indoor and outdoor sports facilities are available on the IZTECH Campus. There is a 2000-seat capacity indoor sports hall and outdoor sports fields consisting of tennis, wall tennis, mini golf course, mini carpet football field and basketball courts. The seaside location of the campus close to Gülbahçe Bay and the climate and natural texture of the Çeşme-Karaburun Peninsula increase the opportunities for students to practice open sea sports such as sailing, surfing, kite-surfing, etc. In addition, the 35,000 hectares of the campus offers students the opportunity to get to know the geography they live in by hiking or cycling. A semi-Olympic swimming pool with a capacity of 265 spectators was put into service in 2015, increasing the sporting opportunities for students and staff.

After the completion of the first phase of construction in the living areas, in accordance with the vision of "Living Campus", the Living Center with an area of 18,554 m² was put into service in 2014. In the section that provides social life opportunities for students and staff, there are equipment such as restaurants, stationery stores, cafes, etc., and in the other section, which serves as a guesthouse, accommodation is provided for 625 student.

IZTECH Unit without Barriers has been in operation since 2011. The aim of the unit is to minimize the difficulties encountered by our disabled students on campus and in dormitory life during their education; to support their equal participation in education, training, social life and cultural areas. Application to IZTECH without Barriers is on a voluntary basis. Studies on the subject have started to be carried out in the designated support areas, and the Department of Construction and Technical Affairs is working on "Creating a student-friendly learning environment" (building ramps, disabled toilets, measures for the visually impaired, etc.).

Academic Activities

Izmir Institute of Technology was established in 1992 as one of the two high technology institutes by a special law. With the transformation of Gebze Institute of Technology into Gebze Technical University in 2014, it is currently the only high technology institute in our country. IZTECH continues on its way in accordance with its founding mission as one of the 10 research universities determined by the Council of Higher Education at the national level in 2017.

The Faculty of Engineering consists of 10 departments: Computer Engineering, Electrical and Electronics Engineering, Food Engineering, Civil Engineering, Chemical Engineering, Mechanical Engineering, Materials Science and Engineering, Bioengineering, Environmental Engineering and Energy Systems Engineering, which were previously interdisciplinary programs and became departments in 2012-2015. The most recently established departments offer only graduate education, while the other departments offer undergraduate and graduate education. (The Department of Materials Science and Engineering and the Department of Bioengineering started undergraduate education in the 2018-2019 academic year). There are 6 departments in the Faculty of Science; Physics, Chemistry, Molecular Biology and Genetics, Mathematics, Photonics and Neuroscience. Graduate education will be given in the newly opened Photonics and Neuroscience departments. The Faculty of Architecture has 4 departments: Architecture, Urban and Regional Planning, Industrial Design and Architectural Restoration. Undergraduate and graduate education is provided in the Departments of Architecture and Urban and Regional Planning, and graduate education is provided in the Departments of Industrial Design and Architectural Restoration. Currently, education and training activities are carried out in 12 undergraduate programs, 23 master's programs in 20 departments, 5 of which are interdisciplinary, and 17 doctoral programs, 3 of which are interdisciplinary.

The local, national and international cooperation framework established by IZTECH, which supports the development of our country in high-tech innovative sectors, for the development and improvement of qualified human resources that will adapt to digital transformation and technological change, is given below:

- IZTECH International Relations Office (IZTECH-IOS), which was established in 2004 under the Rectorate, ensures the planning, development, coordination and coordination of the Institute's academic cooperation with European Union (EU) countries and international institutions and organizations outside the EU, and international relations for the exchange of students and academic staff, and monitors the activities. In 2010, the Institute was awarded the "Diploma Supplement Label" by the European Commission and became one of the 105 universities in Europe and 11 universities in Türkiye in 2012, it was awarded the ECTS Label.
- Effective from the beginning of 2017, the Institute became one of the two official EURAXESS Service Centers of the EU in Türkiye. EURAXESS, which is one of the EU's macro policies, is the unit that facilitates the "Free Movement of Researchers." This unit works as a national contact point that will inform researchers who will come to Türkiye about the country's culture, language courses, accommodation, banking, career development, etc. through the EURAXESS/Türkiye portal.
- Eurasian Centre for Advanced Research (AVILAR) is Türkiye's first and only international research, education and interaction center established in partnership with The Abdus Salam-International Center for Theoretical Physics (ICTP) in Italy, which is a UNESCO affiliated center, and continues its activities on IZTECH Campus. The abbreviation ICTP-ECAR and the name Eurasian Center for Advanced Research are used internationally. The Center is one of the five centers in the world identified as partners with ICTP. The other centers operate in Brazil, Mexico, China and Rwanda. The center, which was established in 2012, received approval from the Executive Board of Higher Education in February 2016 under the acronym AVILAR. It has been designed as an international science, research and education center where high quality science is produced and shared by taking into account the needs of developing countries in the region, especially Eastern Europe, Near Asia, the Middle East and North Africa, and conducting programs that will bring together active researchers and students from Türkiye and abroad. The activities of the Center are monitored and approved by a Scientific Board consisting of internationally renowned scientists.
- The European Organization for Information Systems (EUNIS), founded in Paris in 1998, is a platform that brings together organizations and research institutions responsible for higher education management and information technologies in Europe. Its aim is to contribute to the production of quality information systems in higher education and to support exchange activities, to develop cooperation and information exchange between organizations and research institutions responsible for information technologies, and to act as a bridge between the supervisory bodies that manage information systems and producers. IZTECH has been the only member of EUNIS from Türkiye since 2016 and participates in the EUNIS Rectors conference held every 2 years.
- Within the scope of the ERASMUS+ program, the Institute has a total of 363 agreements with 85 universities with 155 undergraduate, 158 graduate and 50 doctoral quotas. In this context, graduate students can stay abroad for one or two semesters by choosing a project close to their field of study at IZTECH with their advisors; this creates the potential for future collaboration. Among our students who use the ERASMUS+ program and go to Europe, there are students who later receive a double diploma by conducting their studies jointly. Between 2014-2017, 390 undergraduate, 59 graduate and 13 doctoral students benefited from the ERASMUS+ program.
- The Institute is also included in the Mevlana Exchange Program, which is carried out by the Presidency of Higher Education Council under the title of national and international cooperation policy and opens the way for cooperation with universities all over the world. Within the scope of the Mevlana Exchange Program, students and faculty members were exchanged with a total of 3 universities in the United States of America and Greece. Especially the exchange of our master's and doctoral students in order to carry out their thesis studies has the potential to make a great contribution to both the individual students and the international cooperation policies of our institution.
- IZTECH has signed international bilateral agreements with 10 universities apart from ERASMUS and Mevlana programs. These agreements provide IZTECH researchers with the opportunity to conduct research at distinguished universities abroad.
- The "Computer Science and Engineering" PhD program in the Department of Computer Engineering is carried out jointly with Ege University, and the "Bioengineering" PhD program in the Department of Biotechnology and Bioengineering is carried out jointly with Dokuz Eylül University.
- In 2015, an agreement was signed between the Institute and Izmir Northern Public Hospitals Union (IKHB-

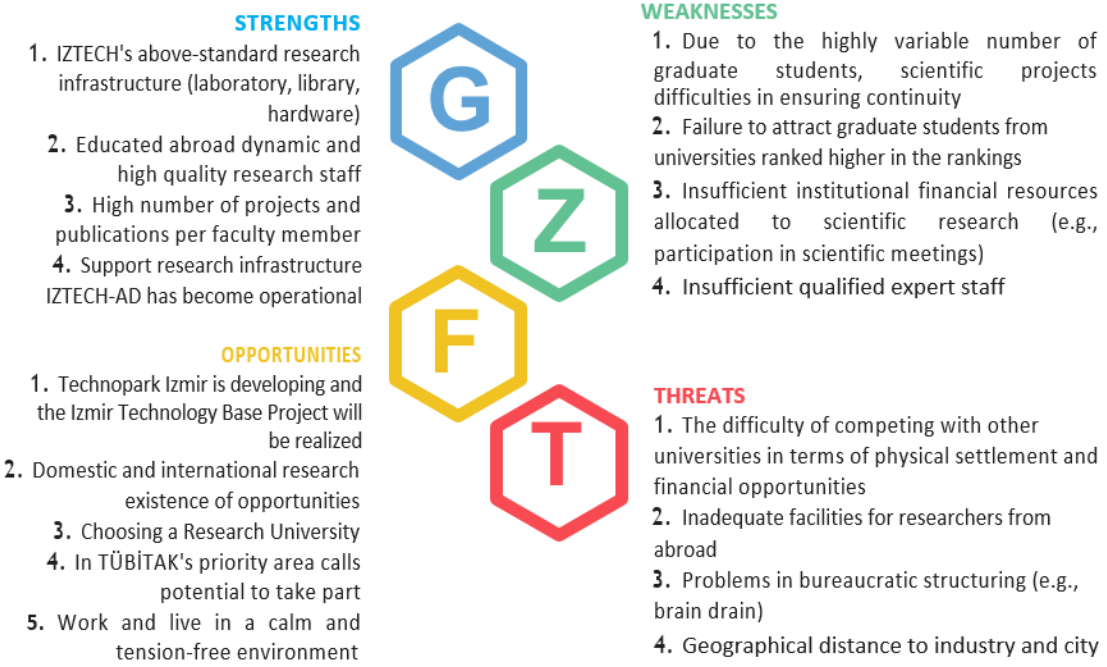
18 Hospitals) for the development of scientific research, services, products and health technologies.

- Izmir Universities Platform, which started in December 2008 with the founding partnership of 6 universities, was established to ensure the effective use of resources and to benefit from the synergy created by unity. IZTECH has chaired the platform, which aims to cooperate in the fields of education, research, information resources and innovation ecosystem, three times. In 2018, the chairmanship of the platform is at IZTECH.
- The Institute has been a member of the Caucasus Universities Union (KÜNİB), which was established on November 11, 2009, since 2014. is a member of the Association and participates in international fairs organized by the Association.

2.8. SWOT Analysis

The strengths and weaknesses of IZTECH and the opportunities and threats in the environment were identified around the 4 main strategic development axes selected by updating the data of the Strategy Plan and applying participatory techniques (e.g. external stakeholder and alumni surveys, focus group meetings).

SCIENTIFIC RESEARCH



INNOVATION ECOSYSTEM

EDUCATION-TEACHING

STRENGTHS

1. Qualified teaching staff
2. Due to the low number of students per faculty member rising quality of education
3. Education in English
4. CO-OP training programs implementation

OPPORTUNITIES

1. Having a high profile of incoming students
2. Active student exchange programs (Erasmus etc.)
3. Opportunities offered by the natural environment such as quiet working environment, nature sports, etc.
4. Potential to attract visiting faculty members and foreign students due to English education

WEAKNESSES

1. Insufficiency of basic infrastructures supporting the educational environment (social life opportunities, housing, transportation)
2. Inadequate support for technical trips etc. to improve the educational environment

THREATS

1. Regular increase in student quotas for undergraduate education

ORGANIZATIONAL DEVELOPMENT AND SOCIAL CONTRIBUTION

STRENGTHS

1. Having a large campus
2. Dedicated work of academic and administrative staff
3. University management receives the opinions of the staff and communicates closely

OPPORTUNITIES

1. Promoting the achievements of students and staff in their fields of study
2. Opportunities offered by the region and the environment (natural historical assets)
3. Valuing natural diversity
4. The seaside areas of IZTECH Campus can be used for the benefit of society

WEAKNESSES

1. Inadequacy of activities and environments to support social life on campus (transportation, housing, entertainment, etc.)
2. Lack of social communication among university staff
3. Lack of institutional recognition and promotion
4. Lack of continuity in corporate policies and strategies
5. Insufficient level of communication with the people of the region, NGOs, etc.

THREATS

1. Perceptions such as distance to the city, brain drain, low wages, lack of social opportunities
2. Being close to active fault lines

2.9. Higher Education Sector Analysis

In order to analyze the external environment in which IZTECH operates, the developments in the higher education sector and the evaluation of the impact of these developments on the Institute will form the basis for the strategic decisions to be taken. In this section, political, economic, sociocultural, technological, legal and environmental (PESTLE) analysis is used to identify trends in various sectoral conditions affecting IZTECH. The PESTLE analysis is based on face-to-face interviews with internal stakeholders, surveys and external stakeholder consultation meetings in line with the participation framework of the 2019-2023 plan (Table 4).

Table 4. PESTLE Analysis for Sectoral Trends

FACTORS	DETERMINATIONS
Political	• Human resources, financial and technical infrastructure facilities required by the research university label and international competitiveness are developing slowly due to the budget. • The EU Human Resources Strategy for Researchers (HRS4R) Program and the activities of IZTECH EURAXESS Service Center, which was established for the free movement of researchers, may be affected by the EU process. • Local transportation policies do not develop in a way that supports the integration of IZTECH with urban life due to its relative distance from the main city. The development of IZTECH Campus together with its surroundings and its transformation into a science city changes the perception of distance.
Economic	• The lack of equity revenues and high dependence on public resources and facilities may impose limitations on research and manpower infrastructures for the core competence areas in which the Institute wants to make a breakthrough. • The distant location of IZTECH to industrial zones may cause problems in terms of the establishment, recognition and sustainability of new relations / collaborations for university-industry cooperation and the preferences of industrialists. In order to change this perception, a "to-do list" has been created and work has started. On the other hand, being the only research university in its region will further increase the attractiveness of IZTECH in its region. • - IZTECH has determined its core competencies in the fields of biotechnology and nanotechnology and organizes its positioning and infrastructure accordingly. The selected areas are regionally and in line with the priority areas of our country, and sectorally suitable for the development of high-tech and value-added products in the region.
Sociocultural	• IZTECH's location far from the central city poses problems for the diversity and continuity of campus life. An increasingly high proportion of students and academic/administrative staff prefer to live around the campus. This situation actually creates an important advantage. In this way, the way for IZTECH to develop together with its environment has been paved. It seems imperative for the future of IZTECH to transform into a Science city with its diversity and sustainability, where innovations and life are alive in itself. • Increasing the recognition and social acceptance of IZTECH and the socio-cultural relations it establishes with its environment will also multiply. The need to increase the social contribution in this direction comes to the fore.
Technological	• Digital transformation and renewal of technological environments and educational methods in the field of education are prioritized on the agenda of the world and the country. In order to overcome the barriers to distance education applications and infrastructures, which have been tried before at IZTECH and have low adoption rates, it has become necessary to address education with innovative institutional policies and coordination. • Open innovation networks are critical for the acceleration and development of science and technology in the world. It is important to develop the Institute's pioneering role in the development of open access policy and open science opportunities.
Legal and Environmental	• The development of the 'research university' status declared by the Council of Higher Education (COHE) is critical for the development of the Institute. Indicators in this direction should be closely monitored and performance should be improved. • There are problems especially in the employment of personnel and freedom of movement (central budget, physical facilities) for research centers. It is of critical importance to urgently regulate the legal infrastructures in this direction in order to improve the effectiveness of scientific research infrastructures. • Plans to act in line with the sustainable development goals (themes determined from 17 goals), which have become a global responsibility and declared by the UN, have become important in terms of international connectivity and scientific collaborations/projects. Institutional strategic goals to be determined in this direction will provide significant environmental benefits for the Institute's research and technopark activities.

2.10. Determination and Identification of Needs

Determinations

IZTECH is currently the only high technology institute in the country. In accordance with its mission, it has been one of the 10 research universities selected at the national level in the last 25 years since its establishment.

The fact that the language of instruction in all undergraduate and graduate programs is English is an important advantage for internationalization. The CO-OP education model based on university-industry cooperation is currently being implemented in some departments and unique education models based on practice and experimentation are being developed. IZTECH graduates are preferred in business life and have job opportunities in a short period of time.

Technopark Izmir is the leading organization of the Aegean Region, established in 2002 within the IZTECH Campus. Technopark Izmir's strong local and foreign R&D companies and researchers provide an important entrepreneurial advantage. With the Technology Transfer Office (Atmosfer TTO) and IZTE-AD, which organizes relations with the university, the innovation ecosystem has developed and in this context, it is attractive for national priority investments such as international technoparks. Technopark Izmir provides IZTECH with the capacity to generate net values such as consultancy, employment, scholarship and patents.

As a research university, IZTECH has the goal of achieving a respected position in the world in the fields of biotechnology and nanotechnology. In this direction, it strengthens its communication network with world universities. Eurasia Advanced Research Application and Research Center (AVILAR) was established in partnership with The Abdus Salam- International Center for Theoretical Physics (ICTP), a UNESCO center that hosts Nobel Prize-winning researchers, and enriches IZTECH's ties with the international geography.

Needs

- IZTECH's thematic superiority and agile infrastructure and qualifications should be preserved.
- The number of foreign academicians and students should be increased by improving internationalization qualities.
- It should be ensured that all stakeholders adopt the 25 years of experience in creating institutional memory and corporate culture.
- International relations of academics and students should be improved.
- Own revenues should be increased in order to expand institutional financial sustainability.
- The number of graduate students should be increased.
- The number of full-time foreign academic staff conducting research should be increased.
- IZTECH's position in world university rankings should be improved to be among the top 200.
- Deficiencies related to physical infrastructure should be completed and socio-cultural and environmental issues should be emphasized.
- Mechanisms that will ensure closer cooperation with international institutions and organizations and increase the interaction of researchers and students should be implemented.
- Efforts should be made to increase the rate of targeted research in coordination with regional and national industry.

3. Looking to The Future

The mission of Izmir Institute of Technology is stated in its founding law and is shaped accordingly. The vision was accepted by the IZTECH Senate in the current plan period and updated in the new plan period to include the idea of a research university. The achievement of the vision in line with the mission depends on the progress to be made in the four main strategic development axes.

3.1. Mission

To conduct advanced research, education, training, production, publication and consultancy in the fields of science and technology.

3.2. Vision

To be a pioneer in science and technology, unique in education, and a respected research university in the world. The expanded statement according to the basic strategic axes that make up the vision of IZTECH;

- Pioneering in disseminating the high technology of its founding purpose to the national priority areas it prefers,
- Making a unique and qualified contribution to digital transformation and technological change by providing collaborative, student-oriented and hands-on learning opportunities in the working environment in education,
- Sustainably protecting environmentally and human sensitive development,
- To be a respected research university in the thematic areas in which it leads in the world.

3.3. Basic Values

IZTECH Basic Values are as follows:

- *Innovative*: Transforms technological innovation coming from scientific research power into modern initiatives.
- *Entrepreneur*: Paves the way for innovations by providing the necessary support environment that encourages stakeholders with ideas.
- *Original*: Supports research and education environments that explore, add value, are different, creative, and prioritize imagination, gives importance to intellectual rights and freedoms.
- *Participatory:* It makes it possible to find value in all kinds of ideas that pave the way for innovation and entrepreneurship and to participate in management processes at all levels.
- *Pioneer*: With its scientific success, it determines its position to lead the developments in the research and innovation environment in its country, to become the technology base of the firsts by instilling a brave and aggressive character to students and researchers, and makes attempts in this direction.
- *Responsive:* Acts respectfully and sensitively to the local community around it and to the sustainability of natural and cultural assets.

4. Differentiation Strategy

4.1. Location Preference

The strongest side of IZTECH is the research ecosystem consisting of "researcher human resources", "accessible research centers", "Technology Transfer Office", "Technopark Izmir" and "Innovation Center" which is structured especially for young entrepreneurs. All these systems, Guidance and coordination of the Institute in line with its strategies IZTECH-AD is managed by IZTECH-AD.

IZTECH-AD organizes "subject-oriented" strategy meetings with researchers from all relevant departments within the scope of focus determination studies, organizes meetings and special meetings with relevant companies in Technopark Izmir to evaluate the research potential, and presents statistical analyses and forward-looking projections based on the data and research outputs obtained and presents them to the senior management. In addition, with the coordination of TTO, it plans to ensure the commercialization and technology transfer of academic knowledge produced by IZTECH researchers, and carries out "facilitating" activities by matching researches with commercialization potential with Technopark İzmir or other R&D companies.

In this context, IZTECH has determined its basic position as a thematic research university.

4.2. Success Region Preference

The most important words that define IZTECH are research, science, technology, multidisciplinary, interdisciplinary, technology transfer, technopark, research centers, transparency, openness, open access, open science and technology. This is the result of the strategy that has been implemented so far and is guaranteed to be implemented in the future.

IZTECH has a highly developed research infrastructure and a human resource that uses this infrastructure effectively. The infrastructure required for education and research in departments is supported to the maximum extent, and special importance is given to central laboratories. The fact that all research and application centers will be gathered under the same roof with the IZTECH Integrated Research Center (IZTECH-TAM) will provide a significant advantage. Special importance is given to the project applications of the Ministry of Development, especially the applications for the establishment of a thematic advanced research center, and differentiation is made in these preferred areas.

IZTECH is research-oriented due to its founding mission, and its academic units prefer horizontal growth at the graduate level with departments for advanced new and priority research areas such as photonics, neurosciences, energy engineering, bioengineering.

Graduate students are very important for IZTECH's research ecosystem. It has the elements that can attract international researchers and students due to its qualified academic staff, the fact that the language of instruction in the education programs is English and that it offers many opportunities as a state university.

It has a geographical location with high natural qualities that encourage scientific research in a calm and tension-free environment. It is located at the center of renewable energy resources, the share of which is gradually increasing in our country, near national investments such as the international technology base and airport planned in Izmir. In this context; As an important science and technology campus in terms of technological, academic and applied education and training opportunities, it is working towards expanding its sphere of influence as a technology corridor.

4.3. Value Presentation Preference

With its qualified academic staff, scientific research infrastructure and the most powerful technopark in its region, IZTECH provides economic and social benefits to our country as well as knowledge and technology.

With the acquisition of Research University, it will reposition its research centers in terms of research infrastructures. The subjects and fields of study of the research centers will be revised in line with the needs of the departments. Subjects that are small in importance and impact and incompatible with national science and technology priorities will be reduced. While ensuring the coordination of research centers with IZTECH-AD, the efficiency of the centers will be increased by combining them under one roof with IZTECH-TAM, considering that being together will increase the synergy between researchers. The number of research centers compatible with the determined core competence areas will be increased, innovation spaces such as Fablab will be added to the established integrated research center infrastructure, economic and social benefit will be increased, and the level of open access will be increased. A center of excellence will be established to expand the Institute's performance and contribution to the field of information and technology.

By establishing IZTECH Education Directorate in order to develop a unique, interactive and student-centered model based on practice and research in the field of education, quality assurance in education will be established while expanding innovative practices in these areas. While aiming to increase the number of graduate students, the number of undergraduate programs will be kept constant or reduced. In addition, the attractiveness of graduate programs will be increased by creating new graduate programs for core competency areas and supported with scholarships, etc.

Due to the limited enrichment of university life and continuous livability due to the distance to the main city and the lack of critical mass, the effectiveness of the Sustainable Campus Coordinatorship, which was implemented during the plan period, will be increased. The visibility and number of innovations within the campus will be increased in order to transform IZTECH Campus into a "living science city". While increasing the number of smart/green buildings, the rate of utilization of fossil-fuel energy systems with low sustainability will be reduced. The energy efficiency of existing buildings will be increased and the rate of utilization of renewable energy sources, which have a very high potential in and around the campus, will be increased.

In IZTECH, which has increased its effectiveness towards internationalization, domestic and international cooperation behavior will be developed by expanding the existing research culture. The number and locations of international education exchange agreements for core competencies and target areas will be increased, inefficient agreements will be reduced or abandoned. Initiatives will be increased to establish the EU Human Resources Strategy for Researchers (HRS4R) Program, which are innovative infrastructures for internationalization, and IZTECH EURAXESS Service Center for the free movement of researchers and to ensure the effective use of its services.

4.4. Core Competency Preference

At IZTECH, it is important for academicians to conduct research with commercialization potential and to develop the commercial value that may arise at the beginning of R&D activities.

Within the scope of TUBITAK 1000 Call for the Preparation and Implementation of R&D Strategy Document in Universities, the Senior Management examined the human resources, academic outputs collected by the Measurement and Evaluation Unit, and determined the areas of competence in IZTECH's research ecosystem by using decision support tools such as SciVal. In the analysis, Biotechnology Research and Nanotechnology Research stood out as the two strongest areas. Both applications were accepted by TÜBİTAK and Strategy Documents were prepared. The project teams continued their planning and coordination activities through

regular meetings, analyzed the strategy documents and domestic and international universities, and identified the most prominent topics and keywords in the world and in Türkiye. A SWOT analysis was conducted with survey results and other feedback sent to all academics conducting scientific studies in related fields, and the current situation and R&D strategies for the future were determined. The opinions of industry and public institution representatives were received at external stakeholder meetings; priority R&D areas and sub-headings were decided upon by bringing all opinions together, and strategies and action plans were prepared. It was decided to establish Advisory and Executive Boards to ensure communication with all stakeholders, to follow up the analysis, to ensure the coordination of strategic goals and action plans, to evaluate the process and to ensure its penetration into the research ecosystem by aligning the work with IZTECH's basic research strategy.

In line with TÜBİTAK 1000 strategy documents, it was decided to focus on "health biotechnology" and "industrial biotechnology" in the field of biotechnology. The sub-headings to be specialized under the main headings are given in Table 5. By prioritizing the selected fields, the Institute has adopted the strategic goal of realizing the necessary transformations in its institutional structure and becoming one of the top three bases of our country in the production of knowledge for national needs in the fields it has chosen. The scope of nanotechnology studies is grouped into four sub-fields. In the same table, the equivalents of the fields in the COHE 100/2000 program in May 2017 are indicated. Biotechnology and Nanotechnology Research Areas include 6 of the 10 fields that IZTECH applied for. The other 4 fields are listed under the heading "Other" in Table 5. COHE 100/2000 fields and sub-fields may vary according to the semesters; IZTECH renews its application every semester in the priority areas it has determined. In addition, the departments were asked to suggest the names of 3 research fields that they think they are specialized in based on the number of theses, articles and projects and the number of academicians focusing on scientific studies in the fields they suggested. The data received were analyzed and the areas that the Institute should focus on were determined (Table 5).

Table 5. Priority research areas of IZTECH and their COHE 100/2000 equivalents (May 2017 Period)

AREA	**Areas Covered by COHE in Exchange for 100/2000**
Biotechnology	
Health biotechnology	THE MAIN AREAS 01.03. Health and Molecular - Cellular Engineering 01.09. Micro/Nano/Opto-electronic and Semiconductor Technologies 02.01. Basic Medical Sciences 02.03. Pharmacy (Field)
Diagnosis and telemedicine	SUBFIELDS 01.03.02. Biomedical Equipment (Medical Devices)* 01.09.02. Sensor Technologies* 01.03.06. Bioinformatics 01.09.01. Micro and Nanotechnology*
Medical robotics	01.03.02. Biomedical Equipment (Medical Devices)
Basic and pre-clinical drug research and treatment approaches	1.3.5. Nanobiotechnologically Driven Drugs* 1.3.6. Bioinformatics 02.01.01. Molecular Pathology 02.03.03. Pharmaceutical Biotechnology and Drug Design
Cell and tissue engineering	01.03.01. Biomaterials and Tissue Engineering*
Industrial biotechnology	There is no equivalent
Biotechnological products with high added value	There is no equivalent
Environmental sustainable technologies	There is no equivalent - 01.06. It can be associated with Energy Technologies.
Nanomaterials, nanotanets, energy materials	01.09.01. Micro and Nanotechnology* 01.06.03. Energy Storage and Energy Materials 01.08.03. New Generation Composites and Multifunctional Nanocomposite Materials*
Nanofabrication, nanoassemblies, nanosensors and nanofludik	1.9.1. Micro and Nanotechnology* 1.9.2. Sensor Technologies* 01.01.02. Data Mining and Data Storage

Nanomedicine, nanobiotechnology and nanotoxicology	1.9.1. Micro and Nanotechnology* 1.9.2. Sensor Technologies* 02.02.02. Molecular Oncology 02.01.01. Molecular Pathology

Nanotechnology	
Nanomaterials, nanotanets, energy materials	01.09.01. Micro and Nanotechnology* 01.06.03. Energy Storage and Energy Materials 01.08.03. New Generation Composites and Multifunctional Nanocomposite Materials*
Nanofabrication, nanoassemblies, nanosensors and nanofluidics	1.9.1. Micro and Nanotechnology* 1.9.2. Sensor Technologies* 01.01.02. Data mining and data storage
Nanomedicine, nanobiotechnology and nanotoxicology	1.9.1. Micro and Nanotechnology* 1.9.2. Sensor Technologies* 01.03. Health and Molecular - Cellular Engineering 02.02.02. Molecular Oncology 02.01.01. Molecular Pathology
Computational nanosciences (graphene and similar materials)	01.09.01. Micro and Nanotechnology* 01.08.04. Smart materials and bio simulation
Other	
Internet of things big data	1.1.2. Data mining and data storage** 1.1.3. Pattern recognition analysis*
Energy systems	01.06.01. Hydrogen and fuel cells*
Robotics and intelligent systems	01.07.01. Human computer interaction*
Architecture	01.04.01. Architecture*
Thermal and Fluid Sciences**	There is no equivalent

* Areas to which IZTECH applies

** Priority areas of IZTECH that are not included in the COHE 100/2000 Table

5. STRATEGY DEVELOPMENT: DETERMINATION OF GOALS, TARGETS AND STRATEGIES

5.1. Goals, Targets and Strategies

The main objectives defined in the four main thematic strategic development axes are given below. The associated strategic objectives and sub-strategies are shown separately for each axis (see Annex 2).

5.1.1. Scientific Research

1. To produce universal knowledge with the mission of a research university
2. To transfer the knowledge and technology produced to society and industry
3. IZTECH to be the "research attraction center", "science and technology base" of the Aegean Region; to provide R&D support in terms of human and infrastructure for this purpose

5.1.2. Innovation Ecosystem

1. Increase awareness-raising activities on innovation and raise awareness, particularly among those in Technopark Izmir to strengthen communication with all innovative companies
2. To develop and maintain the Institute's infrastructure for innovation activities
3. Developing the social infrastructure to define and develop tomorrow's technology

5.1.3. Education-Teaching

1. To create the infrastructure for the realization of multidimensional education based on research and practice
2. To create a learning environment suitable for digital transformation and technological change for student-oriented and applied education
3. To increase international recognition in education and research

5.1.4. Institutional Development and Social Contribution

1. Improving corporate governance, corporate culture and organizational capacity
2. To redefine the IZTECH Campus as a sustainable/living/nature-friendly "education-research laboratory"
3. To increase cooperation by improving the institutional infrastructure on social issues

5.2. Performance Indicators

The strategy plan indicators that are being implemented to measure the defined goals, objectives and strategies are based on the research university indicators and the strategy plan performance indicators for universities. These indicators are shown around four main strategic development axes (Annex 2). The objectives associated with the strategic goals and the target cards are presented in Annex 3.

5.3. Target Risks and Control Activities

Necessary control activities are carried out with the Internal Control Action Plan prepared to prevent the threats that may prevent the Institute from achieving its goals and objectives, prevent the service provided or reduce the quality of service, by taking into account the cost benefit analysis and to prevent negativities that will affect performance.

6. FINANCIAL PLAN

The distribution of financial resources for the objectives, targets, strategies and indicators shaped around the four main strategic development axes is shown in Table 6 and estimated costs are shown in Table 7.

Table 6. Financial Resources Distribution Table (TL)

	2019	2020	2021	2022	2023	TOTAL
Treasury Aid	113.641.000	123.673.000	134.173.000	144.673.000	155.173.000	671.333.000
Own Income	3.026.000	3.219.000	3.419.000	3.619.000	3.819.000	17.102.000
Revolving Fund	2.800.000	3.100.000	3.410.000	3.750.000	4.100.000	17.160.000
TÜBİTAK	8.010.000	8.010.000	9.010.000	9.010.000	10.010.000	44.050.000
SANTEZ	600.000	600.000	600.000	700.000	700.000	3.200.000
TAGEM	80.000	80.000	80.000	90.000	90.000	420.000
European Union	274.380	291.600	309.430	327.900	345.700	1.549.010
Exchange Programs	1.200.000	1.200.000	1.200.000	1.300.000	1.300.000	6.200.000
TECHNOPARK	627.000	720.000	813.000	916.000	1.029.000	4.105.000
Other Resources	1.200.000	1.200.000	1.200.000	1.300.000	1.400.000	6.300.000
TOTAL	131.458.380	142.093.600	154.214.430	165.685.900	177.966.700	771.419.010

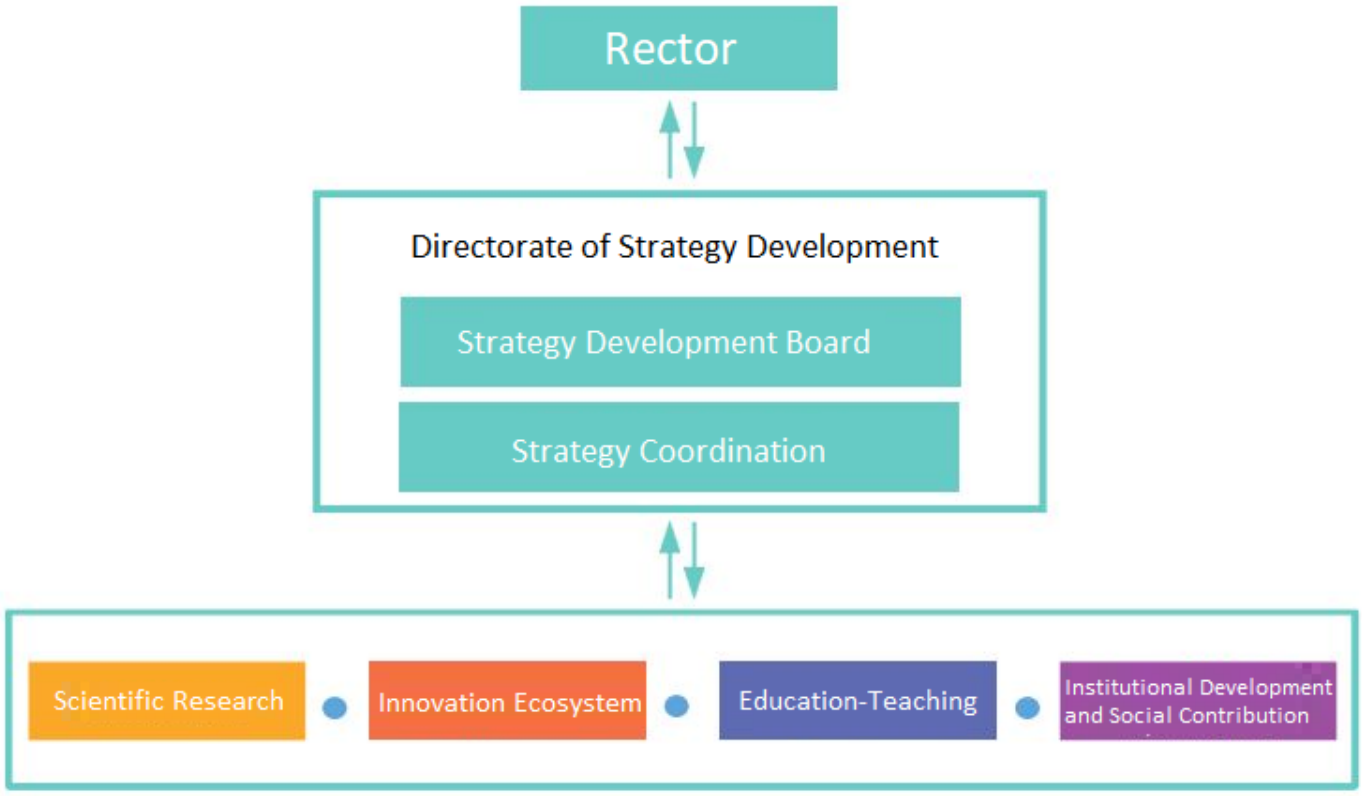
Table 7. Estimated Cost Table (TL)

	2019	2020	2021	2022	2023	TOTAL
SCIENTIFIC RESEARCH						
Strategic Objective-1	13.169.380	13.486.600	14.835.430	15.405.400	16.895.700	73.792.510
Target 1.1	11.779.380	12.096.600	13.425.430	13.895.400	15.265.700	66.462.510
Target 1.2	1.300.000	1.300.000	1.310.000	1.410.000	1.520.000	6.840.000
Target 1.3	90.000	90.000	100.000	100.000	110.000	490.000
Target 1.4	0	0	0	0	0	0
Strategic Objective-2	4.624.000	4.137.000	2.906.000	3.047.000	3.307.000	18.021.000
Target 2.1	1.213.000	221.000	180.000	188.000	157.000	1.959.000
Target 2.2	3.411.000	3.916.000	2.726.000	2.859.000	3.150.000	16.062.000
Strategic Objective-3	0	0	0	0	0	0
Target 3.1	0	0	0	0	0	0
INNOVATION ECOSYSTEM						
Strategic Objective -1	425.000	480.000	525.000	590.000	664.000	2.684.000
Target 1.1	400.000	450.000	490.000	550.000	620.000	2.510.000
Target 1.2	25.000	30.000	35.000	40.000	44.000	174.000
Target 1.3	0	0	0	0	0	0
Strategic Objective-2	150.000	180.000	220.000	250.000	280.000	1.080.000
Target 2.1	0	0	0	0	0	0
Target 2.2	150.000	180.000	220.000	250.000	280.000	1.080.000
Strategic Objective-3	20.000	20.000	20.000	20.000	20.000	100.000
Target 3.1	20.000	20.000	20.000	20.000	20.000	100.000
EDUCATION-TEACHING						
Strategic Objective-1	65.610.000	70.410.000	76.010.000	82.010.000	88.010.000	382.050.000
Target 1.1	65.410.000	70.210.000	75.810.000	81.810.000	87.810.000	381.050.000
Target 1.2	200.000	200.000	200.000	200.000	200.000	1.000.000
Target 1.3	0	0	0	0	0	0
Strategic Objective-2	18.200.000	21.120.000	24.350.000	28.250.000	32.000.000	123.920.000
Target 2.1	18.200.000	21.120.000	24.350.000	28.250.000	32.000.000	123.920.000
Strategic Objective-3	1.330.000	1.335.000	1.390.000	1.495.000	1.500.000	7.050.000
Target 3.1	100.000	100.000	150.000	150.000	150.000	650.000
Target 3.2	1.200.000	1.200.000	1.200.000	1.300.000	1.300.000	6.200.000
Target 3.3	30.000	35.000	40.000	45.000	50.000	200.000
Target 3.4	0	0	0	0	0	0
INSTITUTIONAL DEVELOPMENT AND SOCIAL CONTRIBUTION						
Strategic Objective-1	7.275.000	7.794.000	7.490.000	7.585.000	8.120.000	38.264.000
Target 1.1	0	0	0	0	0	0
Target 1.2	1.250.000	1.300.000	500.000	0	0	3.050.000
Target 1.3	60.000	70.000	80.000	90.000	100.000	400.000
Target 1.4	5.965.000	6.424.000	6.910.000	7.495.000	8.020.000	34.814.000
Strategic Objective-2	1.356.000	1.457.500	1.745.000	1.855.000	1.875.000	8.288.500
Target 2.1	800.000	450.000	485.000	340.000	355.000	2.430.000
Target 2.2	550.000	1.000.000	1.250.000	1.500.000	1.500.000	5.800.000
Target 2.3	6.000	7.500	10.000	15.000	20.000	58.500
Strategic Objective-3	4.000	6.000	6.000	8.000	10.000	34.000
Target 3.1	0	0	0	0	0	0
Target 3.2	4.000	6.000	6.000	8.000	10.000	34.000
TOTAL	131.458.380	142.093.600	154.214.430	165.685.900	177.966.700	771.419.010

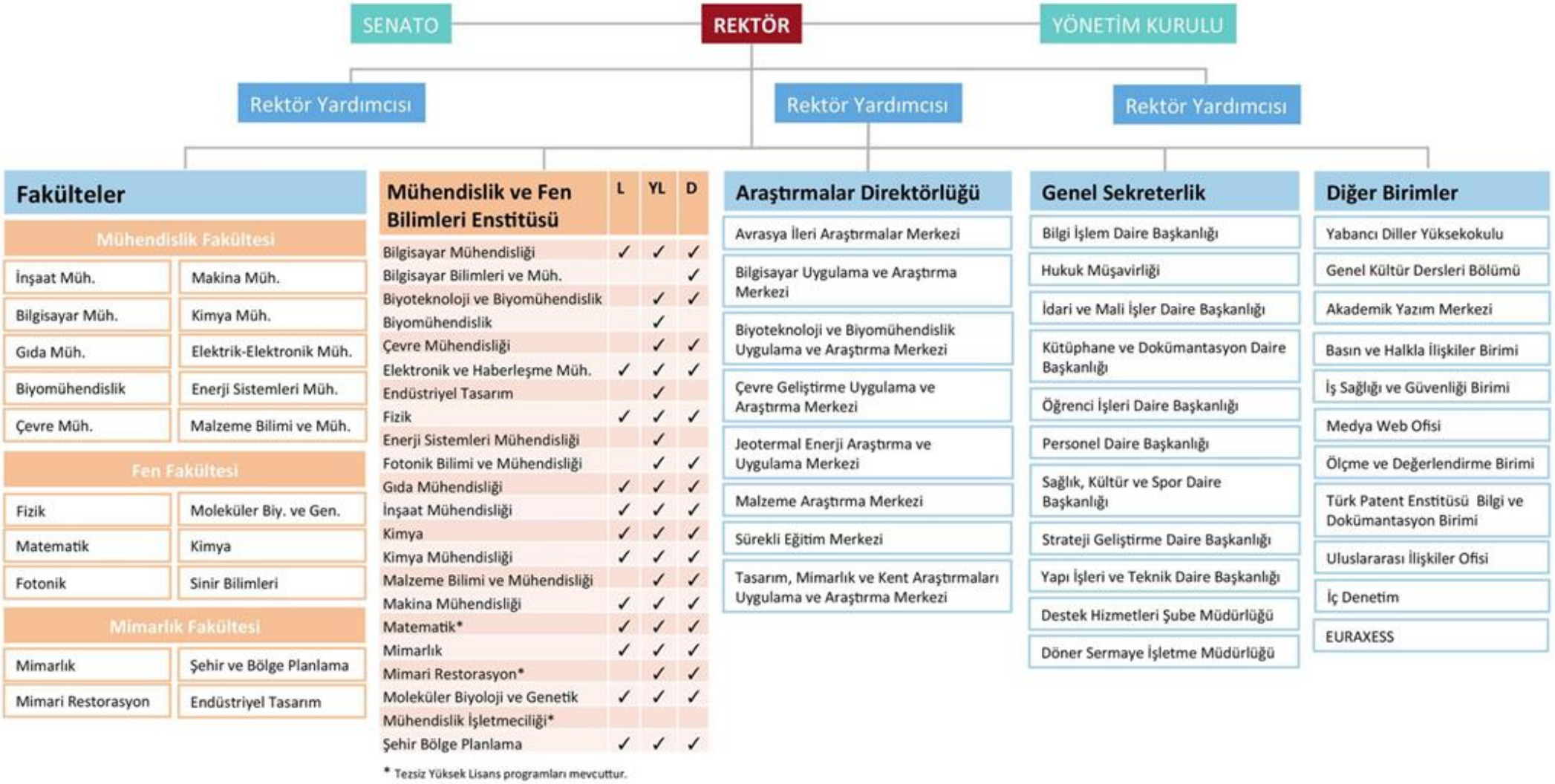
7.MONITORING AND EVALUATION

For the strategic development axes updated in the IZTECH 2019-2023 Corporate Strategy Plan prepared under the organization of IZTECH Corporate Strategy Plan Coordinatorship, the Strategy Plan in Practice, Research University Self-Evaluation Report Performance Indicators Set for Universities were evaluated and consolidated in line with the strategy development goals, objectives and actions.

The role of IZTECH Quality Assurance Coordinatorship, which was established in 2018, will be important in order to monitor and update the 2019-2023 indicators and to ensure the monitoring and sustainability of the Plan. This coordinatorship will oversee the developments in each development axis alongside the Strategy Development Board and Strategy Coordinator (Figure 5). The method to be followed for each strategic development axis is different. Therefore, a sufficient number of coordination meetings will be held to monitor the realization of the goals set. The decisions and recommendations of the Committee will be shared with the Senior Management and the Rector through the Strategy Development Department.



Annex 1. Academic and Administrative Organizational Structure



Scientific Research

	TARGETS	STRATEGIES	PERFORMANCE INDICATORS	RELATED UNIT
GOAL 1. To produce knowledge at a universal level with the mission of the research university	1.1. Increase support for basic research (basic science, engineering and architecture)	S.1. Develop institutional support processes to improve individual/team research performance and reward successful researchers, S.2. Researcher Development for new faculty members and researchers who will apply for projects Program (IZTECH-ARGEP) was initiated S.3. Increasing the number of doctoral and master's theses (number of graduate students) and the quality of theses; optimizing the duration of theses; increasing the number of postdoctoral researchers S.4. Implementation IZTECH Minimum Academic Promotion and Appointment Criteria	1.1.1. Budget allocated per faculty member within the scope of Start-Up Support 1.1.2. Average annual number of externally funded projects completed per faculty member 1.1.3. Number of scientific activities in which faculty members actively participate 1.1.4. Number of graduate students per faculty member 1.1.5. The number of projects supported within the scope of IZTECH ARGEP 1.1.6. Average annual number of articles/reviews in SCI, SSCI and AHCI indexed journals per faculty member	AD ED F/B MFBE
	1.2. Aligning research with national science and technology priorities	S.1. Bringing together researchers from different departments, units and centers in the identified priority areas, identifying and supporting project groups that can form critical mass S.2.Encouraging the submission of graduate and undergraduate theses in priority areas	1.2. 1. Number of focused project teams established by creating a "critical mass" by bringing together researchers from different units 1.2.2. Number of interdisciplinary graduate programs 1.2.3. COHE 100/2000 Doctoral Scholarship Number of Program Fields (applied) 1.2.4. Number of New Scholars in COHE 100/2000 Doctoral Scholarship Program	AD ED F/B Centers MFBE
	1.3. Increasing cooperation with international projects and partnerships	S.1. Improving existing support mechanisms to increase international project monitoring, writing and cooperation possibilities S.2. Ensuring the development of collaboration networks to reinforce IZTECH's leadership in open access, open science and open innovation	1.3.1. Number of international partner/supported projects 1.3.2. Number of academic staff going abroad for research purposes 1.3.3. The number of international scientific events organized 1.3.4. Proportion of articles/reviews etc. made open access by IZTECH researchers	F/B AD TTO AVILAR
	1.4. To ensure that international macro policies and related instruments are adopted and widely used in IZTECH	S.1. Increasing the effectiveness of the services of IZTECH EURAXESS (Free Movement of Researchers) Service Center	1.4.1. Number of information requests, applications, etc. made through EURAXESS to/from IZTECH, Aegean Region and other universities in Türkiye	EURAXESS
GOAL 2. To transfer the knowledge and technology produced to society and industry	2.1. Foundation facilitating knowledge and technology transfer based on research create interfaces and develop activities	S.1. Supporting training activities to raise awareness on FSMH issues and providing institutional support for patent application processes S.2. Determining industry/professional practice collaborations in the core competence areas targeted by IZTECH in undergraduate programs and encouraging the transfer of their outputs to the industry	2.1.1. Number of studies given patent support 2.1.2. Number of patent applications 2.1.3. Average annual number of national/international patent documents per faculty member 2.1.4. Average annual number of utility models and industrial designs per faculty member 2.1.5. Number of collaborations for industry/professional practice in undergraduate programs (COOP and similar collaborations)	FSMH-DDK TTO AD

Scientific Research

	TARGETS	STRATEGIES	PERFORMANCE INDICATORS	RELATED UNIT
	2.2. Existing research centers and departmental research increase the competence of laboratories and establish new ones	S.1. Increasing the qualitative capacity of research centers and transforming them into 'thematic advanced research centers' S.2. Designing new research centers to be established with the theme of "center of excellence" S.3. Establishing targeted focus researcher groups and guided project teams under the leadership of research centers S.4. Developing the technological infrastructure of research and education laboratories in faculties and departments in order to raise a graduate profile that is targeted, versatile, interdisciplinary and able to provide solutions to complex problems, has high manual dexterity and is competent in theoretical and applied fields. S.5. Establishment of next generation laboratories (FabLab or similar) and units where different expertise can be brought together, with the coordination of the Research Directorate and the Education Directorate.	2.2.1. Ratio of the budget allocated for the sustainability of research infrastructures to the general budget 2.2.2. Number of services (researchers benefiting) provided by Research Centers, Thematic Advanced Research Centers and department laboratories within and outside IZTECH 2.2.3. Budget provided by Research Centers, Thematic Advanced Research Centers and departmental laboratories in return for services provided inside and outside the IZTECH (TL) 2.2.4. Number/diversity of stakeholders served (Number of legal and real persons served through the Revolving Fund Enterprise and TTO) 2.2.5. Number of research and education laboratories with revised/new infrastructure in line with the needs of departments 2.2.6. Number of activities/projects facilitating graduate/undergraduate theses and independent research (Number of activities carried out through Fablab or similar organizations)	AD ED MFBE F/B Centers
GOAL 3. To make IZTECH a "research attraction center", "science and technology base" of the Aegean Region; to provide R&D support in terms of human and infrastructure for this purpose	3.1. To develop focused projects for our country and the region by utilizing the human and other infrastructure strengths of IZTECH	S.1. Formation of focused project groups involving the participation of all stakeholders S.2. Providing institutional support to encourage graduate and undergraduate theses and research projects to focus on innovative product/process development S.3. Strengthening the institutional infrastructure for university-industry cooperation, business development, incorporation and entrepreneurship	3.1.1. Number of local/national qualified project applications prepared with focus teams 3.1.2. Number of projects and graduate theses prepared with an innovative product/process focus 3.1.3. The average number of annual contracted projects completed per faculty member	AD F/B Centers TTO Technopark DSIM

Innovation Ecosystem

	TARGETS	STRATEGIES	PERFORMANCE INDICATORS	RELATED UNIT
GOAL 1: To increase awareness about innovation and strengthen communication with all innovative companies, especially those in Technopark Izmir.	1.1. To raise awareness of IZTECH researchers and industrialists on innovation, P&D, technology management, project management, incentives, project applications	S.1. Regular cooperation search and matching meetings/seminars between IZTECH researchers and industrialists on opportunities and potential problems S.2. Regularly conducting needs analysis and foresight studies by following scientific and technological developments for the industry S.3. Strengthening institutional infrastructure for access and support to technology-based entrepreneurial firms	1.1.1. Number of R&D projects carried out with Technopark companies	AD Technopark TTO
			1.1.2. Number of companies incubated	
	1.2. Conducting awareness raising activities on various topics and levels related to innovation	S.1. Supporting and developing an institutional culture that prioritizes innovation and entrepreneurship values S.2. The establishment of companies in Technopark Izmir by graduate and undergraduate students developing the relations of entrepreneurship-themed student societies with Technopark Izmir and Atmosfer TTO	1.2.1. Number of "Techno-Enterprise Academy" programs organized, which have taken place in the entrepreneurial ecosystem	AD F/B Centers GKDB SKS Technopark TTO
			1.2.2. Number of innovation and entrepreneurship themed courses	
			1.2.3. Number of students engaged in entrepreneurship activities	
			1.2.4. Number of student companies in Technopark Izmir	
	1.3. Improving communication with companies in Technopark Izmir	S.1. Strengthening the institutional infrastructure of Technopark Izmir and supporting the implementation of innovative institutional approaches	1.3. 1. Number of companies in Technopark Izmir	AD Technopark TTO
			1.3.2. Number of active faculty member technology companies in Technopark Izmir	
			1.3.3. Total turnover of companies in Technopark Izmir	
			1.3.4. Total number of employment in Technopark Izmir companies	
			1.3.5. Number of entrepreneurship projects carried out with Technopark Izmir companies	
GOAL 2: To improve and maintain the institute's infrastructure for innovation activities	2.1. Increase awareness raising and support activities on innovation, entrepreneurship, patents, etc.	S.1. Strengthening the institutional infrastructure that will enable the transformation of scientific research results into value	2.1.1. Number of commercialized patents	FSHM DDK TTO AD
	2.2. To make positioning, image and innovation activities widespread and sustainable within and outside IZTECH	S.1. IZTECH's institutional structure that prioritizes science, innovation and entrepreneurship culture by reaching out to all stakeholders	2.2.1. Number of open innovation/entrepreneurship camps, social responsibility projects, etc. organized within Technopark Izmir	Technopark
GOAL 3: To strengthen the social infrastructure for defining and developing tomorrow's technology	3.1. Encourage and develop "interdisciplinary/multidisciplinary" studies that can bring a multidimensional perspective to complex technological problems	S.1. Undergraduate and graduate supporting the inclusion of courses and projects in the education plans of the programs that can provide students with the skills to work in "interdisciplinary" or "multidisciplinary" environments	3.1.1. External stakeholders' assessments of graduates' level of achievement in interdisciplinary or multidisciplinary studies	F/B MFBE KARDES

Education - Teaching

GOAL 1: To create the infrastructure for the realization of multidimensional education based on research and practice

TARGETS	STRATEGIES	PERFORMANCE INDICATORS	RELATED UNIT
1.1. Introducing new students to IZTECH values and ensuring their adaptation to IZTECH, developing innovative, original, practical and student-oriented approaches in education	S.1. Opening "IZTECH 101 Introduction to IZTECH" course for new IZTECH students in order to improve their sense of belonging by introducing them to the core values of IZTECH, to adapt to the campus and research ecosystem, to increase their awareness of ethical issues and to internalize the advising system S.2. Establishment of Education Directorate S.3. Supporting approaches to strengthen the relationship between undergraduate programs and professional practice	1.1.1. Level of awareness of IZTECH's vision, mission and core values 1.1.2. General achievement level of undergraduate program students 1.1.3. Level of achievement of course outcomes in undergraduate and graduate programs 1.1.4. Achievement level of program outcomes in undergraduate and graduate programs 1.1.5. The level of alignment of "program outcomes" of undergraduate and graduate programs with "National Vocational Qualifications" 1.1.6. The level of alignment of the "program outcomes" of undergraduate and graduate programs with the basic competencies demanded by professional practice/industry 1.1.7. Number of students participating in CO-OP 1.1.8. Number of students doing internship in industry	ED F/B MFBE OIDB Technopark
1.2. To improve and maintain the quality achieved in graduate/undergraduate education and research and the level of satisfaction with these programs	S.1. Promoting an organizational culture that enables continuous development of internal stakeholders S.2. Supporting the institutionalization of "continuous improvement" approach in all undergraduate and graduate programs S.3. Improving the Preparatory School (English) education and the content of English courses in departments by following new approaches in education S.4. Increasing the number and quality of graduate/undergraduate programs	1.2.1. Number of academic staff participating in pedagogical trainings (training of trainers) organized 1.2.2. IZTECH-wide course/educational environment/faculty evaluation average score 1.2.3. Success rate of English preparatory class students and success rate in ENG 101 and ENG 102 courses in undergraduate programs (average grade of all students taking the course) 1.2.4. Number of undergraduate, graduate and doctoral students per faculty member	ED F/B MFBE ODB YDYO OIDB
1.3. Optimizing graduation times from graduate/undergraduate programs; increasing the employment rate of graduates	S.1. Ensuring that students in graduate/undergraduate programs have effective access to the services offered by the Career Support Center S.2. Making institutional arrangements to activate the "student advisor" role in graduate/undergraduate programs with an innovative approach S.3. Developing and using a "graduate monitoring system" to determine the employment rate of graduates	1.3.1. Average duration of doctoral graduation 1.3.2. Average duration of master's degree graduation 1.3.3. Average duration of undergraduate graduation 1.3.4. The rate of job placement of graduates within the first year after graduation	MFBE F/B ED KARDES OIDB

Education – Teaching

	TARGETS	STRATEGIES	PERFORMANCE INDICATORS	RELATED UNIT
GOAL 2.To create a learning environment suitable for digital transformation and technological change for student-oriented and practical education	2.1. To create education and learning infrastructures suitable for technological change and digital transformation and to train qualified human resources	S.1. Implementing innovative educational approaches in graduate and undergraduate programs	2.1.1. Number of classrooms, study rooms, etc. supported with technology-based systems	F/B MFBEYI DB ED YDYO
			2.1.2. Number of classrooms at SFL designed in accordance with technological/digital transformation in line with the optimum student/classroom ratio	
			2.1.3. Number of students benefiting from FabLab	
GOAL 3. To increase international recognition in education and research	3.1. To ensure that academic programs receive accreditation at national (MÜDEK, FEDEK) and international levels and are included in international university ranking systems	S.1. Strengthening and improving the existing institutional infrastructure in order to "ensure continuous improvement" by evaluating the quality levels of education and research activities and administrative services carried out in all education programs (English preparatory / undergraduate / graduate)	3.1.1. Ratio of the number of nationally accredited programs to the total number of programs	F/B MFBE ED OIDB AD
			3.1.2. Ranking of the Institute in international university ranking systems	
			3.1.3. Change in the rank of the Institute in international university ranking systems by year	
	3.2. To ensure maximum utilization of international student and staff mobility programs (ERASMUS, etc.)	S.1. To rebuild the existing institutional infrastructure with a holistic approach in order to provide effective promotion, consultancy and other services on international exchange programs	3.2.1. Number of bilateral agreements for international student and academic staff mobility and exchange rate on an annual basis	UIO EURAXESS
			3.2.2. Number of students participating in international exchange programs and exchange rate by year	
			3.2.3. Number of students coming from international exchange programs and exchange rate by year	
			3.2.4. Number of faculty members benefiting from international exchange programs and annual exchange rate	
	3.3. To develop corporate communication tools in the outward-facing face of IZTECH	S.1. Using the fields in which IZTECH has competence, in which it has pioneered, to reinforce international recognition	3.3.1. Number of national/international events organized on open access, open science, open innovation	AD ED KDDB
			3.3.2. Student satisfaction with library facilities	
	3.4. To enrich IZTECH's staff of qualified scientists with qualified international scientists	S.1. Develop and implement a "human resources management policy and action plan" based on contemporary approaches	3.4.1. Obtaining the HRS4R logo	HRS4R EURAXESS
			3.4.2. Implementation of the Action Plan to be stated in the internal audit report after two years and achievement in the External Audit Report by the EU Commission after four years	

Organizational Development and Social Contribution

	TARGETS	STRATEGIES	PERFORMANCE INDICATORS	RELATED UNIT
GOAL 1. To improve corporate governance, corporate culture and organizational capacity	1.1. To create a performance evaluation system for administrative and academic units	S.1. Updating and continuous improvement of IZTECH Quality Assurance and Internal Control System with feedback from units S.2. Supporting the professional development of IZTECH administrative staff	1.1.1. Satisfaction level of academic staff	ED F/B MFBE OIDB YDYO SEM ODB PDB
			1.1.2. Satisfaction level of administrative staff	
			1.1.3. Student satisfaction level	
			1.1.4. Number of administrative staff in critical positions attending English courses	
	1.2. To strengthen and ensure the sustainability of IT hardware/software infrastructure and user support services	S.1. Establishing an institutional infrastructure to monitor and evaluate the information technology infrastructure on campus and to monitor technological developments S.2. Developing and disseminating management practice programs in administrative units	1.2.1. Internet access from every point of the campus (educational/social/outdoor)	BIDB
			1.2.2. Completion rate of the planned transformation in information and data security	
			1.2.3. Realization rate of improvements for the needs of administrative units	
	1.3. To reinforce the corporate identity, to strengthen the perception of IZTECH; to activate institutional promotion at local, national and international level	S.1. Dissemination of the elements that make up the corporate identity (logo, color, letterhead, etc.); celebrating July 11th of each year as IZTECH Day with various scientific activities (the date when the decision on the establishment of IZTECH was published in the Official Gazette: 11.07.1992) S.2. Organizing seminars/meetings on current scientific topics and promotional activities for high school students	1.3.1. Completion rate of scientific, technological and architectural design activities related to reinforcing corporate identity	BHIB MWO SKS
			1.3.2. Number of high school/students visiting IZTECH	
	1.4. To improve relations with students and alumni	S.1. Establishing an institutional infrastructure in order to develop, reinforce and ensure the continuity of undergraduate/graduate students' sense of belonging to IZTECH S.2. Improving communication between students and their families and IZTECH, increasing loyalty, using the natural/environmental structure of the IZTECH Campus in the organization of social activities	1.4.1. Number of activities such as Career Day, Alumni Day, etc. organized by KARDES and academic units	KARDES F/B MFBE BHIB SKS
			1.4.2. Number of students registered in the Alumni Information System	
			1.4.3. Number of people benefiting from the Institute's facilities	
GOAL 2. To redefine the IZTECH Campus as a sustainable/living/nature-friendly "education-research" laboratory	2.1. Preparing an action plan for the "Living Campus" project and implementing it during the plan period	S.1. Establishment of the "Living Campus" project coordinator unit S.2. Strengthening and improving the institutional infrastructure in the field of Occupational Health and Safety S.3. Organizing search meetings with the participation of all units of IZTECH in order to enrich the working and living environment	2.1.1. Completion rate of construction activities such as break points, urban furniture, etc. within the scope of organizing campus pedestrian roads	YIDB SKK ISGB
			2.1.2. Realization rate of sustainable hazardous waste management system in indoor and outdoor areas on campus	
			2.1.3. Realization rate of sustainable non-hazardous waste management system (IZTECH Zero Waste Project) in indoor and outdoor areas on campus	
			2.1.4. Rate of completion of OHS activities (construction, installation, electricity, etc.) on campus	
			2.1.5. Realization rate of the activities planned to transform the IZTECH Campus into a "living science city"	

		TARGETS	STRATEGIES	PERFORMANCE INDICATORS	RELATED UNIT
Organizational Development and Social Contribution		2.2. To effectively use natural and renewable energy resources (wind, geothermal, etc.) on campus and become an institution that can meet its own energy needs	S.1. Preparing an action plan for making campus buildings energy efficient and implementing it during the plan period	2.2.1. Number of smart/green buildings (sustainable rainwater management, drip/irrigation automation, etc.)	YIDB SKK
				2.2.2. Number of buildings/roads/parks etc. illuminated with energy-efficient systems	
		2.3. To encourage studies aimed at local development	S.1. Developing responsible attitudes towards the protection and development of natural and cultural values in the surrounding geography with communities and volunteers	2.3.1. Number of projects and graduate theses prepared for the region	F/B MFBE SKS TSPK
				2.3.2. Number of events organized to contribute to society	
	GOAL 3. To increase cooperation by developing the institutional infrastructure related to social issues	3.1. To strengthen and enrich the social contribution of IZTECH	S.1. Supporting bringing together internal and external stakeholders through the Social Responsibility Project Coordinatorship	3.1.1. Number of students taking the Social Responsibility Project course	GKDB TSPK SKS
				3.1.2. Number of Social Responsibility Projects Implemented	
		3.2. To develop and strengthen the interest of children and young people in science	S.1. Establish an institutional infrastructure to support activities aimed at developing children and young people's interest in science and encourage the participation of all internal stakeholders in such activities	3.2.1. Number of activities organized to popularize science (IZTECH Science and Technology Day, Summer Science Camp, etc.)	ED AD F/B SKS BHIB Technopark
				3.2.2. Measuring the change in the attitude level of the participants in the activities carried out for the popularization of science	

Abbreviations

Abbreviation	Unit Name
AD	Directorate of Research
AVILAR	Eurasian Advanced Research University and Investigate Central
BHIB	Press and Public Relations Department
BIDB	Department of Information Processing
DSIM	Directorate of Revolving Capital Operations
ED	Directorate of Education
EURAXESS	EURAXESS Service Center
F/B	Faculties/Departments
FSMH-DDK	FSMH Evaluation and Support Board
GKDB	Department of General Culture Courses
HRS4R	Human Resources Strategy for Researchers
IMIDB	Department of Administrative and Financial Affairs
ISGB	Occupational Health and Safety Unit
KARDES	Career Support Center
KDDB	Library and Documentation Department

Abbreviation	Unit Name
Centers	Centers
MFBE	Institute of Engineering and Natural Sciences
MWO	Media-Web Office
ODB	Measurement and Evaluation Unit
OIDB	Department of Student Affairs
PDB	Department of Personnel
SEM	Continuing Education Center
SGDB	Department of Strategy Development
SKK	Sustainable Campus Coordination
SKS	Department of Health, Culture and Sports
Technopark	Technopark Izmir
TTO	Atmosphere TTO
TSPK	Social Responsibility Projects Coordination
UIO	International Relations Office
YDYO	High School of Foreign Languages
YIDB	Department of Construction Works

Annex 3. Target Cards

SCIENTIFIC RESEARCH

GOAL 1. To produce knowledge at a universal level with the mission of the research university

Target 1.1. Increase support for basic research (basic science, engineering and architecture)

Responsible Unit	Executive Management	Cost Estimate (TL)	66.462.510
Units to Cooperate with	**Directorate of Research (AD)** Directorate of Education (ED) Institute of Engineering and Natural Sciences (MFBE) Faculties/Departments (F/B)	Risks	• Difficulty in finding graduate students for basic sciences • Reducing higher education incentives for basic sciences
		Determinations	• Compatibility of basic research with the academic structure and mission of IZTECH and the existence of infrastructure to support basic sciences • Increasing the incentives and opportunities given to basic research
		Requirements	• Increasing the number of graduate students • Protecting and strengthening the research/teaching staff
Strategies	S.1. Develop institutional support processes to improve individual/team research performance and reward successful researchers, S.2. Researcher Development for new faculty members and researchers who will apply for projects Program (IZTECH-ARGEP) was initiated S.3.Increasing the number of doctoral and master's theses (number of graduate students) and the quality of theses; optimizing the duration of theses; increasing the number of postdoctoral researchers S.4. Implementation IZTECH Minimum Academic Promotion and Appointment Criteria		

	Indicator	Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
1.1.1.	Budget allocated per faculty member within the scope of Start-Up Support (TL)	15	50.000	55.000	60.000	66.000	72.500	80.000	Twice a year	Once a year	AD ED MFBE F/B
1.1.2.	Average annual number of externally funded projects completed per faculty member	25	0,20	0,21	0,22	0,22	0,23	0,23	Twice a year	Once a year	
1.1.3.	Number of scientific activities in which faculty members actively participate	20	290	298	305	313	320	328	Twice a year	Once a year	
1.1.4.	Number of graduate students per faculty member	5	6,26	6,35	6,54	6,74	6,94	7,37	Twice a year	Once a year	
1.1.5.	The number of projects supported within the scope of IZTECH ARGEP	10	0	3	5	5	5	5	Twice a year	Once a year	
1.1.6.	Average annual number of articles/reviews in SCI, SSCI and AHCI indexed journals per faculty member	25	CERN Including: 1,82 CERN Excluding: 1,23	1,70 1,27	1,79 1,36	1,88 1,46	1,97 1,56	2,06 1,66	Twice a year	Once a year	

Target 1.2. Aligning research with national science and technology priorities

Responsible Unit	Executive Management	Cost Estimate (TL)	6.840.000
Units to Cooperate with	**Directorate of Research (AD)** Directorate of Education (ED) Institute of Engineering and Natural Sciences (MFBE) Faculties/Departments (F/B) Centers	Risks	• The research topics of the academic staff are different from national science and technology priorities; requiring time for transformation • The number of doctoral students benefiting from the national supports established within the scope of national science and technology priorities is not at the desired level
		Determinations	• Revising institutional research infrastructure and programs at all levels in line with national science and technology priorities and encouraging research staff to work in these areas • Directing students to national science and technology priority areas in doctoral program thesis topics
		Requirements	• Attracting students to PhD programs • Updating the research infrastructure by considering national science and technology priorities through the IZTECH Research Directorate, ensuring the visibility of studies in this direction at the local and institutional level
Strategies	S.1. Bringing together researchers from different departments, units and centers in the identified priority areas, identifying and supporting project groups that can form critical mass S.2.Encouraging the submission of graduate and undergraduate theses in priority areas		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
1.2.1.	Number of focused project teams established by creating a "critical mass" by bringing together researchers from different units	25	0	1	2	2	3	3	Twice a year	Once a year	AD ED MFBE F/B Centers
1.2.2.	Number of interdisciplinary graduate programs	15	8	8	8	9	9	10	Twice a year	Once a year	
1.2.3.	COHE 100/2000 Doctoral Scholarship Number of Program Fields (applied)	30	8	4	4	4	4	4	Twice a year	Once a year	
1.2.4.	Number of New Scholars in COHE 100/2000 Doctoral Scholarship Program	30	40	15	15	15	20	20	Twice a year	Once a year	

Target 1.3. Increasing cooperation with international projects and partnerships

Responsible Unit	Executive Management	Cost Estimate (TL)	490.000
Units to Cooperate with	**Directorate of Research (AD)** Institute of Engineering and Natural Sciences (MFBE) Faculties/Departments (F/B) Centers Atmosfer TTO (TTO) Eurasian Advanced Research University and Investigate Central (AVILAR)	Risks	• Challenges in institutional culture and functioning towards internationalization • Slow development of human resources, financial and technical infrastructure required for international competitiveness
		Determinations	• Increasing number of projects with international partners • IZTECH researchers have developed international connections and relations
		Requirements	• Increasing the number and quality of scientific collaborations by increasing incentives and support for international projects • Increasing the visibility of IZTECH researchers' international publications through policies such as open access
Strategies	S.1. Improving existing support mechanisms to increase international project monitoring, writing and cooperation possibilities S.2. Ensuring the development of collaboration networks to reinforce IZTECH's leadership in open access, open science and open innovation		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
1.3.1.	Number of international partner/supported projects	25	7	7	8	9	9	10	Twice a year	Once a year	AD MFBE F/B TTO AVILAR
1.3.2.	Number of academic staff going abroad for research purposes	25	21	21	22	23	24	25	Twice a year	Once a year	
1.3.3.	Number of international scientific events organized	25	10	10	10	11	11	12	Twice a year	Once a year	
1.3.4.	Proportion of articles/reviews etc. made open access by IZTECH researchers (%)	25	95	95	96	96	97	98	Twice a year	Once a year	

Target 1.4. To ensure that international macro policies and related instruments are adopted and widely used in IZTECH

Responsible Unit	Executive Management	Cost Estimate (TL)	-
Units to Cooperate with	**EURAXESS Service Center (EURAXESS)**	Risks	• Difficulties in aligning international macro policies with national research priorities • Inadequate national participation in the European Union scientific framework programs; different countries taking a restrictive stance on the free movement of researchers, such as visa and work restrictions
		Determinations	• Programs such as EURAXESS are not sufficiently known by researchers • Establishment of a service center for Free Movement of Researchers
		Requirements	• Promotion/information on Free Movement of Researchers • Ensuring the continuity of services with the center to be established and opening up to the region as the main access point of IZTECH
Strategies	S.1. Increasing the effectiveness of the services of IZTECH EURAXESS (Free Movement of Researchers) Service Center		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
1.4.1.	Number of information requests, applications, etc. made through EURAXESS to/from IZTECH, Aegean Region and other universities in Türkiye	100	4	15	25	35	45	50	Twice a year	Once a year	EURAXESS

GOAL 2. To transfer the knowledge and technology produced to society and industry

Target 2.1. Foundation facilitating knowledge and technology transfer based on research create interfaces and develop activities

Responsible Unit	Executive Management	Cost Estimate (TL)	1.959.000
Units to Cooperate with	**FSMH Evaluation and Support Board (FSMH-DDK)** Atmosfer TTO (TTO) Directorate of Research (AD)	Risks	• Difficulties in commercialization of inventions
		Determinations	• The need to increase the awareness of researchers about patents, which is not yet at a sufficient level • The existence of many national and international programs that support university-industry collaborations; the existence of structures such as IZTECH-AD, Atmosfer TTO, which serve as an interface for the development of university-industry cooperation in IZTECH
		Requirements	• Increasing own revenues through commercialization and producing more projects to support research infrastructure in this direction • Dissemination of patent success stories in the organization
Strategies	S.1. Supporting training activities to raise awareness on FSMH issues and providing institutional support for patent application processes S.2. Determining industry/professional practice collaborations in the core competence areas targeted by IZTECH in undergraduate programs and encouraging the transfer of their outputs to the industry		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
2.1.1.	Number of studies given patent support	30	16	16	17	18	19	20	Twice a year	Once a year	FSMH-DDK TTO AD
2.1.2.	Number of patent applications	30	8	8	8	8	8	8	Twice a year	Once a year	
2.1.3.	Average annual number of national/international patent documents per faculty member	15	0,0053	0,0053	0,0053	0,01	0,01	0,01	Twice a year	Once a year	
2.1.4.	Average annual number of utility models and industrial designs per faculty member	5	0,0053	0,0053	0,0053	0,0053	0,0053	0,0053	Twice a year	Once a year	
2.1.5.	Number of collaborations for industry/professional practice in undergraduate programs (COOP and similar collaborations)	20	3	4	5	5	7	7	Twice a year	Once a year	

Target 2.2. Existing research centers and departmental research increase the competence of laboratories and establish new ones

Responsible Unit	Executive Management	Cost Estimate (TL)	16.062.000
Units to Cooperate with	**Directorate of Research (AD)** Directorate of Education (ED) Institute of Engineering and Natural Sciences (MFBE) Faculties/Departments (F/B) Centers	Risks	• Difficulties in providing the manpower necessary for the efficient operation of research centers
		Determinations	• Lack of necessary arrangements for research centers to retain and attract researchers (financial structure, manpower, etc.) • Research centers focus more on routine activities
		Requirements	• Increasing the number of research centers in line with national science and technology priorities • Increasing the number of focused projects in this scope
Strategies	S.1. Increasing the qualitative capacity of research centers and transforming them into 'thematic advanced research centers' S.2. Designing new research centers to be established with the theme of "center of excellence" S.3. Establishing targeted focus researcher groups and guided project teams under the leadership of research centers S.4. Developing the technological infrastructure of research and education laboratories in faculties and departments in order to raise a graduate profile that is targeted, versatile, interdisciplinary and able to provide solutions to complex problems, has high manual dexterity and is competent in theoretical and applied fields. S.5. Establishment of next generation laboratories (FabLab or similar) and units where different expertise can be brought together, with the coordination of the Research Directorate and the Education Directorate.		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
2.2.1.	Ratio of the budget allocated for the sustainability of research infrastructures to the general budget (%)	20	3,81	3,42	3,20	5,60	5,18	5,06	Twice a year	Once a year	AD ED MFBE F/B Centers
2.2.2.	Number of services (researchers benefiting) provided by Research Centers, Thematic Advanced Research Centers and department laboratories within and outside IZTECH	30	450	470	490	510	530	550	Twice a year	Once a year	
2.2.3.	Budget provided by Research Centers, Thematic Advanced Research Centers and departmental laboratories in return for services provided inside and outside the IZTECH (TL)	20	400.000	450.000	450.000	500.000	500.000	500.000	Twice a year	Once a year	
2.2.4.	Number/diversity of stakeholders served (Number of legal and real persons served through the Revolving Fund Enterprise and TTO)	5	360	400	400	500	600	700	Twice a year	Once a year	
2.2.5.	Number of research and education laboratories with revised/new infrastructure in line with the needs of departments	20	6	7	8	8	9	10	Twice a year	Once a year	
2.2.6.	Number of activities/projects facilitating graduate/undergraduate theses and independent research (Number of activities carried out through Fablab or similar organizations)	5	0	0	3	3	5	5	Twice a year	Once a year	

GOAL 3. To make IZTECH a "research attraction center", "science and technology base" of the Aegean Region; to provide R&D support in terms of human and infrastructure for this purpose

Target 3.1. To develop focused projects for our country and the region by utilizing the human and other infrastructure strengths of IZTECH

Responsible Unit	Executive Management	Cost Estimate (TL)	-
Units to Cooperate with	**Directorate of Research (AD)** Institute of Engineering and Natural Sciences (MFBE) Faculties/Departments (F/B) Centers Atmosfer TTO (TTO) Technopark Izmir (Technopark) Directorate of Revolving Capital Operations (DSIM)	Risks	• Lack of clarity in national preferences in the selection of "research attraction center", "science and technology base", and the spread of efforts and activities in this direction over a long period of time
		Determinations	• High level of IZTECH research infrastructure (IZTECH is the only research university supported in its region) • Having university-industry interfaces that support entrepreneurship in IZTECH region
		Requirements	• Creating a regional inventory register and organizing the entrepreneurship ecosystem • Faculty members to develop projects for Requirements in their region
Strategies	S.1. Formation of focused project groups involving the participation of all stakeholders S.2. Providing institutional support to encourage graduate and undergraduate theses and research projects to focus on innovative product/process development S.3. Strengthening the institutional infrastructure for university-industry cooperation, business development, incorporation and entrepreneurship		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
3.1.1.	Number of local/national qualified project applications prepared with focus teams	40	0	1	2	3	4	5	Twice a year	Once a year	AD MFBE F/B Centers TTO Technopark DSIM
3.1.2.	Number of projects and graduate theses prepared with an innovative product/process focus	30	20	25	30	35	40	50	Twice a year	Once a year	
3.1.3.	The average number of annual contracted projects completed per faculty member	30	0,15	0,17	0,18	0,18	0,18	0,18	Twice a year	Once a year	

INNOVATION ECOSYSTEM

Goal 1. To increase awareness about innovation and strengthen communication with all innovative companies, especially those in Technopark Izmir.

Target 1.1. To raise awareness of IZTECH researchers and industrialists on innovation, P&D, technology management, project management, incentives, project applications

Responsible Unit	Executive Management	Cost Estimate (TL)	2.510.000
Units to Cooperate with	**Directorate of Research (AD)** Atmosfer TTO (TTO) Technopark Izmir (Technopark)	Risks	• Inadequate opportunities for Target studies due to the time that IZTECH researchers devote to personal projects, graduate theses and courses • Difficulties in the dissemination of activities on technology management, project management, etc.
		Determinations	• The relevant units/interfaces (Directorate of Research, Atmosfer TTO, Technopark İzmir) are structured and their sustainability is guaranteed • Communication and possible partnerships between IZTECH researchers and industrial organizations are not at the desired level; the critical mass related to "Technology Management" has not been formed in IZTECH
		Requirements	• Ensuring that IZTECH researchers and project groups collaborate with companies and other industrial organizations in Technopark Izmir on focus projects • Developing support mechanisms on technology management, project management, R&D, P&D, etc. in IZTECH and expanding participation
Strategies	S.1. Regular cooperation search and matching meetings/seminars between IZTECH researchers and industrialists on opportunities and potential problems S.2. Regularly conducting needs analysis and foresight studies by following scientific and technological developments for the industry S.3. Strengthening institutional infrastructure for access and support to technology-based entrepreneurial firms		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
1.1.1.	Number of R&D projects carried out with Technopark companies	50	0	1	1	2	2	3	Twice a year	Once a year	AD Technopark TTO
1.1.2.	Number of companies incubated	50	43	44	46	47	49	50	Twice a year	Once a year	

Target 1.2. Conducting awareness raising activities on various topics and levels related to innovation

Responsible Unit	Executive Management	Cost Estimate (TL)	174.000
Units to Cooperate with	**Technopark Izmir (Technopark)** Atmosfer TTO (TTO) Directorate of Research (AD) Centers Institute of Engineering and Natural Sciences (MFBE) Faculties/Departments (F/B) Department of General Culture Courses (GKDB) Department of Health, Culture and Sports (SKS)	Risks	• Difficulties in optimizing the time allocated to innovation by IZTECH faculty members and researchers due to their personal academic studies • Difficulties in popularizing the subject of entrepreneurship and ensuring that academic staff are more guiding
		Determinations	• The need to increase the number of competent researchers in technology management, project management, patent, innovation, entrepreneurship, etc. in IZTECH • The need for optimization in other academic duties of faculty members who can teach these courses and the evaluation of experts from industry in these courses
		Requirements	• IZTECH faculty members and researchers taking a more active role in innovative developments • Increasing the number of students involved in innovation, entrepreneurship, etc. and their distribution in academic programs
Strategies	S.1. Supporting and developing an institutional culture that prioritizes innovation and entrepreneurship values S.2. The establishment of companies in Technopark Izmir by graduate and undergraduate students developing the relations of entrepreneurship-themed student societies with Technopark Izmir and Atmosfer TTO		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
1.2.1.	Number of "Techno-Enterprise Academy" programs organized, which have taken place in the entrepreneurial ecosystem	30	1	1	1	1	1	1	Twice a year	Once a year	AD F/B Centers GKDB SKS Technopark TTO
1.2.2.	Number of innovation and entrepreneurship themed courses	20	30	30	31	31	32	32	Twice a year	Once a year	
1.2.3.	Number of students engaged in entrepreneurship activities	30	92	110	130	150	175	200	Twice a year	Once a year	
1.2.4.	Number of student companies in Technopark Izmir	20	19	19	20	20	21	22	Twice a year	Once a year	

Target 1.3. Improving communication with companies in Technopark Izmir

Responsible Unit	Executive Management	Cost Estimate (TL)	-
Units to Cooperate with	**Technopark Izmir (Technopark)** Atmosfer TTO (TTO) Directorate of Research (AD)	Risks	• The number of technoparks in Izmir has increased and sometimes the competition has developed in the direction of "cheapest office rent" rather than "seeking the best scientific/technological/social support" • Failure to realize possible projects that IZTECH researchers can carry out with Technopark Izmir and other industrial companies due to their personal academic studies
		Determinations	• The fact that in many technoparks in Türkiye, a large number of companies tend to maintain the existing structure instead of focusing on innovative projects • Facilitating IZTECH researchers to conduct scientific/technological research on the needs and expectations of companies in Technopark Izmir
		Requirements	• Increasing the number of technology companies in Technopark Izmir; establishing focus project groups with faculty member-technology company cooperation
Strategies	S.1. Strengthening the institutional infrastructure of Technopark Izmir and supporting the implementation of innovative institutional approaches		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
1.3.1.	Number of companies in Technopark Izmir	30	151	160	165	170	175	180	Twice a year	Once a year	Technopark TTO AD
1.3.2.	Number of active faculty member technology companies in Technopark Izmir	10	16	16	17	17	18	18	Twice a year	Once a year	
1.3.3.	Total turnover of companies in Technopark Izmir (TL)	30	141.350.771	180.000.000	220.000.000	240.000.000	250.000.000	300.000.000	Twice a year	Once a year	
1.3.4.	Total number of employment in Technopark Izmir companies	20	878	925	950	975	1025	1050	Twice a year	Once a year	
1.3.5.	Number of entrepreneurship projects carried out with Technopark Izmir companies	10	68	70	72	74	76	78	Twice a year	Once a year	

GOAL 2. To improve and maintain the Institute's infrastructure for innovation activities

Target 2.1. Increase awareness raising and support activities on innovation, entrepreneurship, patents, etc.

Responsible Unit	Executive Management	Cost Estimate (TL)	-
Units to Cooperate with	**FSMH Evaluation and Support Board (FSMH-DDK)** Atmosfer TTO (TTO) Directorate of Research (AD)	Risks	• Possible innovative products and studies that may emerge from academic studies at IZTECH are overlooked due to the fact that they are not reported to the relevant units
		Determinations	• The fact that some of the IZTECH faculty members and researchers direct their academic studies only for the production of academic knowledge
		Requirements	• Continuation of awareness raising activities on patents organized in various academic units
Strategies	S.1. Strengthening the institutional infrastructure that will enable the transformation of scientific research results into value		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
2.1.1.	Number of commercialized patents	100	0	1	1	1	2	2	Twice a year	Once a year	FSHM DDK TTO AD

Target 2.2. To make positioning, image and innovation activities widespread and sustainable within and outside IZTECH

Responsible Unit	Executive Management	Cost Estimate (TL)	1.080.000
Units to Cooperate with	**Technopark Izmir (Technopark)**	Risks	• Despite having one of the most successful and productive academic staff in Türkiye, this number is below 200 and all academic/education/training/entrepreneurship etc. activities must be carried out by this staff • For the aforementioned reason, difficulties in the sustainability of the support received from faculty members by units such as Technopark İzmir and Atmosfer TTO, which organize these activities
		Determinations	• IZTECH faculty members are very busy due to academic/teaching/innovation studies and administrative duties
		Requirements	• Increasing the number of faculty members with high academic performance and experience in innovation/entrepreneurship in IZTECH
Strategies	S.1. IZTECH's institutional structure that prioritizes science, innovation and entrepreneurship culture by reaching out to all stakeholders		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
2.2.1.	Number of open innovation/entrepreneurship camps, social responsibility projects, etc. organized within Technopark Izmir	100	131	140	150	150	150	150	Twice a year	Once a year	Technopark

GOAL 3: To strengthen the social infrastructure for defining and developing tomorrow's technology

Target 3.1. Encourage and develop "interdisciplinary/multidisciplinary" studies that can bring a multidimensional perspective to complex technological problems

Responsible Unit	Executive Management	Cost Estimate (TL)	100.000
Units to Cooperate with	**Department of General Culture Courses (GKDB)**	Risks	• Faculty members' research and teaching loads make it difficult for them to support interdisciplinary and multidisciplinary studies
		Determinations	• Lack of an academic unit on technology management at IZTECH; these studies are shaped in line with the personal priorities of faculty members
		Requirements	• Eliminating the deficiency in the number and variety of courses by supporting the relevant faculty members and experts in the field
Strategies	S.1. Undergraduate and graduate supporting the inclusion of courses and projects in the education plans of the programs that can provide students with the skills to work in "interdisciplinary" or "multidisciplinary" environments		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
3.1.1.	External stakeholders' assessments of graduates' level of achievement in interdisciplinary or multidisciplinary studies	100	%90	%90	%90	%90	%95	%95	Twice a year	Once a year	F/B MFBE KARDES

EDUCATION - TEACHING

GOAL 1: To create the infrastructure for the realization of multidimensional education based on research and practice

Target 1.1. Introducing new students to IZTECH values and ensuring their adaptation to IZTECH, developing innovative, original, practical and student-oriented approaches in education

Responsible Unit	Executive Management	Cost Estimate (TL)	382.050.000
Units to Cooperate with	**Directorate of Education (ED)** Institute of Engineering and Natural Sciences (MFBE) Faculties/Departments (F/B) Department of Student Affairs (OIDB) Technopark Izmir (Technopark)	Risks	• Difficulties in implementing double major and minor programs due to legal difficulties • Failure of the teaching staff to take sufficient initiative in implementing student-oriented and innovative education models
		Determinations	• Establishment of a Training Directorate • Limited double major and minor programs and low level of interest
		Requirements	• Encouraging and supporting double major programs • Increasing the number of elective courses and their ratio in the education program
Strategies	S.1. Opening "IZTECH 101 Introduction to IZTECH" course for new IZTECH students in order to improve their sense of belonging by introducing them to the core values of IZTECH, to adapt to the campus and research ecosystem, to increase their awareness of ethical issues and to internalize the advising system S.2. Establishment of Education Directorate S.3. Supporting approaches to strengthen the relationship between undergraduate programs and professional practice		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
1.1.1.	Level of awareness of IZTECH's vision, mission and core values	10	-	%90	%95	%100	%100	%100	Twice a year	Once a year	ED MFBE F/B OIDB Technopark
1.1.2.	General achievement level of undergraduate program students	15	%60	%85	%90	%90	%95	%95	Twice a year	Once a year	
1.1.3.	Level of achievement of course outcomes in undergraduate and graduate programs	15	-	%90	%90	%95	%100	%100	Twice a year	Once a year	
1.1.4.	Achievement level of program outcomes in undergraduate and graduate programs	15	-	%90	%90	%95	%100	%100	Twice a year	Once a year	
1.1.5.	The level of alignment of "program outcomes" of undergraduate and graduate programs with "National Vocational Qualifications"	15	%100	%100	%100	%100	%100	%100	Twice a year	Once a year	
1.1.6.	The level of alignment of the "program outcomes" of undergraduate and graduate programs with the basic competencies demanded by professional practice/industry	15	%100	%100	%100	%100	%100	%100	Twice a year	Once a year	
1.1.7.	Number of students participating in CO-OP	25	21	25	29	33	37	40	Twice a year	Once a year	
1.1.8.	Number of students doing internship in industry	25	637	700	700	700	800	800	Twice a year	Once a year	

Target 1.2. To improve and maintain the quality achieved in graduate/undergraduate education and research and the level of satisfaction with these programs

Responsible Unit	Executive Management	Cost Estimate (TL)	1.000.000
Units to Cooperate with	**Directorate of Education (ED)** Institute of Engineering and Natural Sciences (MFBE) Faculties/Departments (F/B) High School of Foreign Languages (YDYO) Department of Student Affairs (OIDB) Measurement and Evaluation Unit (ODB)	Risks	• Lack of sufficient number and quality of applicants for graduate education • Failure of graduate education programs to adapt to dynamic business life conditions
		Determinations	• IZTECH's founding mission focuses on graduate education • Rethinking graduate education programs with national research priorities
		Requirements	• Having education coordinators in departments and working in harmony with the Directorate of Education on issues such as introduction, information, follow-up, etc. for graduate education • Bringing the teaching staff to a better pedagogical level
Strategies	S.1. Promoting an organizational culture that enables continuous development of internal stakeholders S.2. Supporting the institutionalization of "continuous improvement" approach in all undergraduate and graduate programs S.3. Improving the Preparatory School (English) education and the content of English courses in departments by following new approaches in education S.4. Increasing the number and quality of graduate/undergraduate programs		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
1.2.1.	Number of academic staff participating in pedagogical trainings (training of trainers) organized	15	0	100	200	300	400	500	Twice a year	Once a year	ED MFBE F/B YDYO OIDB ODB
1.2.2.	IZTECH-wide course/educational environment/faculty evaluation average score	25	4,10	4,11	4,13	4,15	4,17	4,20	Twice a year	Once a year	
1.2.3.	Success rate of English preparatory class students and success rate in ENG 101 and ENG 102 courses in undergraduate programs (average grade of all students taking the course)	25	80	80	85	85	89	90	Twice a year	Once a year	
1.2.4.	Number of undergraduate, graduate and doctoral students per faculty member	15	28,54	27,60	26,80	26,10	25,50	25	Twice a year	Once a year	

Target 1.3. Optimizing graduation times from graduate/undergraduate programs; increasing the employment rate of graduates

Responsible Unit	Executive Management	Cost Estimate (TL)	-
Units to Cooperate with	**Directorate of Education (ED)** Institute of Engineering and Natural Sciences (MFBE) Faculties/Departments (F/B) Career Support Center (KARDES)	Risks	• Failure of the teaching staff to act fast enough in renewing educational programs and methods • Lack of feedback mechanisms to improve student satisfaction in education or not being taken into consideration by trainers
		Determinations	• Establishment of a Training Directorate • IZTECH ranks first in the national ranking of student satisfaction
		Requirements	• Regular in-depth and systematic analysis of factors affecting student satisfaction • Establishment of a graduate tracking/information system
Strategies	S.1. Ensuring that students in graduate/undergraduate programs have effective access to the services offered by the Career Support Center S.2. Making institutional arrangements to activate the "student advisor" role in graduate/undergraduate programs with an innovative approach S.3. Developing and using a "graduate monitoring system" to determine the employment rate of graduates		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
1.3.1.	Average duration of doctoral graduation (semester)	25	11,88	11,40	11,10	10,50	10,00	9,00	Twice a year	Once a year	MFBE F/B ED KARDES
1.3.2.	Average duration of master's degree graduation (semester)	25	6,04	5,75	5,50	5,25	5,00	4,50	Twice a year	Once a year	
1.3.3.	Average duration of undergraduate graduation (semester)	25	9,20	9,15	9,10	9,00	8,90	8,80	Twice a year	Once a year	
1.3.4.	The rate of job placement of graduates within the first year after graduation (%)	25	60	65	70	80	90	90	Twice a year	Once a year	

Goal 2. To create a learning environment suitable for digital transformation and technological change for student-oriented and practical education

Target 2.1. To create education and learning infrastructures suitable for technological change and digital transformation and to train qualified human resources

Responsible Unit	Executive Management	Cost Estimate (TL)	123.920.000
Units to Cooperate with	**Directorate of Education (ED)** Institute of Engineering and Natural Sciences(MFBE) Faculties/Departments (F/B) High School of Foreign Languages (YDYO) Department of Construction Works (YIDB)	Risks	• High cost of technological educational environments and laboratories • Difficulty of the teaching staff in adapting to new technological educational environments and tools, timid behavior in recording and sharing lessons
		Determinations	• Failure to popularize previous distance education and smart classroom applications • Low level of awareness of applications such as open courses and distance education
		Requirements	• Improving the physical and technological infrastructure of educational spaces, increasing physical comfort conditions • Improving the level of knowledge and awareness of the teaching staff about new technological tools and methods
Strategies	S.1. Implementing innovative educational approaches in graduate and undergraduate programs		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
2.1.1.	Number of classrooms, study rooms, etc. supported with technology-based systems	30	0	1	1	1	2	2	Twice a year	Once a year	ED MFBE F/B YDYO YIDB
2.1.2.	Number of classrooms at SFL designed in accordance with technological/digital transformation in line with the optimum student/classroom ratio	30	2	5	10	15	20	-	Twice a year	Once a year	
2.1.3.	Number of students benefiting from FabLab	40	0	25	50	75	100	100	Twice a year	Once a year	

GOAL 3. To increase international recognition in education and research

Target 3.1. 3.1. To ensure that academic programs receive accreditation at national (MÜDEK, FEDEK) and international levels and are included in international university ranking systems

Responsible Unit	Executive Management	Cost Estimate (TL)	650.000
Units to Cooperate with	**Directorate of Education (ED)** Institute of Engineering and Natural Sciences(MFBE) Faculties/Departments (F/B) Department of Student Affairs (OIDB) Directorate of Research (AD)	Risks	• Resistance to harmonization with international criteria • Inadequate or prolonged preparation and equipment required for accreditation
		Determinations	• Having departments that comply with criteria such as MÜDEK • Establishment of a Training Directorate
		Requirements	• Increasing the number of accredited departments • Developing an action plan for internationalization in education under the coordination of the Education Directorate
Strategies	S.1. Strengthening and improving the existing institutional infrastructure in order to "ensure continuous improvement" by evaluating the quality levels of education and research activities and administrative services carried out in all education programs (English preparatory / undergraduate / graduate)		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
3.1.1.	Ratio of the number of nationally accredited programs to the total number of programs	50	0,25	0,25	0,25	0,25	0,25	0,25	Twice a year	Once a year	ED MFBE F/B OIDB AD
3.1.2.	Ranking of the Institute in international university ranking systems	50	QS EECA: 82 THE: 800-1000	80 800-1000	78 600-800	75 600-800	73 Top 500	70 Top 500	Twice a year	Once a year	
3.1.3.	Change in the rank of the Institute in international university ranking systems by year	10	-	%10	%10	%10	%10	%10	Twice a year	Once a year	

Target 3.2. To ensure maximum utilization of international student and staff mobility programs (ERASMUS, etc.)

Responsible Unit	Executive Management	Cost Estimate (TL)	6.200.000
Units to Cooperate with	**International Relations Office (UIO)** EURAXESS Service Center (EURAXESS)	Risks	• Fluctuating international relations and cost of living
		Determinations	• High level of awareness and utilization of programs such as Erasmus • Establishment of EUROAXESS Service Center
		Requirements	• Increasing the number and locations of international education exchange agreements
Strategies	S.1. To rebuild the existing institutional infrastructure with a holistic approach in order to provide effective promotion, consultancy and other services on international exchange programs		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
3.2.1.	Number of bilateral agreements for international student and academic staff mobility and exchange rate on an annual basis	25	99	100	100	100	100	100	Twice a year	Once a year	UİO EURAXESS
3.2.2.	Number of students participating in international exchange programs and exchange rate by year	25	155	159	163	167	171	175	Twice a year	Once a year	
3.2.3.	Number of students coming from international exchange programs and exchange rate by year	25	7	9	11	13	15	17	Twice a year	Once a year	
3.2.4.	Number of faculty members benefiting from international exchange programs and annual exchange rate	25	8	11	12	13	15	18	Twice a year	Once a year	

Target 3.3. To develop corporate communication tools in the outward-facing face of IZTECH

Responsible Unit	Executive Management	Cost Estimate (TL)	200.000
Units to Cooperate with	**Directorate of Education (ED)** Directorate of Research (AD) Library and Documentation Department (KDDB)	Risks	• Periodic changes in foreign relations • Not taking part in international publication and education platforms
		Determinations	• Existence of structures such as the international research center AVILAR • IZTECH library has improved access to international publications and opportunities
		Requirements	• Making IZTECH corporate identity and communication tools compatible and easily accessible to international students and researchers
Strategies	S.1. Using the fields in which IZTECH has competence, in which it has pioneered, to reinforce international recognition		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
3.3.1.	Number of national/international events organized on open access, open science, open innovation	50	1	1	1	1	1	1	Twice a year	Once a year	ED AD KDDB
3.3.2.	Student satisfaction with library facilities (%)	50	83	83	84	84	85	85	Twice a year	Once a year	

Target 3.4. To enrich IZTECH's staff of qualified scientists with qualified international scientists

Responsible Unit	Executive Management	Cost Estimate (TL)	-
Units to Cooperate with	**EURAXESS Service Center (EURAXESS)** Human Resources Strategy for Researchers (HRS4R)	Risks	• It takes time to eliminate the incompatibilities that may occur in some articles between the procedures valid in our country and the EU legislation
		Determinations	• The advantage of IZTECH being the only higher education institution from Türkiye participating in the HRS4R program
		Requirements	• Establishment of a team and initiation of studies for the internal analysis and action plan that must be prepared for compliance with the HRS4R program
Strategies	S.1. Develop and implement a "human resources management policy and action plan" based on contemporary approaches		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
3.4.1.	Obtaining the HRS4R logo	50				+			Twice a year	Once a year	HRS4R EURAXESS
3.4.2.	Implementation of the Action Plan to be stated in the internal audit report after two years and achievement in the External Audit Report by the EU Commission after four years	50					+		Twice a year	Once a year	

INSTITUTIONAL DEVELOPMENT AND SOCIAL CONTRIBUTION

GOAL 1. To improve corporate governance, corporate culture and organizational capacity

Target 1.1. To create a performance evaluation system for administrative and academic units

Responsible Unit	Executive Management	Cost Estimate (TL)	-
Units to Cooperate with	**Directorate of Education (ED)** Institute of Engineering and Natural Sciences(MFBE) Faculties/Departments (F/B) High School of Foreign Languages (YDYO) Department of Student Affairs (OIDB) Continuing Education Center (SEM) Measurement and Evaluation Unit (ODB) Department of Personnel (PDB)	Risks	• Inadequate establishment of corporate culture and memory • The magnitude of the gap between the rationality of strategic management tools and the realities of the corporate bureaucracy
		Determinations	• Clarification of workflow processes and job descriptions in internal audit, but need time to be internalized in practice • Ineffective monitoring and evaluation system; quality new implementation of the assurance system
		Requirements	• Defining the monitoring and evaluation system at different levels and identifying responsibilities
Strategies	S.1. Updating and continuous improvement of IZTECH Quality Assurance and Internal Control System with feedback from units S.2. Supporting the professional development of IZTECH administrative staff		

	Indicator	Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
1.1.1.	Satisfaction level of academic staff (%)	25	70	80	81	82	83	84	Twice a year	Once a year	ED MFBE F/B YDYO OIDB SEM ODB PDB
1.1.2.	Satisfaction level of administrative staff (%)	25	70	78	79	80	81	82	Twice a year	Once a year	
1.1.3.	Student satisfaction (%)	25	70	75	76	77	78	79	Twice a year	Once a year	
1.1.4.	Number of administrative staff in critical positions attending English courses	25	0	3	5	10	15	20	Twice a year	Once a year	

Target 1.2. To strengthen and ensure the sustainability of IT hardware/software infrastructure and user support services

Responsible Unit	Executive Management	Cost Estimate (TL)	3.050.000
Units to Cooperate with	**Department of Information Processing (BIDB)**	Risks	• Increased need for necessary infrastructure/software/hardware and update costs
		Determinations	• Ensuring the sustainability of the necessary informatics / technological infrastructure to carry out education / training / communication services due to the increasing number of students and technological developments • Updating the technological infrastructure of training/practice areas
		Requirements	• Ensuring the sustainability of the physical/technological/information infrastructure for the reasons mentioned
Strategies	S.1. Establishing an institutional infrastructure to monitor and evaluate the information technology infrastructure on campus and to monitor technological developments S.2. Developing and disseminating management practice programs in administrative units		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
1.2.1.	Internet access from every point of the campus (educational/social/outdoor) (%)	40	25	50	100	-	-	-	Twice a year	Once a year	BIDB
1.2.1.	Completion rate of the planned transformation in information and data security (%)	30	10	40	80	100	-	-	Twice a year	Once a year	
1.2.3.	Realization rate of improvements for the needs of administrative units (%)	30	80	90	100	100	100	100	Twice a year	Once a year	

Target 1.3. To reinforce the corporate identity, to strengthen the perception of IZTECH; to activate institutional promotion at local, national and international level

Responsible Unit	Executive Management	Cost Estimate (TL)	400.000
Units to Cooperate with	**Press and Public Relations Department (BHIB)** Media-Web Office (MWO) Sustainable Campus Coordination (SKS)	Risks	• Lack of continuity in promotional activities; limited access to effective networks for international promotion • Lack of harmony between alumni and employees in adopting the basic values of IZTECH and acting together
		Determinations	• Reaching the 25th anniversary of the establishment of IZTECH and having activities to create awareness in this direction • Having structures such as Public Relations, Media-Web Office and taking an active role in institutional activities
		Requirements	• Developing a database for communication with alumni • Improving communication (memberships, etc.) with networks necessary for international promotion
Strategies	S.1. Dissemination of the elements that make up the corporate identity (logo, color, letterhead, etc.); celebrating July 11th of each year as IZTECH Day with various scientific activities (the date when the decision on the establishment of IZTECH was published in the Official Gazette: 11.07.1992) S.2. Organizing seminars/meetings on current scientific topics and promotional activities for high school students		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
1.3.1.	Completion rate of scientific, technological and architectural design activities related to reinforcing corporate identity (%)	50	30	50	75	90	95	100	Twice a year	Once a year	BHIB MWO SKS
1.3.2.	Number of high school/students visiting IZTECH	50	83 High School 6.225 Student	83 6.400	83 6.550	84 6.700	84 6.850	85 7.000	Twice a year	Once a year	

Target 1.4. To improve relations with students and alumni

Responsible Unit	Executive Management	Cost Estimate (TL)	34.814.000
Units to Cooperate with	**Career Support Center (KARDES)** Institute of Engineering and Natural Sciences(MFBE) Faculties/Departments Department of Health, Culture and Sports (SKS) Press and Public Relations Department (BHIB)	Risks	• Students and graduates do not have sufficient knowledge and equipment to adopt IZTECH core values and common corporate culture • Insufficient development of the institutional structure and activities of the Alumni Association
		Determinations	• The fact that IZTECH graduates have not been able to form a "critical mass" in various fields of study • Establishment of the Career Support Center (KARDES) and institutionalization of communication with students and graduates in this direction
		Requirements	• Planning and implementing joint training and promotion activities with IZTECH Alumni Association • Providing physical space for Student Council and Student Clubs, Student Creation of a Student Center
Strategies	S.1. Establishing an institutional infrastructure in order to develop, reinforce and ensure the continuity of undergraduate/graduate students' sense of belonging to IZTECH S.2. Improving communication between students and their families and IZTECH, increasing loyalty, using the natural/environmental structure of the IZTECH Campus in the organization of social activities		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
1.4.1.	Number of activities such as Career Day, Alumni Day, etc. organized by KARDES and academic units	40	2	4	7	9	11	13	Twice a year	Once a year	KARDES MFBE F/B BHIB SKS
1.4.2.	Number of students registered in the Alumni Information System	40	600	1000	1200	1350	1500	2000	Twice a year	Once a year	
1.4.3.	Number of people benefiting from the Institute's facilities	20	3155	3500	3900	4300	4700	5000	Twice a year	Once a year	

GOAL 2. To redefine the IZTECH Campus as a sustainable/living/nature-friendly "education-research" laboratory

Target 2.1. Preparing an action plan for the "Living Campus" project and implementing it during the plan period

Responsible Unit	Executive Management	Cost Estimate (TL)	2.430.000
Units to Cooperate with	**Sustainable Campus Coordination (SKK)** Department of Construction Works (YIDB) Occupational Health and Safety Unit (ISGB)	Risks	• Inadequate internalization of activities and responsibilities to create a sustainable and living campus
		Determinations	• Establishment of a Sustainable Campus Coordinatorship • Although there are some activities and projects to create a sustainable campus, their effectiveness remains limited due to the fact that they are not described with a holistic guide and action set
		Requirements	• Improving the organizational structure and effectiveness of the Sustainable Campus Coordinatorship • Determining the principles of "Living Campus" landscape design and carrying out the necessary work (project production, grant support, competition organization, etc.) for its implementation
Strategies	S.1. Establishment of the "Living Campus" project coordinator unit S.2. Strengthening and improving the institutional infrastructure in the field of Occupational Health and Safety S.3. Organizing search meetings with the participation of all units of IZTECH in order to enrich the working and living environment		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
2.1.1.	Completion rate of construction activities such as break points, urban furniture, etc. within the scope of organizing campus pedestrian roads (%)	20	25	50	80	100	-	-	Twice a year	Once a year	SKK YIDB ISGB
2.1.2.	Realization rate of sustainable hazardous waste management system in indoor and outdoor areas on campus (%)	20	100	100	100	100	100	100	Twice a year	Once a year	
2.1.3.	Realization rate of sustainable non-hazardous waste management system (IZTECH Zero Waste Project) in indoor and outdoor areas on campus (%)	20	20	40	60	100	-	-	Twice a year	Once a year	
2.1.4.	Rate of completion of OHS activities (construction, installation, electricity, etc.) on campus (%)	20	10	20	20	60	80	100	Twice a year	Once a year	
2.1.5.	Realization rate of the activities planned to transform the IZTECH Campus into a "living science city" (%)	20	40	50	60	70	80	100	Twice a year	Once a year	

Target 2.2. To effectively use natural and renewable energy resources (wind, geothermal, etc.) on campus and become an institution that can meet its own energy needs

Responsible Unit	Executive Management	Cost Estimate (TL)	5.800.000
Units to Cooperate with	**Department of Construction Works (YIDB)** Department of Health, Culture and Sports (SKK)	Risks	• Difficulties in adaptation due to constant changes in national and local regulations in the field of renewable energy • Renewable Energy installation cost (e.g. geothermal) is too high
		Determinations	• Initiatives to meet energy needs with renewable energy (e.g. grant support for wind energy installation) • Feasibility reports (e.g. geothermal energy) and modeling to expand the use of renewable energy on campus
		Requirements	• Accelerating initiatives to invest in the necessary physical and technological infrastructure to meet its own energy from renewable energy sources
Strategies	S.1. Preparing an action plan for making campus buildings energy efficient and implementing it during the plan period		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
2.2.1.	Number of smart/green buildings (sustainable rainwater management, drip/irrigation automation, etc.)	50	0	10	20	40	-	-	Twice a year	Once a year	YİDB SKK
2.2.2.	Number of buildings/roads/parks etc. illuminated with energy-efficient systems	50	5	2	5	10	20	40	Twice a year	Once a year	

Target 2.3. To encourage studies aimed at local development

Responsible Unit	Executive Management	Cost Estimate (TL)	58.500
Units to Cooperate with	**Institute of Engineering and Natural Sciences (MFBE)** Faculties/Departments Department of Health, Culture and Sports (SKS)	Risks	• The level of awareness of IZTECH with its geography is not sufficiently developed
		Determinations	• Workshop-type activities have started with communities and volunteers to map natural and cultural values in the nearby geography, but have not yet reached a sufficient level
		Requirements	• Conducting capacity building trainings for student societies to increase their activities related to nature and environment (project writing, etc.) • Increasing the level of awareness by encouraging nature-friendly practices and projects on campus
Strategies	S.1. Developing responsible attitudes towards the protection and development of natural and cultural values in the surrounding geography with communities and volunteers		

Indicator		Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
2.3.1.	Number of projects and graduate theses prepared for the region	50	10	12	14	16	18	20	Twice a year	Once a year	MFBE F/B SKS
2.3.2.	Number of events organized to contribute to society	50	5	6	7	8	9	10	Twice a year	Once a year	

GOAL 3. To increase cooperation by developing the institutional infrastructure related to social issues

Target 3.1. To strengthen and enrich the social contribution of IZTECH

Responsible Unit	Executive Management	Cost Estimate (TL)	-
Units to Cooperate with	**Department of General Culture Courses (GKDB)** Social Responsibility Projects Coordination (TSPK)	Risks	• Institutions/organizations in the immediate geography of IZTECH do not know IZTECH sufficiently
		Determinations	• IZTECH Social Responsibility Project Coordinatorship has been established and has established the organization to carry out certain activities within this scope
		Requirements	• Ensuring the continuity and effectiveness of relations with institutions and organizations in the close geography of IZTECH through coordinatorships • Including a social responsibility course in the curriculum to develop volunteerism
Strategies	S.1. Supporting bringing together internal and external stakeholders through the Social Responsibility Project Coordinatorship		

Indicator

3.1.1.	Number of students taking the Social Responsibility Project course	100	0	5	9	13	17	20	Twice a year	Once a year	GKDB TSPK
3.1.2.	Number of Social Responsibility Projects Implemented	10	5	5	6	6	8	8	Twice a year	Once a year	

Target 3.2. To develop and strengthen the interest of children and young people in science

Responsible Unit	Executive Management	Cost Estimate (TL)	34.000
Units to Cooperate with	**Technopark Izmir (Technopark)** Directorate of Education (ED) Directorate of Research (AD) Faculties/Departments (F/B) Department of Health, Culture and Sports (SKS) Press and Public Relations Department (BHIB)	Risks	• IZTECH's location advantages and geographical qualities are not sufficiently recognized • Failure to effectively reach primary and secondary school students
		Determinations	• The fact that science day activities and robot league type activities are carried out in IZTECH; Technopark Izmir has activities for university students • Limited activities and participation in developing social and cultural ties with IZTECH's immediate geography
		Requirements	• Developing scientific activities for primary and secondary education groups with Technopark İzmir • Participation in TÜBİTAK summer science camp programs
Strategies	S.1. Establish an institutional infrastructure to support activities aimed at developing children and young people's interest in science and encourage the participation of all internal stakeholders in such activities		

	Indicator	Effect on the Target (%)	Current Situation	2019	2020	2021	2022	2023	Monitoring Frequency	Reporting Frequency	Related Unit(s)
3.2.1.	Number of activities organized to popularize science (IZTECH Science and Technology Day, Summer Science Camp, etc.)	75	2	2	3	3	4	5	Twice a year	Once a year	ED AD Technopark F/B SKS BHIB
3.2.2.	Measuring the change in the attitude level of the participants in the activities carried out for the popularization of science	25	-	%90	%90	%90	%90	%90	Twice a year	Once a year	