MIDDLE EAST TECHNICAL UNIVERSITY

SELF EVALUATION REPORT

METU
May 2002

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1. INTRODUCTION

METU welcomes this Institutional Evaluation process as a valuable opportunity to blend the experience of a knowledgeable group of international `peers` with the University's assessment of its past and present at various levels. The feedback to be received from this review will contribute to METU`s continuous efforts to

- Institutionalize its strategic management practices,
- Implant a quality assurance system and
- Reinforce its quality culture.

In the first 25 years following its establishment in 1956, METU enjoyed the special status specified by law to rapidly grow and evolve into a highly prestigious international university. With the passing of the Higher Education Law in 1982, METU was deprived of its special status and joined the ranks of the other state universities. Since then, METU has experienced a series of massive changes that have created a threatening environment, namely increased rigidity in financial and human resources management, uncontrolled increase in student enrollment, and erosion of staff salaries.

Pushed by developments in the European higher education area and the advancements in technology, and pulled by shrinking resources, METU's upper administration has striven to be proactive about the future of the University in order to continue to play a critical role in the rapidly changing world.

It is our expectation that the *Self Evaluation* exercise will contribute a great deal to control the progress of METU, to avoid unpredictable and chaotic contingencies, to shape up and to exploit its environment. It is also expected that this exercise will add to the knowledge base that METU has obtained from other assessment and accreditation procedures in the past. In particular, this Institutional Evaluation practice has already helped to trigger the formation of "Self Evaluation Committees" in all the departments, faculties, and graduate schools of the University to continuously assess and evaluate their individual units and to prepare their own strategic and operational plans.

Methodology of Self Evaluation

This Self Evaluation Report was coordinated and guided by the University Self Evaluation Committee (USEC), whose members include a Vice Rector, two Assistants to the Rector and faculty members from various disciplines. The list of the USEC members is provided in **Appendix 1**. The report was first drafted by the USEC, then reviewed by the university upper administration, and finally made available to all faculty members for their individual contributions.

The Self Evaluation Report incorporates findings from two types of sources:
1. The routine data collection and assessment mechanisms, and periodic reports produced by the University at different organizational levels;
2. A number of special-purpose studies, non-routine reports, and review/accreditation processes completed in recent years, notably:
   - "METU Strategy Document 1995-2000" and "METU Strategy Document 2000-2005" (**Appendix 3**);
   - Two reports submitted to the Prime Minister to summarize the financial, administrative, and human resource problems encountered by the state universities together with suggestions for changes in the legal framework, prepared by METU and other state universities (January and February 2001);

- A participative study entitled "The R&D Road Map of METU," commissioned in 2000 and completed in December 2001;
- A "SWOT Analysis" performed as a part of this Self Evaluation Process, with the participation of current and former upper administrators, as well as academics and students (September-November 2001) (**Appendix 18**);
- Experience with previous assessment and accreditation processes conducted in various faculties by national and international bodies.

2. PRESENT SITUATION OF METU

2.1 Mission of METU

The present university mission statement reads:

"The Middle East Technical University is devoted to the pursuit and application of knowledge for the social, cultural, economic, scientific and technological development of our society and humankind through achievements in teaching, research and community services that are of the highest international standards".

The University practices to fulfill the expectations laid out in the mission statement are supported by a set of guiding principles given in **Appendix 2**. The major functions of the University underlined in the mission statement can be assessed in two areas:

i. Education and Research: METU is renowned for its traditionally impressive undergraduate education in a large number of disciplines, encompassing also a respectable graduate education. METU graduates have served with competency, showing leadership to promote new professional fields at institutions both at home and abroad and to establish critical links between Turkey and the world. The METU image in society is a well-deserved university asset, which also necessitates continuous effort to maintain at a level of performance to satisfy demands.

Modeled after US campus universities and having English as the language of instruction, METU has enjoyed important advantages over the other Turkish universities and served as a model in many ways.

Despite the fact that METU has a leading position in academic research in Turkey accommodating valuable researchers in its institutional body, limited access to resources slows down the rate of pioneering research carried out. The research performance is based primarily on the capacity of individuals or small groups rather than on large-scale collaboration. There are modest incentives provided by the University and public agencies to bolster the academic research capacity. Graduate education, laboratories and technical support systems, and research links to international research centers require considerable improvement and restructuring. The METU researcher profile reflects a respectable level of awareness of research objectives and the output, but this profile is not reflected as much as it should, towards collaboration and large projects. Most faculty regard research primarily as an individual effort, while links to stakeholders, and to society at large, are viewed as secondary. On the other hand, it is crucial to note that the national demand for academic or industrial research is still very low.

ii. Services and Linkages: METU faculty are very active as advisory agents to governments and private companies. The consultancy services in general are mediated

through personal contacts and project applications made to the departments. The METU staff have become a popular pool of expertise for innovations carried out in the public and private sectors. However, the commercialization of university knowledge has yet to become an integral part of academic life. The faculty still need to develop the necessary organization and management skills to link up with the external production and research activities, to join clusters of industrial/service institutions, and to take part in networking activities at the national/global levels.

As a part of its efforts to establish sustainable links with the outside world, METU has started to review the contents of its academic programs and institutional performance for continuous quality improvement. Upon the request of all engineering programs, ABET (Accreditation Board for Engineering and Technology), as a formal external evaluator, having judged these programs, reported that they are "substantially equivalent to similarly named accredited programs in the USA". This is the only kind of positive accreditation statement provided by ABET for programs outside the USA.

To support the realization of its mission, METU has attributed great significance to the following projects:

1. Consolidation of METU as a Research University of International Recognition: The University aims to be a dynamic institution seeking excellence in an international context. To this end, it strives to attain the legal status, to actively participate in international research and education networks, and to attract highly qualified teaching and research staff and high quality students. For this purpose, METU has established the European Union and Socrates Offices to follow the higher education activities in Europe and to inform the faculty about various possibilities for research and collaboration with the EU Member States.

2. Academic Human Resources Development: The University gives priority to research by encouraging graduate and especially PhD programs, based on national and international projects, and offering solutions to the problems of our society and humankind, thus helping to meet the need for academic staff in Turkish universities. For this purpose, METU has recently established collaborative programs with four newly-established or developing universities in Turkey, enabling the prospective faculty of these universities to conduct their PhD studies at METU. The financial support for the program is provided from a university project already approved by the State Planning Organization.

3. METU-Technopolis and Incubation Center (TEKMER): The University strives to give shape to a research structure integrated with regional and external sectors and nurture the development of METU-Technopolis and the Incubation Center. The University aims to contribute to innovations and developments in technology by directing graduate and PhD theses as well as the research efforts of faculty towards METU-Technopolis and the Incubation Center, thus establishing a healthy and productive structural relation between the University and these two centers. Both METU-Technopolis and the Incubation Center are the first of their kind in Turkey (**Appendix 13**).

4. Distance Education: The University aims to pioneer the development of distance-learning tools and methods based on the Internet. It is the intention of the University to assume a leading role in national and international activities of this kind and to develop

joint distance education programs through cooperation with a number of certificate and graduate programs on the Internet (**Appendix 9**).

5. METU-Northern Cyprus Campus: The University desires to develop the METU-Northern Cyprus Campus on a sound structure, and to set up academic programs after discussing various administrative and academic matters in detail with the participation of the entire faculty.

However, there exist severe constraints limiting METU's efforts to realize the goals covered in its mission statement. It should be noted that an immediate consequence of inadequate financial resources and inflexible higher education law cause the loss of qualified academic personnel. The search for better paying jobs or moonlighting options by the academics is posing a serious threat to the quality of the University.

METU is also facing the danger of becoming an "aging university" in many respects. Besides the lack of interest of young graduates in an academic career and the ever-rising average age of academics, the University has entered its maturity stage. Multidisciplinary programs are emerging (**Appendix 11**) amidst the single-discipline traditions; partnership and networking cultures are developing against a background of low connectivity. The inequality in salaries between research assistants and those with jobs outside the university is discouraging students from applying for demanding graduate programs.

2.2 General Context and Environment

2.2.1 National Legal Framework

The Higher Education Council (HEC) plays a crucial role in the Turkish higher education system. It is responsible for the planning, coordination and supervision of higher education within the provisions set forth in the Higher Education Law (**Appendix 14**).

The Interuniversity Board, comprising the rectors of all universities and one member elected by the senate of each university serves as an academic advisory body to HEC. The Minister of National Education, on the other hand, represents higher education in the Parliament and can chair the meetings of the Council, as a non-voting member. Decisions of neither HEC nor the universities are subject to ratification by the Ministry.

Universities, faculties and schools are established by law, while the establishment of departments is approved by HEC. Likewise, the opening of a degree program at any level is subject to ratification of HEC. Upon the recommendation of the Interuniversity Board, HEC determines common course requirements for such programs. Universities are completely free to decide on the rest of the curricula, course contents, grading systems and degree requirements. Teaching methods and grading are prerogatives of the individual instructors.

a- Selection and Appointment of (full) Professors and Other Academic Staff
Both academic and administrative staff in state universities have civil servant status. The number of academic and administrative staff cadres allocated to each state university is determined by the acts of the Parliament, while staff appointments at all levels are made exclusively by the universities and are not subject to approval by any external authority.

The Higher Education Law, given in **Appendix 14**, sets forth the minimum requirements for academic promotions and the procedures to be followed in making appointments. METU has specified additional criteria and requirements to be met for the appointment and promotion of its academic personnel. These criteria and the relevant procedures are explained in **Appendix 15.**

b- Selection of Students
The student quota for bachelor programs is determined annually by HEC, upon the recommendations of the universities. Admission of students to Turkish universities is based upon a central examination, organized by the Student Selection and Placement Center. High school graduates applying for admission to higher education must take the Placement Examination for Turkish Universities. Approximately 1.5 million students take this examination every year.

Foreign students are accepted to degree programs in Turkish universities on the basis of their scores in the Foreign Student Examination, which is administered at the Turkish Consulates in several countries and in the capital, Ankara, in June every year.

On the other hand, universities are free to determine the number of students to be admitted to graduate programs. During the selection process of these students, their performances in previous undergraduate and graduate education and nationwide Graduate Education Examination scores are taken into consideration.

METU, also provides a continuing education service to society at large, through its Continuing Education Center. Catalogue seminars and courses, as well as customized certificate programs depending on the specific needs of participants are announced and conducted each year (**Appendix 12**).

c- Finance

State financing from "annexed budget" funds: METU, relies primarily on state funding, with up to 65% of its revenues coming from the "annexed budget". The annual budgeting process begins in early summer with the submission of the university budget proposals to the Ministry of Finance for the "current expenses" budget and to the State Planning Organization for the "infrastructure" budget. After various meetings for justification, the funding agencies prepare the national budget proposal and submit it to the Grand National Assembly for ratification.

The total funds allocated to the University inevitably fall short of the proposal. Equally importantly, the line-item distribution of the funds allocated to the University is not necessarily in line with the priorities expressed by the University. Moreover, its ability to re-allocate the "annexed budget" funds is extremely limited. The strict implementation of the "line-item" system throughout the year further exacerbates the rigidity of the budgeting process. Transfer of the "current expense budget" funds among line items –in an effort to make the budget better respond to the university objectives or unanticipated needs emerging within the fiscal year– is largely curtailed by the system. It is, however, possible to secure State Planning Organization approval for re-allocation of funds between *similar* items in the infrastructure budget.

While the funds budgeted along line items are released in quarterly installments, the actual procurement needs of the University are not equally spaced throughout the year. Moreover, the overly confining "purchasing-tendering" by-laws and regulations create

extensive bureaucracy which unduly prolongs most procurement efforts, and at times denies choices that would result in provision of goods and services at lower costs. Subject to the Turkish Court of Accounts audits which strictly adhere to the letter of the by-laws and regulations, the University currently has very little flexibility or discretion in using state funds.

The Ministry of Finance recently started a major reform project to initiate a "performance budgeting" system in the Turkish public sector. The six state agencies (including the METU Library and Documentation Center) chosen as pilots are in the process of developing strategic planning and performance measurement systems as the basis for their 2003 budget proposals.

Student Tuition Fees: Student tuition fees comprise the second largest source of funds for most Turkish state universities. Tuition fees vary according to faculty, undergraduate /graduate program and the number of semesters the student has already spent at METU. Different tuition fees are charged to Turkish and international students. In this context, the range of tuition fees per semester is $50-$220 for Turkish students and $240-$975 for international students.

The University can allocate funds generated from the tuition fees to any line-item as its needs dictate. However, due to the strict "procurement-tendering" by-laws and procedures as well as stringent Turkish Court of Accounts audits, extensive bureaucracy hampers efficient use of these funds.

Revolving Fund Revenues: The University has a free hand in the pricing of its non-degree teaching/training programs, contract research, and consultancy services. However, in addition to the stringent "procurement-tendering" by-laws and regulations that encumber the conduct of duties, there are also specific rules that dictate how the University can use these funds in financing its needs.

The pending amendment to the Higher Education Law is expected to provide the state universities with greater discretion in setting tuition fees for Turkish students and total freedom in the case of international students. It is expected to increase flexibility in the management and the use of revolving fund revenues generated by the state universities.

Support from the METU Development Foundation: The mission of the METU Development Foundation includes generation of funds to complement the activities of the University. The entrepreneurial activities carried out under the auspices of the Foundation are explained in **Section 2.2.1.f**.

Rental Fees and Other Revenues: The University generates funds by renting/leasing land, buildings and facilities to companies operating on the campus. Here, too, certain Ministry of Finance regulations specify the tender/auction processes to be followed, and in some cases even determine the rental rates. More importantly, due to changes, from one year to the next, in the rules accompanying the Budget Law, there has been no consistency as to the beneficiary of these revenues (i.e., the University or the Ministry). Lately, the view that universities should receive these funds to complement their tuition fee revenues has been gaining wider support. The pending amendment is expected to finalize the issue in favor of the universities.

University Research Fund: METU, as do all state universities, has a research grant fund to support projects submitted by individual faculty members and research units. The contributions to the University Research Fund come from the annexed budget, the revolving fund, and the tuition fees of certain graduate programs. The total annual budget, ranging from $1 to $1.5 million, is distributed at all the university levels, using performance-based allocation criteria and competitive awarding to support faculty members as well as graduate thesis/dissertation work.

d- Teaching and Learning

Undergraduate programs are designed for four years of study beyond a one year intensive English language preparatory program, if needed, conducted by the Department of Basic English.

To receive a bachelor's degree in any of the programs at METU, each student must successfully complete a course of study as specified in the official curriculum of the program published in the University catalogue.

Undergraduate students are expected to have a grade point average (GPA) of at least 2.00/4.00 and at least a DD grade for each course every semester in order to complete their programs successfully on time. A cumulative grade point average (CGPA) less than 1.80 results in academic probation, a situation in which the student must rectify within two semesters.

e- Research

Graduate Schools and Research and Development Centers are the major organizational entities responsible for conducting and coordinating research activities at METU. While the former are founded by law, the latter are established with the approval of university boards and HEC, depending on their size and type.

Given the fact that various bodies of the University are under pressure to attend to a variety of issues, a separate unit is needed that primarily focuses on academic concerns at the graduate level. The responsibility for planning, implementing, coordinating, and evaluating graduate programs, as well as for setting out new policies in search of excellence in graduate education rests with the four Graduate Schools, namely the Graduate Schools of
- Natural and Applied Sciences,
- Social Sciences,
- Marine Sciences and
- Informatics.

Apart from these, there are a total of 37 research and development centers in the University. Among them, 11 centers directly report to the Rector's Office and undertake multidisciplinary research activities (**Appendix 16**).

Only a few of the research centers are well established and carry out substantial research projects, the remaining are relatively less active. Research centers are expected to be self-sustaining and not to use the already limited resources of the University. However, since they are established without a resource plan concerning physical space, infrastructure, or cadre for administrative and technical personnel, their research performance is insufficient and in their present situation they constitute a financial burden to the University.

The research centers are not price-competitive to receive industrial projects from outside the University, owing to the additional cost of contributions to revolving funds. The recent changes in the allocation of the revolving funds and the new Technopark Law, which eliminates the state taxes and university shares, further reduce the significance of the research centers in the University.

As directing or taking part in the activities of a research center does not reduce the regular academic or administrative workload of the directors or researchers, these centers survive through individual efforts.

f- Development of Entrepreneurial Activities at METU

Entrepreneurial activities at METU are carried out through two channels. The first channel is the Incubator, which provides an opportunity for young entrepreneurs to start up their businesses by putting their technological projects into practice. The Incubator was established in 1992 as a result of cooperation between METU and Turkish SMIDO (Small and Medium Industry Development Organization). The infrastructure in terms of the University library and laboratories combined with the experience of the University regarding local and international research projects have produced a fertile environment for the companies in the METU Incubator. Hitherto, 22 companies have successfully 'graduated' and 28 companies are still continuing with their research and product development activities there. The Incubator has a success rate of 79%.

The second channel for entrepreneurial activities is METU-Technopolis (**Appendix 13**). The successful experience with the Incubator has led the University into establishing a technopark in which R&D activities of relatively larger and medium size companies could be accommodated. After 6 years of intensive effort, in 1998, METU-Technopolis was officially established. Today 39 companies, 7 of which graduated from the Incubator, are conducting their R&D activities within METU-Technopolis. The legislation concerning technoparks (Technology Development Regions Act) was approved by the Parliament and became effective as of July 7, 2001. This new legislation provides some financial incentives for the R&D activities of the companies operating in METU-Technopolis. Both the Incubator and METU-Technopolis provide opportunities for the faculty to participate in the research activities of industry and/or to establish their own companies in METU-Technopolis in order to commercialize the results of their research activities. The outcome of this is yet to be seen.

Additionally, the revenues generated by the METU Development Foundation are used to support various services both within the University and outside. The Foundation supplies scholarships and accommodation to students, as well as services outside the scope of the annexed budget. The METU Development Foundation also gives awards to the faculty for their publications and outstanding performance.

2.2.2 Financial and Economic Environment

The high unsustainable levels of public debt has plagued the Turkish economy in recent years, with nominal interest payments on domestic and international debt absorbing as much as 50% of the annual national budget. Due to insufficient state funds and the low priority assigned to higher education, the "per student" public funding provided to state universities has fluctuated between $1,000-$2,000 in the last decade (excluding distance learning programs).

In addition to insufficient funding by the state, frequent economic/financial crises in Turkey during recent years have placed major burdens on state universities in the form of:

- Rapid devaluation of the Turkish Lira, eroding the annual budget, especially in connection with purchase of books and equipment from abroad
- Ever-increasing need for financial aid for students
- Reduction of real wages of staff to untenable levels

The state universities face these conditions while increases in the cost of providing higher education are endemic and private universities continue to emerge rapidly on the Turkish scene.

Insufficient state funds available to higher education in Turkey have to be distributed to an ever-increasing number of state and private universities. With the newly established state universities -- still in their peak construction-investment phase -- receiving the highest share of the government funds, the well-established universities, such as METU, face the difficult task of persuading the funding agencies about their pressing financial needs. The latter are forced to generate funds from revolving fund activities, real estate rentals, donations, and university foundations. While the state implicitly endorses revenue generation by state universities, the current legal framework is not conducive to "university entrepreneurship".

2.2.3 Geographical Position of METU

METU, with its outstanding architecture and efficient campus planning, has a unique setting. Since its establishment in the capital city, it has become the source of inspiration for a privileged life style mediating between continuous cultural and natural enhancement. The initial campus plan – the product of an international competition held in 1961– was designed to meet the needs of 10,000 students and for a daily population of 30,000 within an area of 4,500 hectares, including a forest and Lake Eymir.

The separation of the pedestrian circulation from the vehicle traffic, which routes a loop around the academic zone and the administrative center, was the fundamental principle of the project applied.

Over the years, the University has been forested entirely and has reached an area of more than 450,000 square meters of floor space.

The characteristics of the campus changed its significance with the rapid growth of the city; now, new residential, commercial and educational areas surround it. METU, today, is a town created from scratch and bears most of the attributes and problems of urban life. It has expanded to include a technopark, a culture and convention center, a museum and an antique site, a shopping area, a health center, an olympic indoor, and a semi-olympic outdoor swimming pool, sports centers, a stadium, tennis courts, and related infrastructure. Thus, the control of the campus entrances, the overall traffic, and the car parking system require re-consideration. While expanding its built environment within the scope of the existing master plan, the challenge will be maintaining the balance between the flora/fauna created and the built environment constructed.

2.2.4 Opportunities and Threats with respect to METU's Environment

The major threat to the University's social and human capital appears to be the lack of financial resources and low salaries. In conjunction with the rigid higher education

system, they are adversely affecting the revitalization efforts by the University at a time of rapid global changes.

Amid such difficulties, METU has to face the competition brought about by the new private universities through better funding and upgrading of some of its programs. The competitive pressures of international educational and research institutions on the domestic market are also significant. Another important threat originates from the weakness of the links with industry, government, other universities and international/global organizations. The low domestic R&D demand and ever-increasing brain drain are aggravating this problem. However, if successfully tapped, the international reputation of METU graduates and the prominent Turkish researchers living abroad also provide important opportunities. Equally important is the recently emerging demand for domestic R&D and a skilled work force in order to build up international competitiveness in a knowledge-driven economy and in particular in order to facilitate joining the EU. The ongoing national reforms and harmonization efforts carried out as parts of EU candidacy are creating favorable conditions for achieving METU goals.

2.3 Organization and Resources

2.3.1 Faculties/Educational Units of METU, Graduate Schools/ Research Centers

The key academic organization units at METU are the departments, which are grouped under 5 Faculties. Most academic and educational activities take place in the Department-Faculty-Rector's Office hierarchy. The department chairperson is in charge of both graduate and undergraduate programs. While the dean administers the undergraduate programs and all human and financial resources, the graduate school director handles only the matters related to graduate study. Therefore, the department chairperson reports both to the faculty dean and graduate school director, for undergraduate and graduate programs respectively.

The School of Foreign Languages concentrates on the English preparatory programs headed by a director reporting to the Rector's Office.

The research and development centers are established under the departments, faculties or the Rector's Office (**Appendix 16**).

The administrative and financial activities are conducted by various units at the Rector's Office. These units also coordinate the relevant activities in the faculties and schools.

METU offers a total of 152 programs, which grant 37 bachelor and 115 graduate (Master's and PhD) degrees.

Teaching styles vary from classical lecturing to web-based classes and interactive learning. Formal mechanisms that promote better teaching are limited to seminars and feedback through students' course evaluations. In addition, the departments offering engineering programs evaluated by ABET 2000, developed more systematic mechanisms to improve teaching and learning during 1998-2000. These mechanisms are expected to prove themselves in time.

The University Organization Chart can be seen in **Appendix 17**.

As of the end of 2001, a total of 2,402 academic personnel are employed by the university. 54% of these are research assistants, 17% instructors, 7% assistant professors, 6% associate professors, and 16% professors. The distribution of academic staff to faculties is as follows: 46% in Engineering, 28% in Arts and Sciences, 9% in Architecture, 9% in Economics and Administrative Sciences, and 8% in Education.

2.3.2 Students

a- Distribution Across Levels
A total of 19,232 students are registered for 2001-2002 academic year at METU. 75% of these are enrolled in undergraduate programs, 17% in master's programs, 6% in PhD programs and 2% are special/visiting students.

The total number of international students is 901 in the 2001-2002 academic year.

The total number of graduates (including those of the Vocational School) was 2,537 in the academic year 2000-2001. In addition, 547 students received M.S. or M.A. degrees and 72 received PhD degrees, in the same year.

METU is highly preferred by students taking the Central University Entrance Examination for university education. The University admits students from the top 1%, mostly to popular engineering, natural, social and administrative science programs. In the years 2000 and 2001, approximately 40% of the students ranking in the first 1,000 in the Central University Entrance Examination in all score types preferred METU. Further details are included in **Appendix 4**.

b- Distribution Across Faculties
For the 2001-2002 academic year, the distribution of undergraduate students across the faculties is as follows: 49% in Engineering, 18% in Arts and Sciences, 15% in Economics and Administrative Sciences, 13% in Education, 5% in Architecture, and less than 1% in Vocational School.

For the same academic year, the distribution of graduate students across graduate schools is as follows: 67% in Graduate School of Natural and Applied Sciences, 27% in Social Sciences, 5% in Informatics and less than 1% in Marine Sciences.

Graduates from master's programs had the following distribution in the 2000-2001 academic year: 69% from the Graduate School of Natural and Applied Sciences, 24% from Social Sciences, 6% from Informatics and less than 1% from Marine Sciences. On the other hand, during the same period, the distribution of graduate students in PhD programs was as follows: 79% in Graduate School of Natural and Applied Sciences and 21% in Social Sciences. Further details are included in **Appendix 4**.

c- Trends Over The Last Five Years

Over the years, the student enrollment has steadily increased to 19,000. Having considered the employment figures, infrastructure, and the efficiency of the departments, successful steps have been taken to keep the undergraduate quota in order to emphasize graduate studies. As it is seen in **Appendix 4**, the undergraduate enrollment has declined from over 16,000 to 14,400 in the last five years. On the other hand, the graduate enrollment has reached 4,413 showing an increase over 30%.

From 1995 to 1998, the total incoming undergraduate quota announced by the Student Selection and Placement Center fluctuated between 2,410 and 2,445 students.

However, the increase of the quotas in the last two years, the Amnesty Law implemented in 1999, and the onset of nationwide vertical transfer application from vocational schools have once more disturbed the general trend, yielding an increase in the undergraduate enrollment in the 2000-2001 academic year.

The total number of academic staff, including research assistants in the university has increased from 1,967 to 2,402 (more than 22%) from 1998 to 2001. The distribution of academic staff across cadres and faculties has not changed considerably over the last five years, except for the number of research assistants which has increased 50% during the same period.

The enrollment of international students has been decreasing since 1989, mainly due to the reduction in the student quotas in those departments with a high demand. With a 36% decrease in the last twelve years, international students now constitute 4.8% of the total enrollment, while the ratio a decade ago was around 7-8%.

The students per faculty ratio has been slightly decreasing since 1995 due to the increase in the number of faculty (**Appendix 4**).

The realization of quantitative targets in "METU 2000-2005 Development Targets and Strategies" is given in **Appendix 20**.

2.3.3 Finance

METU derives about 65-70% of its total annual budget from government funding. **Table 1** provides the annual distribution of funds by source for the period 1998-2001.

Table 1 - Revenues of METU by Source: 1998-2001 ($1,000)[*]

Source of Funding	1998	1999	2000	2001 (est.)
Annexed Budget – Salaries	30,095	32,088	37,781	21,024
Annexed Budget – Other current expenses	6,144	6,385	6,752	4,244
Annexed Budget – Infrastructure	6,723	6,862	7,001	4,529
Tuition Fees	5,602	5,503	5,780	4,003
Rentals and Service Charges	2,958	3,240	3,559	2,399
Revolving Fund	5,886	8,444	9,104	5,110
METU Development Foundation	317	1,270	7,426	1,268
Other Sources [**]	1,709	1,600	1,900	3,828
Total	59,434	65,391	79,304	46,404

* Based on the parity as of July 1st of each year.
** Includes donations earmarked for specific construction projects

Funds from research projects that do not cover wage/salary payments to the university staff (such as NATO, Turkish Scientific and Technical Research Council sponsored projects) are not included in the table. These projects do not pay overhead to the University, but they do contribute to the infrastructure (machine-equipment park).

2.3.4 Strengths and Weaknesses in METU's Organization and Resources

METU is attracting the top quality students of the country, a strength that has created prestigious alumni to act as a powerful strategic ally for METU in its quest for excellence. Although it is difficult to retain the existing cadres and attract qualified personnel due to low salaries, the highly qualified and dedicated academic and

administrative staff are still a major strength of METU. These strengths contribute jointly to build the METU culture and spirit, valuing organizational commitment, quality orientation, innovativeness, and social responsibility.

The informal and non-hierarchical approach in academic relations fosters accessibility, transparency, and participation. However, the current administrative setup is overloaded by the volume and diversity of activities on the campus. Various rules and regulations constraining the administrative model, human resources and financial management practices inhibit effective and efficient operation on the campus. Furthermore, the eroding salary levels and promotion scheme emphasizing research and publication result in the reluctance of faculty to devote time to institutional development projects, administrative, and committee work.

METU`s claim with regard to internationalization is supported by memberships in numerous international scientific and professional networks, primarily in English-speaking countries. However, the weak ties with its European counterparts need improvement.

Despite the intention of stressing research activities, the university culture and practices still favor undergraduate education over graduate studies and research. Furthermore, conservative attitudes of some faculty hinder the development of new courses and changes in curricula.

The major physical asset of METU is the attractive campus with buildings and abundant space for education, research and social and cultural activities. Nevertheless, most buildings and technical infrastructure are aging and increasingly in need of extensive repair and maintenance.

Financial support from the METU Development Foundation and other sources compensate, to some extent, for the insufficient state funds needed to maintain a research university of international caliber.

3. STRATEGIC MANAGEMENT

3.1 Institutional Strategies

The Rector, Secretary General, Vice Rectors, Assistants to Rector, Deans, Directors of Graduate Schools, Department Chairpersons and the governing boards at various levels in the University constitute the major bodies responsible for the strategic management and overall functioning of the University.

The heads of the academic units, with whom ultimate decision-making power rests, are advised by the academic and administrative boards. The academic boards make strategic decisions, while the latter are responsible for the day-to-day implementation of rules and regulations. Although the University Senate and the boards are, in general, advisory in nature, the Rector, Deans, Directors and Chairpersons often delegate decision-making power to these bodies.

The boards at the University, faculty and graduate school levels consist of elected and ex-officio members. The department academic boards consist of all the academic staff in the departments. The student movements during the period of 1972-1980 had a

consequence on the relevant law to exclude representatives of the students or administrative staff from any of these boards.

There are no lay members, in the Senate or the various boards of the state universities. The only potential source of external influence is the lay members of HEC. However, hidden or indirect governance stems from the public finance laws, which stipulate in minute detail the procedures to be followed in the preparation of annual budgets, procurement (including construction contracts), and auditing of expenditures, to which all public agencies are subject.

Procedures governing the election, nomination and appointment of the Rector, Deans, Directors and Chairpersons and the requirements thereof, as well as the composition of the boards and the responsibilities and authorities of each, are given in the Higher Education Law in **Appendix 14**.

3.1.1 Current Decision Making Structures and Processes

Major decision making processes of the University can be considered with regard to three main activities: **Education,** including curriculum development, course delivery, assessment of learning and extracurricular activities, establishment of new departments and schools; **Research**, including projects, establishment of laboratories and centers; and **Administration**. Decisions concerning these activities are distributed to the following university organs:

The major research and educational activities are discussed and decided by the department academic boards. Most of the time, the proposals come from the individual efforts, without utilizing a formal measurement and assessment process. However, some academic and administrative committees in the departments conduct studies taken into account by the academic board when making decisions.

Each undergraduate and graduate student is assigned an academic advisor in the department who monitors the performance of the student and approves the courses taken each semester. However, advisors' role significantly decreased with the online registration system and has almost been reduced to automatic approval of the courses the student intends to take.

At the faculty level, the decisions are taken by the Faculty Board and Faculty Administrative Board, chaired by the Dean. The faculty boards approve the decisions which come from the departments in order to coordinate the undergraduate education and administrative activities within the Faculty.

The director of the graduate school chairs the academic and administrative boards of the graduate school, which approve and organize graduate programs.

The director of the research center is responsible for the research and administrative activities. The center boards monitor the activities of the center to provide advice to the director in regular monthly meetings.

Major university organs responsible for strategic decision-making at the top level are the University Senate and the University Administrative Board, headed by the Rector. While the Senate is basically responsible for the decisions concerning evaluation and establishment of institutes, research and development centers, and graduate and

undergraduate programs, the University Administrative Board makes decisions about day-to-day administrative activities.

Administrative management decisions, regarding **public relations**, **student affairs, health services, community services, cultural affairs, physical resources and budgeting** are made by the responsible Vice Rector or Assistant to Rector and/or Secretary General and approved by the Rector. The decisions are implemented by the central administrative offices. Some examples are given below*:*

First and foremost care is devoted to continuous and systematic promotion of the University to attract high quality undergraduate students. The Public Relations Office under one of Assistants to the Rector, in coordination with a committee especially set up for this purpose, participates in national fairs and organizes departmental promotion programs designed for high school students providing them with basic information concerning professions.

The Registrar's Office, reports to one of the Assistants to the Rector and deals with all student-related administrative issues. The great majority of the procedures are automated through a Student Affairs Information System that allows students to register for courses and review their grade reports, and allows instructors to submit grades through the Internet.

The Student Clubs, under the responsibility of the Office of Cultural Affairs and the Office of Health, Culture and Sports, organize various cultural and artistic activities throughout the year. These activities are carried out under the control of an academic advisor and supervised in accordance with the decisions of the executive boards of the Clubs **(Appendix 19)**.

A special committee organizes fund raising activities for scholarships for students with financial difficulties. Approximately 4,000 undergraduate students benefit from the financial support provided by METU sources and institutions outside the University. Furthermore, METU provides scholarships to students with outstanding academic performance (**Appendix 5**).

A multi-disciplinary standing Library Committee of academics is designed to reflect the needs of university users in the development of library services and collections. The University Library and Documentation Center is undergoing a major change, as a formal and comprehensive strategic management and performance budgeting system is being implemented for the first time in the University. In addition, the METU Library has a leading role in the establishment of a successful national consortium of university libraries, ANKOS (Anatolian Libraries Consortium) (**Appendix 7**). Similar to the practices of the Library Committee, the multi-disciplinary Computing and Informatics Committee, develops strategies and policies, and approves annual investment budgets regarding the University computing and communication infrastructure (**Appendix 8**).

The Directorate of Construction and Technical Works and the offices that are related to the duties concerning the campus and infrastructure support are in charge of the management, maintenance and construction of physical resources and are responsible to the General Secretariat. The Directorate of Construction and Technical Works provides architectural, interior and engineering designs, and estimation and management services for all projects. It is also the duty of this Office to manage the coordination of new constructions as well as projects involving certain space-based

changes in the University. Planning of the major projects and funding considerations are carried out by the Rector's Office.

In the domain of Community Services, METU has a vast number of activities at all levels of the university, under foundations, associations and committees. Among them, the most important ones are rehabilitation activities after the devastating 1999 earthquake, organization of disaster management in co-operation with local governments, establishment of primary and secondary schools, and provision of equipment and books to primary schools in rural areas.

Decision Making Processes for University Budget Proposal Development and Budget Allocation

The annual annexed budget proposal is compiled by the Rector's Office and approved by the University Administrative Board, following the procedure summarized below:

- The University utilizes an equation for each line-item in the other current expenses budget proposal. The formulae, which were developed by an interfaculty Budget Committee, are devised by using criteria such as number of students and faculty members and special needs of different units.

- The Rector's Office prepares the infrastructure budget proposal, which incorporates construction, large-scale repair and maintenance. The priority-ranking of each infrastructure project is negotiated between the Rector's Office and the concerned units. Moreover, each year academic and administrative units submit and negotiate with the Rector's Office, their proposals for specific sub-items in the current expenses budget proposal, as well as any anticipated activity that will require resources beyond what the preset criteria would provide.

- The annual funds allocated by the government usually fall short of the proposed budget figures. The distribution of the approved current expenses budget to the academic units is adjusted by the Rector's Office to reflect the proportions suggested by the formulae used in preparing the original proposal. Both the budget proposal and the final allocation of the approved budget funds must be approved by the University Administrative Board. Due to the reluctance of the Ministry of Finance to approve substantive changes in the line-distribution of the budget from one year to the next, the current expenses budget is slow to respond to the changing needs and priorities of the University. The University has higher discretion in transferring funds among infrastructure projects, once the State Planning Organization approves the budget.

- Faculties and graduate schools receive 3% of the budget of contract research projects carried out by their faculty as discretionary funds, while 10% is allocated to research funds. Moreover, a very substantive part of the share at the disposal of the Rector's Office (5%) is again allocated to faculties and graduate schools to finance travel expenses of their faculty members. The remaining part of the share of the Rector's Office is used to meet the needs of the administrative units or the common university infrastructure.

- The student tuitions, rental fees and other revenues, administered by the "Student Social Services Accountancy (SSSA)" provide more substantial funds left to the discretion of the faculties and graduate schools to meet their machinery and equipment needs, as well as providing considerable support for the information services of the University. Moreover, the University has more leeway in allocating the SSSA funds in line with its priorities, such as subsidizing student dormitories and food services, and bolstering student scholarships and financial aid.

- The METU Development Foundation has greatly helped in generating the funds for and managing some of the University's strategic projects, such as on-campus faculty housing, dormitories (**Appendix 6**), METU-Technopolis, as well as providing financial support for research.
- The University has no control over salaries.

3.1.2 Long Term Development Decisions

The first comprehensive study to set forth the strategies of the University was prepared for the 1995-2000 period and has been updated to cover the 2000-2005 period (**Appendix 3**). However, these studies are not complemented by strategic and operational plans. Academic and administrative units do not have long term plans beyond annual budgets. This is caused partly by the turbulence in METU's environment, and partly by the "informal" management traditions and practices.

METU has relied extensively on informal communication channels and face-to-face interaction which have provided the departments and faculties with almost complete freedom on academic issues, as well as considerable discretion in resource allocation. The fact that the Rector is elected by the faculty, provides legitimacy and support to the Rector as the main strategist and agent of change. The Rector's Office has been able to initiate and carry to completion very substantive changes in the University (e.g., academic promotion system, and overhaul of curricula designs). The process is usually lengthy with iterations and negotiations at different levels, and involves active participation of the faculty and academic administrators.

Some of the major decisions with long term and far-reaching impact on METU, such as the establishment of the Faculty of Education, the Vocational School, and METU Northern Cyprus Campus, have been initiated externally. On the other hand, major choices, such as reducing undergraduate enrollment in favor of graduate enrollment, decreasing undergraduate quotas of "less demanded" departments and increasing quotas of "more demanded" departments, have developed internally. Moreover, METU has pioneered in introducing several major innovations, e.g., non-thesis master programs, abolition of divisions within departments, thereby influencing improvements in the higher education system by working closely with HEC and other universities.

3.1.3 Data Collection Mechanisms

The data collection and reporting activities at METU may be classified into three groups:

1. Automated data collection and reporting: The accounts of the University are fully automated to allow real-time data updating and reporting. Transaction data and reports are accessible to all academic and administrative units through the Intranet.

An automation process is underway in the Human Resources Directorate utilizing the Oracle integrated package.

2. Periodic data collection and review: The University collects data and compiles reports periodically to include:
- Annual Progress Reports of academic and administrative units
- METU Annual Progress Report
- Academic Staff Performance Data
- Student Evaluation Surveys of courses and instructors on a semester basis

3. Aperiodic/unstructured data collection and feedback: In addition to daily informal face-to-face contact among the staff, the University maintains several general and specialized e-mail lists and groups on the Internet that are very intensively used by the faculty and administrative staff. These groups allow staff to share their observations, opinions, and requests or to air complaints about a wide range of issues from physical amenities and university promotion criteria to a new world order.

There are intermittent activities undertaken by the University or subunits to obtain data and feedback from the external environment. They include:
- Annual or semi-annual meetings with the Alumni Associations with the participation of the Rector and Vice Rectors
- Surveys conducted by the Career Planning Office to elicit opinions and suggestions from industry regarding METU programs and graduates
- Surveys carried out by the academic units to get feedback from alumni and industry as a part of curriculum review and development activities
- Contact with alumni through e-mail groups

However, as the University does not have a comprehensive and structured system of performance criteria, data collection and reporting mechanisms do not form a coherent and integrated framework.

3.1.4. Strengths and Weaknesses in METU's Strategic Decision Making

During the transition from the growth to the maturity phase, the informal information channels which flourished in the METU culture, have started to lose their effectiveness. Furthermore, the various rules and regulations accentuating centralization disturb the participative approach which has been a major strength of METU.

Currently, the University is overgrown with informal mechanisms to reestablish the articulation of vision, mission, and related objectives of the University, as well as mechanisms for strategic analysis, strategy formulation, and implementation. The absence of plans and criteria for efficiency and effectiveness measurement are the major weaknesses of METU, leading to a lack of coordination between the academic and administrative units. In order to compensate for this deficiency, ad hoc data collection, and information circulation and dissemination processes are employed for adapting the environment.

3.2 Specific Policies

3.2.1 METU Career Planning Center

The METU Career Planning Center is the first of its kind established in Turkey and has led the way to the creation of similar centers in other Turkish universities. Owing to close communication ties and good relations with companies, along with activities such as the "career days" and organization of career fairs, each year it has provided more than half of its graduates with employment opportunities. Every five years, the Career Planning Center conducts an extensive survey on the performance of METU graduates, by means of questionnaires addressed to the companies which employ them. The survey in 1998 resulted in the addition of further English and writing skills courses to the curriculum and the introduction of a long-term summer practice program (COOP) in some departments. The Alumni Office that works under the Career Planning Center strives to contribute to the opening of fresh job opportunities for new graduates and to collect donations for the university by maintaining close contacts with METU graduates,

especially with those who have been successful in business life. The Alumni Office also collects feedback from the meetings held frequently with alumni associations in 12 provinces of Turkey and is in continuous contact with 10 alumni organizations in 7 countries abroad.

3.2.2 The Balance Between Undergraduate/ Graduate/Continuing Education

The University has a target of keeping the undergraduate enrollment at the level of 12,000 and increasing the graduate enrollment to about 5,500 by the year 2005, yielding a graduate student body of 27% at METU **(Appendix 20)**. For this purpose, new and interdisciplinary programs in the graduate schools are encouraged, with special attention devoted to on-line graduate programs. Furthermore, around 200 research assistants, employed in the cadres of the developing universities, do their PhD studies at METU, with an obligatory agreement to serve in their universities subsequent to the completion of their studies at the university.

3.2.3 Internationalization of Education

METU was established as an international university to provide technical human resources for the Middle East region by means of its highly qualified staff mostly holding PhD degrees from well-recognized universities abroad. Up to the 90s, international students accounted for 7-8% of the total enrollment. However, in recent years, a decline in the number of international students has been observed.

METU has 94 collaboration and exchange agreements with institutions in 36 countries (**Appendix 10**). Furthermore, since 1993 exchange students have been accepted and also sent from Turkey. An International Summer School and preparations for a Diploma Supplement and the European Credit Transfer System (ECTS) within the framework of the Erasmus Program have been launched to increase the student exchange rate.

During 2001, intensive efforts have been spent to develop joint programs with the State University of New York (SUNY). It is foreseen that students participating in these programs will be able to take the courses offered in these programs during the summer months at relevant SUNY campuses and that some courses will be taken via distance education.

The METU Northern Cyprus Campus, expected to accept students at the beginning of the 2003-2004 academic year, will also contribute to the internationalization of the university.

To increase the number of international students, both on the main and Northern Cyprus campuses, more emphasis will be given to the promotion of METU in the coming years, by increasing the amount and types of materials to be sent abroad, participating in international education fairs, and establishing stronger ties with Turkish embassies and organizations outside Turkey.

As Turkey is planning to participate in European Union Education and Youth Programs in 2003, an Office of EU Affairs was set up in October 2000. The aim of the Office is
- to keep close track of innovations and changes in the EU education programs (Socrates, Leonardo and Youth),
- to give technical support to the faculty to enable their participation in EU projects both at the planning stage and when ready to be implemented as a whole or in parts,

- to be in touch with the relevant EU institutions and joint foundations that are influential in the relations between Turkey and the Member States.

However, the Office is confronted with some obstacles in realizing these aims: the Turkish National Agency, which is expected to play a leading role in establishing the ties with the EU as an official body, has been set up very recently and has not yet fully completed its infrastructure. Furthermore, a lack of interest among some academicians in conducting joint research or projects with the Member States is a hurdle yet to be overcome.

3.2.4 Application of ICT to Education, Research, Administration and Information Services

METU started building up a computing capacity for education and research, and the automation of the financial and administrative activities as early as 1970, with the establishment of the Computer Center. Since then, advances in information technologies are continuously incorporated to construct and link the building blocks of the ICT in an iterative manner. Currently, the information systems covering student affairs, accounting, resources management, library, online grading and registration are important modules of the ICT at METU. Although the systems provide some means of obtaining information, there is no systematic effort to improve the information required for strategic management.

The computing power for activities concerning research and education is decentralized through the local area networks on the campus.

3.3 Quality Assurance

Quality of education and research is monitored at the university and faculty administration levels by using the following tools:

1. Student Evaluation Questionnaires, which are filled out by the students for each course at the end of each semester, are taken into consideration for promotions and awards.
2. Faculty Performance Assessment Questionnaires are filled out by the faculty to indicate their education, research and administrative performance. The data are kept confidential. However, it is used in preparing the Yearly Activity Report of the University.
3. METU has its own set of Criteria for Promotion (**Appendix 15)**, devised by the University Administrative Board. Juries are formed to review the academic promotions of the faculty.

The high demand for METU programs is considered to be an indicator of the quality of education. Although the Career Planning Center and departments conduct alumni surveys, satisfactory comprehensive feedback could not be gathered so far about the short-term and long-term success of METU graduates in the labor market, or about the appropriateness of curricula in general.

The quality of educational programs is monitored and procedures for departmental improvement proceedings are planned by the departments. The Education Committee evaluates departmental proposals for new courses and for changes in curricula. The Committee typically lacks a systematic analysis of targets versus achievements and may be too involved in short term problems and resolutions. The coordination among

different faculties or schools is a major quality problem that has not been yet effectively solved.

Research Centers monitor their own research performance. Although the University upper administration promotes quality research, it does not play an active role in monitoring the quality and taking corrective action against poor performance.

Support services such as computing facilities and the library write annual activity reports and present these orally to the University upper administration. For the time being, complaints from these services are taken as indicators of quality.

The present informal quality assurance system implicitly results in a high success rate in education and maintains the academic quality of the faculty. However, evaluation of research quality and monitoring the performance of research centers are not structured. Availability of international funds as a natural outcome of the preparation period for accession to the European Union is expected to guide the procedures to monitor research quality.

Although there are various boards and committees to assist Chairpersons, Directors, Deans and the Rector by discussing the quality of education and research, there is no attempt to assure the effectiveness and efficiency of the support services given at METU. Also, the students are not involved in any phase of decision-taking and implementation.

During the ABET accreditation process, most departments in the Faculty of Engineering defined a set of measurement and assessment processes in order to evaluate the effectiveness and outcomes of their curricula. A similar effort is needed in other academic units of the University, not only with regard to education but also to activities concerning research and administration.

Creating feedback loops to incorporate student evaluation has not been systematized. The student questionnaires are mostly used to evaluate the teaching quality of academic staff. To summarize, quality monitoring is a common problem at different stages. A qualitative evaluation system that matches the long-term plans and evaluates target-based achievements would be a great contribution to the quality assurance of the university.

3.4 Management of Change

The management of change is realized through both top-down and bottom-up approaches at METU. The major top-down change agent is the Rector himself together with Vice Rectors and Assistants to Rector. However, he has a limited power in strategic changes related to budget allocation, personnel policies, and large investments, due to constraints imposed by the Higher Education Law.

Bottom-up change processes which are essentially related to the changes in curriculum and course conduct are initiated in the Department Academic Boards at the lowest level. The suggestions for change in curricula are submitted to and approved by the Faculty Board. The departments are quite autonomous in managing the changes related to academic and administrative issues, as long as they are consistent with the general strategies and policies of the University. The major change agent at the bottom-up level is the department chairperson.

The imposed increase in the student numbers results in an ad hoc expansion in the infrastructure and personnel of the University. The current size and capacity of the University necessitate the design of a thorough quality assurance and change management mechanism.

To overcome the major weaknesses in change management, METU is launching a process of redefining its mission, objectives, and strategy setting and selection mechanisms. This process is intended to be dynamic, self-enhancing, bottom-up, and participative as in the initial planned growth era of the University, nevertheless it will be reinforced with formal feedback and corrective mechanisms.

The statement of 2000-2005 METU Development Targets and Strategies is intended to be the starting point of the new strategic policy making process, rather than a final declaration of the University's mission, related goals, objectives, and strategies. The strategic policy making process is envisaged to take its momentum from self-assessment by departments, faculties, institutions and centers of the University, which involves the following steps:

To start with, each academic unit questions the reason for its existence, that is, what its mission is, what its goals and objectives are, how it is to achieve these, how much its objectives differ from those of its competitors, who its stakeholders are, what its expectations are. In the forthcoming stages of the process, the academic and administrative units assess how their goals, objectives and strategies relate with and integrate into that of the University. Then if need be, amendments are made and necessary measures are taken by individual units to achieve their objectives. During the following stage, each strategic unit develops the criteria and measures to initiate the self-assessment process. Finally, administrators of each strategic unit, having questioned the results of the self-assessment, choose its individual strategy and facilitate the corrective action.

At the end of every cycle of performance measurement, estimated to take 2 years, a new cycle will be triggered whose starting point will be the assessment results of the previous cycle. With the help of this process, every aspect of the units will be questioned, based on the results of the previous cycle, and the required changes will be made. Thus, it is intended to serve as a kind of learning system which improves and renews itself with what has been learned, encouraging full participation and consensus of the major stakeholders.

4. CHALLENGES AND OPPORTUNITIES

In order to maintain sufficient detail conducive to policy generation and specific action, the confrontation matrices provided in **Appendix 18** were created in connection with specific higher-level objectives of the University. While the SWOT items included in these matrices comprise an extensive list, certain headings emerge as underlying or common factors.

The major assets that distinguish METU, and serve as its sources of **strength** appear to be:
- The "METU image", referring to the reputation and trust inspired in, and support received from the society as a high-quality, dependable, and principled institution with a pioneering role;

- Its qualified faculty of international caliber, demonstrating a high degree of institutional commitment;
- A select graduate and especially undergraduate student body;
- An organizational culture that is quality-oriented, tolerant, and supportive of self-actualization, cognizant of developments, and open to change;
- Strong international contacts in several teaching and research networks, English as the medium of instruction, and reputation as a prominent regional university with internationally accredited programs and world-class graduates;
- Its land area and building stock, as well as the wealth of social and cultural amenities provided on the campus;
- Its laboratories, ICT infrastructure, and library facilities sufficient for teaching and most research needs;
- A leading position in contract research, university-industry collaboration including METU Incubation Center and METU-Technopolis.

The **weaknesses** that encumber METU are attributed to:
- Insufficient state funds to support the existing infrastructure and research needs;
- Being a state university subject to a legal framework that constrains METU's ability to generate and use resources effectively;
- Aging faculty and weakening administrative staff caused by low salaries making it difficult to retain the qualified human resources or to attract equally qualified new staff;
- Worsening personal finances of University personnel, creating motivation problems, and a push for revenue-generating activities that compete for faculty time and energy available for research and teaching;
- An organizational tradition emphasizing undergraduate education and lack of mechanisms to prioritize research and graduate education;

The SWOT analysis identifies a set of **opportunities** that may benefit METU in fulfilling its mission:
- Growing demand in Turkey and abroad for highly qualified graduates;
- Increasing need for graduate-level education brought about by the demand for faculty members in the newly-established Turkish universities;
- Recent steps taken in national politics to provide more support to the education sector and empower state universities to a larger extent in financial management and administrative issues;
- Advances in IC technologies;
- Rising interest in Turkish industry to collaborate with universities and support R&D activities;
- Recent international events emphasizing Turkey's regional and international position and attributing new roles;
- Strengthening international academic/scientific networks and collaborative mechanisms, notably those involving European countries.

A sizeable list of **threats** were also identified by the SWOT analysis:
- Frequent fiscal/economic crises depriving the University of the funds needed to keep up with the demands of up-to-date research and teaching;
- Increased competition from universities abroad primarily for qualified graduate students and researchers;

- Inaction by the authorities to improve salaries of METU personnel to result in continued and even accelerating "aging" and erosion in qualified academic and administrative personnel **(Appendix 21)**;
- Isolationist tendencies in the national political arena and uncertainties in Turkey's international relations;
- Uncertainty in state priorities and policies regarding higher education in general, and R&D in particular;
- Increasing competition in Turkey for qualified students, academic and administrative personnel and research funds with the emergence of private universities;
- Uncertain nature of R&D demand of Turkish industry;
- Difficulty in attracting sufficient numbers of qualified graduate students to support the demanding graduate programs (especially PhD programs) METU offers

The findings of the SWOT analysis point to a set of high-priority **challenges** for the University:
- **Improving personal financial means of University staff:** The University has indirectly contributed to the personal finances of its staff by constructing housing for faculty and administrative personnel, maintaining contacts with the government and campaigning in mass media for increased salaries for state university personnel, and providing merit awards and supporting faculty publications.
- **Increasing the financial resources of the University in general:** The University has maintained and tried to strengthen its contacts with the state agencies for increased funding, expand METU Development Foundation companies and investments to provide constant flow of revenue for the University, develop alumni fund-raising campaigns, establish collaboration or alliances with organizations at home and abroad to procure research and infrastructure funds, expand continuing education and evening degree programs to support tuition receipts, and contract research activity under the Revolving Fund.
- **Advocacy and support for change in the legal framework to empower the University:** METU has played a leading role in bringing the problems of state universities to the attention of the government, parliamentarians, and high level bureaucrats; organized public relations campaigns and media appearances, and established alliances with other state universities to advocate the necessary legal changes, and actively participated in preparation of some key legislative amendments.
- **Improving collaboration with industry to support R&D activities:** The mission of METU calls for more effective collaboration with the key sector in the economy to further improve its current cooperative agreements for joint research, METU-Technopolis, revolving fund, and special purpose training and degree programs.
- **Increasing the input of qualified undergraduate and graduate students:** Continued promotion efforts aimed at high school graduates, as well as scholarship and accommodation for qualified students, and cooperation with state universities in the area of graduate education appear essential for realizing METU's objectives.

It is in this light that the five high-priority objectives of the 2000-2005 period, as explained in "Section 2.1 Mission Of METU", embody clusters of projects to meet the above-mentioned challenges.

As seen from this brief exposé, METU has been proactive to a large extent in formulating conscious strategies to respond to the threats and opportunities in its environment. Hence, in strategic management parlance, METU has displayed

leadership skills to **adapt** to the rapidly changing conditions in its environment, and actively participate in efforts to modify its legal environment. However, the University does not have a formal and structured "strategy formulation and review" procedure; traditionally, the process, governed by the Rector, is mostly informal, judgmental, and at times fragmented. Formal procedures of strategy formulation and review, such as environmental scanning, strategic needs assessment, and strategy audit are not commonly utilized.

Moreover, the "strategy documents" specifying university-wide mission(s), objectives, and high priority projects, are not translated into formal and explicit university-wide administrative- and operational-level plans. The University does not produce comprehensive and formal plans to coordinate and mobilize its financial, human, and physical resources in line with the University objectives formulated. This is due, in part, to the "informal" and "negotiation-oriented" management culture at METU, and also to administrative- and operational-level "inertia" caused by inflexible administrative structure dictated by the legal framework, scarcity of strategic resources and discretionary funds available to University administration, and traditional METU culture which emphasizes consensus and gives large degrees of autonomy to academic units. Academic and administrative units do not have formal and communicated plans, save for annual budgets that conform to the guidelines indicated by the University-wide objectives. Hence, again in strategic management parlance, there is a need for management skills and formal tools to better communicate and coordinate, that is to **integrate**, the priorities, resource allocation decisions, and activities of academic and administrative units within the University.

It is, thus, a management challenge to implant a coherent strategic management model and develop an effective system of unit- and University-wide strategic plans. It is anticipated that such a model will improve rationality, transparency and accountability, as well as providing a medium for effective communication and participation in the decision-making processes. While periodic documents, such as the METU Annual Progress Report, are already being compiled to reflect institutional performance in terms of the most generic performance criteria, it is only by means of coherent and communicated strategic plans that a consistent and comprehensive system of performance criteria may be developed to measure efficiency, effectiveness, and productivity. Such systematic performance measurement and evaluation will provide the necessary feedback for (strategic) resource allocation decisions, as well as serving as a sound basis for modifications needed at the strategic, administrative and operational levels.

This transition, as it requires organizational learning, will inevitably take time. Self Assessment Committees (SEC) will provide the important first step to assess the strategic needs and formulate the strategic priorities of academic units. Moreover, the experience obtained from the strategic management and performance budgeting pilot implementation at the METU Library will contribute to this learning process. The challenge, then, facing METU is to design and manage the process of moving from a large organization with centralized strategic decision-making and informal integration mechanisms to a more adaptive university with mutual goal setting by it units, integrated more effectively around the institutional mission and objectives.

APPENDICES
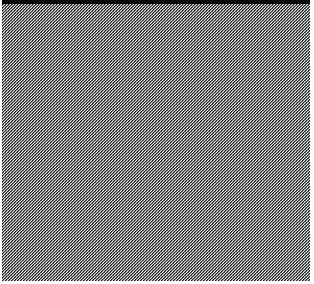
APPENDICES

APPENDIX

1

**APPENDIX 1
UNIVERSITY SELF EVALUATION COMMITTEE**

UNIVERSITY SELF EVALUATION COMMITTEE

1. Ahmet Acar / Vice Rector
2. Nezih Güven / Assistant to Rector
3. Fatoş T. Yarman-Vural / Assistant to Rector
4. Metin Durgut
5. Metin Ger
6. Nesim Erkip
7. Çiğdem Erbuğ
8. Erol Sayın
9. Gülser Köksal
10. Sibel Güven
11. Özlem Öz

APPENDIX 2
METU'S MISSION AND GUIDING PRINCIPLES

MISSION STATEMENT

The Middle East Technical University is devoted to the pursuit and application of knowledge for the social, cultural, economic, scientific and technological development of our society and humankind through achievements in teaching, research and community service that are of highest international standards.

GUIDING PRINCIPLES

1. The University strives to be a university of the first rank in an international context. To this end, the University seeks to be a dynamic institution aiming at excellence that will attract both the best teaching and research staff and the highest quality students.

2. The University hopes to create an environment where inquiry and scholarship can flourish, where heterodoxy is not suppressed and where creativity can find expression. Its goal is excellence in all faces of university life; teaching, research, administration and the interface with the community.

3. The University accepts unreservedly that a fundamental part of a university's scholarship mission should be a strong research component and orientation to add to and improve understanding of existing knowledge; to this end the University opposes any form of censorship, which prejudices fundamental research and scholarship.

4. The University encourages each faculty, department and the administration to plan forward and establish specific strategies for the years ahead so that the Middle East Technical University of the future will not merely be the projection of its past but will be in tune with and reflect the changing environment in which it functions. To this end, the University, recognizing that there are physical and other constraints on its growth, endeavors, without being restrictive, to control and contain its rate of overall growth with appropriate adjustments to the balance between faculties and departments so as to ensure the highest standards.

5. The University is dedicated to the fundamental concept of academic freedom, which is essential to ensure high standards of teaching and research; is necessary to counter fear of heterodox thought and ideas in the continuous search for truth; accepts as vital the right to determine, on academic grounds, who may teach, who may be taught, what may be taught and how it should be taught; thrives best in a society which encourages frank questioning and inquiry as well as legitimate protest; a society where those who exercise these rights are protected by the rule of law.

6. The University seeks to ensure that no student is deprived of the right to receive higher education due to financial difficulties.

7. The University, recognizing that explicit consultation and accountability mechanisms are essential for just and efficient governance, encourages a high degree of staff and student involvement in its affairs.

8. The University is dedicated to instill in students an appreciation for human and ethical values, vision and training that will prepare them for lifetime learning and leadership.

9. The University wishes to function in intimate contact with and to contribute to its environment. The issues that concern Turkey, Middle East, Mediterranean and the international community are of concern to the University as part of that environment.

10. The University encourages in all its members and in society those attitudes of understanding, tolerance, and respect for others which are essential for the attainment of peace and justice.

APPENDIX

3

APPENDIX 3
METU
2000-2005
DEVELOPMENT TARGETS AND STRATEGIES

MAIN PROJECTS

1. Consolidation of METU as a Research University of International Recognition: The University aims to be a dynamic institution seeking excellence in an international context. To this end, it strives to attain the required status by attracting the best teaching and research staff and the highest quality students as well as providing best service with the contribution of its highly qualified administrative and academic staff.

2. Academic Human Resources Development: The University gives priority to research by encouraging its student body to enroll in graduate and especially PhD programs, where graduate and PhD theses are expected to be as interdisciplinary as possible, based on national and international projects, with the ultimate goal of offering solutions to the problems of the society and humankind and filling the gap for scientists.

3. METU-Technopolis and Incubation Center (TEKMER): The University strives to form a research structure integrated with the regional and external sectors and to take measures for the development of METU-Technopolis and the Incubation Center. The University aspires to contribute to the technological innovations and productions by directing graduate and PhD theses towards METU-Technopolis and the Incubation Center and to establish a healthy and productive structural relation between the University and these two centers.

4. Distance Education: METU intends to initiate various degree and certificate programs using distance learning methods based on the Internet. The University is ready to assume a leading role in national and international activities in this area and to develop joint distance education programs through cooperation with national and international bodies.

5. METU Northern Cyprus Campus: The University aims at developing the METU Northern Cyprus Campus on a sound structure, setting up academic programs and discuss various administrative and academic matters in detail with the participation of the entire faculty. The University wishes to maintain these in close contact between Turkey and the Northern Cyprus.

MAIN TARGETS AND STRATEGIES

1. RESEARCH

The basic aim of research carried out at METU is to contribute to science at both national and international levels and to offer solutions to technological, economic and social problems. To this end, to provide research and education in a balanced way, taking into account the diversity in various fields at METU and supporting research and publications in areas that need betterment and recovery in Turkey constitute the basis of this strategy.

The targets and strategies to achieve the above mentioned aim are as follows:

1.1 TO DEVELOP R&D ENVIRONMENT

- **To form the University research inventory**
    - By formulating project inventories and interest areas of the faculty within scope of national and international research, by way of defining the strong and weak areas and accordingly coming up with improvement mechanisms.
    - By preparing a catalogue involving information on the areas of interest of the faculty and projects carried out at METU and by publicizing this catalogue on the Internet

- **To advance access to research funds and to use them efficiently**

- By informing the university faculty on national and international research programs and available funds to increase applications to national and international research programs and to enable them to benefit from the funds in the best way possible.
- By focusing on project groups such as the State Planning Organization and the Turkish Scientific and Technological Research Council at home and EUREKA and EUMEDIS abroad and by providing the impartial distribution of such projects.
- By accelerating the practices promoting the research potential of the University
- By setting up mechanisms providing support for the faculty wishing to prepare research proposals

- **To improve the methods applied for the evaluation of applications and progress reports in order to use of research funds efficiently**
- **To form effective and efficient project development structures in the units established to carry out interdisciplinary research**
    - By defining long, medium and short term targets and strategies of the research and implementation centers and working on action plans to achieve them
    - By creating resource through the use of knowledge and technology produced and by supporting the use of it to boost the research potential of the University
    - By encouraging the academicians to participate in the organization and supervision of projects at research centers and by establishing mechanisms to create resources for research projects

- **To adopt and encourage the widespread use of research culture**
    - By preparing documents providing research support to graduate students
    - By creating an environment for discussion on scientific targets and goals of undergraduate, graduate and PhD programs in the faculties, departments and centers at METU
    - By increasing the number of observers present at thesis presentations and juries
    - By increasing the number of research seminars organized both within the University and outside
    - By creating funds to invite speakers and getting the support of the industry

- **To set up a unit where research will be carried out on patent and intellectual property ownership rights to be obtained as an end result of the research carried out at the University**
    - By informing the faculty and graduate students with the help of this unit about their rights concerning the issues on patent and intellectual property ownership to be obtained through research done at METU
    - By providing support for graduate students on their entrepreneurial activities through which they can have a chance to shape up their future for the years ahead.

1.2 TO STRENGTHEN UNIVERSITY-PUBLIC INSTITUTIONS-INDUSTRY RELATIONS BY FOCUSING ON R&D

- **To aim at high-level attempts to develop the relations between university, public institutions and industry**
- **To promote the establishment of field committees on a sectoral basis and increase the invitations and visits from industry**
  - o By following the current trends in industry and by promoting the projects and theses carried out at the University.
  - o By motivating the faculty working in the centers and committees with incentives such as overtime and promotion possibilities.
  - o By arranging means for these academicians to benefit from the University facilities, such as transportation and accommodation to promote the University-industry relation.

- **To search for resources to be used in the establishment of new laboratories and centers in basic scientific research**
  - o By striving for the foundation of research units for natural and social science research within the University premises to answer the R&D needs of the public institutions with some contribution from these institutions
  - o By supporting natural and social sciences in an efficient way through research funds

- **To organize activities to persuade the industry to invest at the University for the purpose of supporting innovations**
  - o By maintaining the effort to establish institutes, centers and laboratories with the support of public and private sector enterprises
  - o By developing models to increase the R&D projects
  - o By supporting the public and private sector enterprises in defining their research needs in various disciplines and by developing means to this end
  - o By defining a co-operation with the public sector and industry following the formulation of the departments' individual methods.

- **To prepare short and long term plans to supply the academic units with laboratory and research tools and instruments equipped with present-day technology**
- **To make improvements in the current revolving fund regulations.**
  - o By searching for possibilities of changes in the legal procedures to encourage the University faculty to participate in research projects
  - o By suggesting ways of improving the regulations by reviewing the regulations in effect
  - o By reducing the University share in research projects
  - o By proposing a new structure in which all departments benefit from the revolving fund (Currently School of Foreign Languages, for instance, does not)

- **To promote the Incubation Center (TEKMER) and to strengthen its relations with the University**
- **To attract national, international and multi-national R&D institutions to the University campus within the METU-Technopolis framework**

- By making arrangements in the regulations on the personal rights of the faculty as employees that will encourage their investment in industry and service sectors through the METU-Technopolis activities

- **To provide the development of METU-Technopolis in a planned and organized way**
- **To make regulations aiming at the enhancement of the present structure and relations between METU-Technopolis firms and the faculty**
- **To contribute to the design, innovation and technology production required to carry out various national and international projects through METU-Technopolis**
- **To strive for the legal frame of allowing the faculty spend their 7th year leave (sabbatical) at industry or service sectors, within the framework of the development strategies of their departments as this will help develop technology and in this way intensify the university-industry relations**
- **To initiate projects for the intensive use of Central Laboratories by industry**
- **To encourage the preparation of graduate and PhD theses at METU-Technopolis and the Incubation Center**
- **To strive to persuade the foundation companies to support the R&D activities in the universities**
  - By ensuring the professionalism demanded for the realization of large-scaled projects by the foundation companies.
  - By clearly defining the procedures and principles to be applied when projects with foundation companies are carried out
  - By directing the current foundation companies towards R&D and establishing new foundation companies in the field of advanced technology

1.3 TO GIVE PRIORITY TO RESEARCH IN EDUCATION

- **To increase the number of institutes and research centers and improve their structures to carry out both educational and research activities**
  - By working on the setting up of a science center as a part of METU-Technopolis
  - By reshaping the university structure towards a research center-based institution
  - By organizing interdisciplinary work in the framework of institutes and research centers and by employing there staff who will be responsible only for research
  - By continuing the activities of the Research Fund Executive Board in a more effective and efficient way
  - By introducing an understanding which evaluates the activities of the faculty in the departments, centers and interdisciplinary activities as a whole
  - By defining the appointment and criteria promotion and interdisciplinary activities of the faculty

- **To adopt a structure promoting graduate and PhD studies and to open new graduate programs**
  - By redefining the student profiles, the need for new faculty and infrastructure to become a university with an emphasis on graduate study

- By formulating new regulations to enable the opening PhD programs following the completion of undergraduate programs in keeping with the framework of the current legal system. By doing this, to shift the research potential from graduate to PhD theses and to answer the qualified faculty need in Turkey, and to this end, initiate the work within the institutes themselves
- By inquiring the reasons for low rates of completion of graduate and PhD programs and by taking the necessary measures to increase efficiency
- Evaluating master's degrees as an 'intermediate degree' achieved in one or one and a half years as an increasing the number of programs to train experts in certain fields and by opening new graduate programs without thesis in these fields
- By giving priority to graduate and PhD studies by taking into consideration issues like the number of faculty, infrastructure of the departments, coherence between the programs and the level of students accepted to these programs, and efficiency of the departments
- By providing opportunities to students to do research within the framework of joint projects through protocols signed with universities and research institutions abroad
- By attracting qualified students and young researchers from abroad to carry out their graduate, PhD and post-doctoral studies at METU
- By increasing the number of graduate and PhD students with undergraduate degrees from other universities to be accepted to METU and by promoting an awareness and appreciation of the University among the graduates of other universities.
- By introducing evening programs in the fields where there is a high demand using the means of online education benefiting from the Internet, and by opening new interdisciplinary graduate programs in the light of the developments in Turkey and the world

1.4 TO INCREASE INTERNATIONAL RESEARCH ACTIVITIES

- **To increase the number of joint international research projects**
  - By encouraging various units of the university to participate in international research projects and by providing the faculty with the necessary support at the proposal, implementation and follow up stages

- **To increase the efforts abroad to promote the research potentials at METU**
  - By encouraging the faculty to inform their counterparts abroad of our university during their travels
  - By preparing brochures and CDs on research activities and research potential of the university and by continuously updating the web page of the University

- **To convince and persuade international research institutions to take part in METU-Technopolis**

2. EDUCATION

Middle East Technical University aims at bringing up highly qualified professional people. The targets and strategies follow in reaching this aim are as follows:

2.1 TO INCREASE THE QUALITY OF EDUCATION

- **To benefit from the new teaching models with their research and implementation possibilities**
  - o By introducing the student-centered education model offering opportunities for students to develop themselves and to shape up their education with their own initiative rather than making them passive recipients of information
  - o By encouraging the widespread application of student-centered teaching methods
  - o By considering theory together with research and practice in the education programs

- **To develop and encourage widespread us of the Internet-based long distance education models**
  - o By consulting the faculty from educational sciences while initiating new models
  - o By supporting comprehensive research and development projects on internet-based education
  - o By lecturing the students of other Turkish universities through this Internet based education
  - o By participating in distance education projects in EU member states and by developing joint international programs based on the Internet
  - o By initiating various degree and certificate programs through Internet-based education

- **To design detailed web sites for each individual course and to encourage the widespread formation of discussion groups where course contents, assignments and projects are addressed.**
  - o By assigning research assistants to achieve this goal, by establishing new units for web site design and if possible, by reducing the teaching load of the faculty participating in these units.

- **To develop new systems for the constant improvement of the education quality**
  - o By scheduling necessary regulations and updating quality assurance and quality evaluation methods developed by the departments in line with their vision
  - o By coordinating these methods throughout the university
  - o By giving priority to the evaluation of education programs of the University using the criteria of the existing international accreditation institutions
  - o By assuming a leading role in the setting up of a nationwide accreditation system.
  - o By taking part in the accreditation efforts in the EU for the recognition of diplomas received at METU in EU member states

- **To attract highly qualified undergraduate, graduate and PhD students to continue their education at METU**
  - o By giving priority to successful undergraduate, graduate and PhD students in accepting them to the dormitories and by finding new ways of creating scholarship opportunities for them
  - o By encouraging full-time education in the PhD programs

- **To develop an international student profile**
  - o By increasing the number of qualified international students in undergraduate and graduate programs
  - o By promoting the University abroad in order to attract the qualified students there.
  - o By promoting the facilities on the Main Campus and Northern Cyprus Campus to potential undergraduate students in the Middle East, Near East and North Africa

- **To have flexible and interdisciplinary education programs**
  - o By directing students to interdisciplinary, minor or major programs where they can shape their education taking the initiative themselves and by reducing the number of compulsory departmental courses
  - o By initiating interdisciplinary custom-designed courses and by supporting them from the university budget
  - o By designing interdisciplinary projects and laboratories and by providing the participation of international faculty and students in this kind of custom-designed courses

- **To update course materials frequently and to encourage the widespread use of books, CDs and package programs on visual aids and course contents**
- **To strive for the equipment of classes with the latest education technologies on the market**
- **To upgrade the computer software and hardware with the technological developments**
- **In addition to the written and oral expression skills of students in both Turkish and English, to improve their abilities in certain issues, such as teamwork and leadership**

2.2 TO STRENGTHEN EDUCATION BY INDUSTRY-UNIVERSITY COLLABORATION

- **To make summer practices more beneficial for both students and industry**
  - o By reorganizing the existing summer practice mechanisms by evaluating them at the departmental levels

- **To develop cooperative education programs with industry and business life in relevant departments at both undergraduate and graduate levels**
- **To constitute consultation bodies formed by those working in industry to develop programs at departmental levels, evaluate them and get feedback about them**
- **To arrange seminars, panels, congresses etc. by the departments under the coordination of Career Planning Center in order to familiarize the students with the sectors they can work in after graduation**
  - o In line with the formation received at METU, by introducing the national and international opportunities to our graduates and show various ways of establishing a business by making use of these opportunities in order to boost research and development in Turkey

- **During the graduate studies, to concentrate on technology production in technical areas, current problems in social sciences as well as on strategic and regional studies in their theses.**

- By preparing national and international projects during their thesis studies, by forming interdisciplinary teams and getting the help of centers and institutions
- By taking into consideration, the success of the faculty participating in such projects and by attributing due care to quality rather than quantity in determining promotion criteria.

- **To add a new dimension to the courses by inviting qualified people from industry and abroad capable of teaching and to organize conferences and seminars**
    - By taking measures in order to promote the lecturing and teaching of qualified experts from industry at the University on part-time basis with a satisfactory salary
    - By encouraging METU graduates to teach at the University in particular with the help of the METU alumni associations

2.3 STUDENT SUPPORT

- **To develop financial models to increase the efficiency and extracurricular activities of the students.**
    - By increasing the scholarship possibilities and by establishing new mechanisms to create new income sources to students by working at various units and research projects.

- **To strengthen the student-advisor communication**
    - By restructuring the student-advisor relationship that has lost its significance after the adoption of the online registration system in order to reactivate the relation between the two parties. To serve this purpose, to develop an efficient and working model of advisory system that will enable students to discuss all their academic problems and thus enhance their self-respect.
    - By taking over the responsibility of, as advisors, encouraging the students, to become scientists and assume a leading role in society.
    - By designing programs and preparing documents for the academicians to provide a more efficient and effective advisory system

- **To come up with ways to optimize the workload of both students and faculty in the arrangement of syllabuses.**
- **To increase the number of cultural, sports and art activities carried out by student clubs.**
    - By improving the infrastructure for cultural and sports events to include all students and provide the financial means for the human resources and the physical infrastructure needed to this end

- **To think of models that will encourage the initiation of a common denominator for the academic and social life of students.**
    - By supporting and rewarding the success of the students in cultural, arts and sports activities.
    - By organizing competitive projects supported by industry and favoring teamwork and research, and by supporting participation in national and international design projects.

- **To encourage student assistantship**
- **To encourage psychological guidance and counseling system**
- **To establish a Student Union for accelerating the student activities as well as answering their various needs and providing a home base for Student Clubs**
- **To benefit from the Student Clubs for the promotion of METU spirit, thus providing a strong link with the University after their graduation**
- **To increase the participation and support of the faculty in Student Clubs activities**
- **To allocate resources from the alumni, related national and international institutions and establishments for the cultural, social and sports activities**
- **To publicize the activities of Student Clubs by way of written media, radio and TV and with the joint efforts of our alumni associations.**
- **To support the national and international student congresses and the participation in them.**
- **To arrange University Olympics**
- **To encourage the organization of inter-university festivals (folk dances, plays, etc) on the University premises.**

3. FINANCIAL STRUCTURE

Middle East Technical University should provide the financial means for education and research in universal norms; ensure their continuation; use its funds in a rational way and parallel with the strategic plans and programs in education and research areas.

Hence, the University should develop activity criteria based on their cost effectiveness, a computer-aided follow-up system for the activities realized and build mechanisms both to check and modify the system.

Under the present laws and regulations in effect, it seems unrealistic to expect the achievement of all these objectives. Consequently, financial goals and strategies of METU should be examined under two headings:

3.1 WORK TO BE DONE UNDER PRESENT LAWS AND REGULATIONS:

- **To continue with the applications of the Budget-Planning Commission to maintain a balanced university budget draft on the basis of cost centers**
- **To abolish the subsidizing of services provided to students and support the needy students with the help of scholarship programs**
- **To allocate resources and establish new structures to reinforce the international relations in various research and education projects**
- **To work on possible ways to create new resources other than those included in the budget**
  - By allocating the premises, buildings and infrastructure of the university to be used to create new income sources in an ethical way and respecting the ecological norms
  - By trying to increase the income resulting from high quality service

- **To make the foundation companies of the University more powerful and through their work, provide support for various activities and needs of the University**

3.2 WORK TO BE DONE FOR AMENDMENTS IN LAWS AND REGULATIONS:

- **To restructure relationships with the Higher Education Council, Ministry of Finance and Court of Accounts with the implementation of new laws in a way to encourage international interaction.**
    - o By shifting to bulk budget practice, by re-identifying the cost centers, by setting up an inter-university system to follow up and check the expenditures
    - o By adopting a personnel policy enabling the rational use of the university's financial resources and by enabling the personnel expenses within the current budget system to be carried out also through the bulk budget
    - o By adopting a system where beneficiaries are expected to a reasonable amount of cost of education.
    - o By compensating the low salaries of both the academic and the administrative personnel and by formulating new means to increase the supplementary indicator of the university personnel
    - o By working on possibilities of a tax exemption for a certain percentage of the income from the revolving fund and by using the money received from the sources other than the budget in a flexible way and devising new methods of making the funds more profitable
    - o By reorganizing the appointment procedures of the administrative and academic personnel personal rights
    - o By considering the structure of our university directed towards the formation of international research oriented scientists, Higher Education Council should recognize some flexibility to the University regarding the programs in Faculty of Education

- **To develop a more flexible financial structure for METU to be able to accept international students and faculty**
    - o By enabling the upper administration to decide on the salaries of the visiting faculty and the fees received from international students
    - o By simplifying the procedures for the appointment and visas of visiting faculty from other countries

- **To devise laws and regulations related to the Northern Cyprus Campus in a way to direct METU towards becoming a high quality, international and research-centered university**

4. INTERNATIONAL RELATIONS:

In a globalizing world, the basic aim of METU in strengthening its international relations is to bolster its scientific background in education, science and research, contribute to universal science and be recognized on international platforms.
The main targets and strategies for achieving this basic aim are:

4.1 FACULTY AND STUDENT EXCHANGES:

- **To activate reciprocal international faculty exchange programs**
    - o By creating an awareness within the faculty that, the 7th year leave (sabbatical) is not only a right of the faculty but also is an opportunity for the professional evolution of the faculty
    - o By taking encouraging measures to the elite international faculty to spend their sabbatical leave at METU

- o By providing the non-Turkish faculty an opportunity for short-term lecturing in summer schools and contribute to the research conducted at METU

- **To increase the number of qualified visiting faculty**
  - o By supporting the highly-qualified faculty from abroad at our university (lecturing as adjunct professors) by providing funds, not only from the national budget, but also from programs like DOPROG, Fullbright etc. and institutions such as Association of Banks, Union of Insurance Companies etc.

- **To develop multilateral education programs**
  - o By taking part in the education programs of international universities leading to certificates, diplomas or degrees, by supporting the widespread application of such programs in Turkey and being a center of excellence among the Mediterranean and Black Sea universities

- **To make the student exchange programs more active**
  - o By actively participating in the education programs in EU such as Youth, Socrates and Leonardo
  - o By contributing to the establishment and management of the National Agency necessary for running the EU programs
  - o By using summer practice as a means for student exchange

- **To support international cultural activities**
- **To encourage the faculty to participate in international scientific meetings and organize international conferences and activities at the University**
- **To develop and encourage international summer schools and short term workshop programs**

4.2 FULL EU MEMBERSHIP PROCESS

- **To take a pioneering role in the research and scientific activities during the EU membership process**
  - o By establishing a mutual support and collaboration system in areas of education and research between METU and institutions such as TÜBİTAK and Secretariat General for European Union, that play an active role during the transition to full EU membership

- **To give priority to the EU education and research projects**
  - o By announcing the EU projects to the faculty and supplying support to those willing to join these projects

5. DEVELOPMENT OF HUMAN RESOURCES

The main aim of Middle East Technical University concerning its academic staff is to attract and accommodate the best educators and researchers and concerning its administrative staff is to provide all the possible services and support to help them run the university effectively and efficiently.

To achieve these, the necessary policies and strategies are:

5.1 QUALIFIED FACULTY AND ADMINISTRATIVE PERSONNEL

- **To take necessary measures to attract the qualified faculty and keep them at the university**
  - o By improving the possibilities of seed money for the young faculty to start their research, by giving additional support to the researchers from the University sources, by providing suitable on-campus accommodation and by accepting their children to its inexpensive day care centers and also to school on the campus premises

- **To increase the frequency and the scope of the in-service training programs devised for the administrative personnel**
  - o By giving in-service training to the administrative and technical personnel at all levels, by giving orientation seminars to the recently hired faculty and by organizing seminars to update the faculty on new methods in education.

- **To reward outstanding success in education and research**
  - o By encouraging the faculty involved in research with the establishment of a structure based on meritocracy

- **To appoint the retired qualified faculty or those who have left the University for other reasons to carry out research activities**
- **To give due consideration to the differences between disciplines in the appointments and promotions of the faculty**
  - o By coming up with a new understanding following the discussions in academic units and taking into account the targets and different disciplines in the appointment and promotion criteria of the faculty

- **To keep and evaluate the performance records of the faculty and administrative personnel at all levels at an electronic medium and implement a system based on performance**
  - o By constantly updating the performance evaluation system and by developing a similar system for both the faculty with administrative cadres and the actual administrative personnel

5.2 ACADEMIC HUMMAN RESOURCES DEVELEOPMENT PROGRAM

- **To improve the conditions for assistantship**
  - o By supplying the research assistants who have passed the proficiency exam with appropriate scholarships and opportunities under the guidance and approval of the university, to encourage research assistantship and PhD education
  - o By equipping the research assistants with more rights to let them benefit from the services and opportunities provided by the University

- **To keep the successful research assistants at METU as faculty, following the completion of their PhD studies**
  - o By providing national and international scholarship opportunities to METU PhD graduates, to continue with their post-graduate studies abroad and join the faculty at METU. By doing this, to prevent the unhealthy academic structure caused by inbreeding

- **To increase the attraction of being faculty**
  - By showing extra effort to attract the young graduates to METU, by tracing the students doing their PhD studies abroad and by recruiting them as faculty in the department, the department heads can contribute to the future of their departments

- **To make the supervision of research and PhD theses attractive**
  - By encouraging the research and supervision of PhD theses by rewarding such efforts
  - By trying to enforce legislative changes through Higher Education Council and Court of Accounts for the acceptance of supervising to PhD theses and lecturing in the evening programs as equal

- **To increase the quality and quantity of the research assistants of other universities selected to be trained as the prospective faculty for their universities in the framework of Article 35 and to take precautions to increase the success of these students**
  - By determining the problems of the research assistants continuing their PhD studies at METU in the framework of Article 35 and finding ways to promote their success

- **Taking into consideration the shortage of faculty in Turkish universities, to determine the total number of new registrations and total students numbers the Graduate Schools aim at accepting to the graduate and PhD programs each year**
  - By formulating necessary action plans to reach the pre-determined numbers by the Graduate Schools

- **To increase the possibilities of full time student and project assistantships for the graduate studies**
- **To broaden the application of student assistantship to include research studies, too**
- **To take precautions, at least for the first year, to meet the accommodation needs of the PhD students coming from the centers outside Ankara or those who are non-Turkish**

5.3 TO IMPROVE STANDARDS OF LIVING

- **To raise the standards of living of the personnel**
  - By continuing with the attempts to improve the education and research policies of the country to reach an acceptable level of standard of living for the faculty
  - By cooperating with the other universities to contact Higher Education Council and the Government, and find solutions to the problems of the faculty and administrative personnel of the University

- **To develop new models based on the research and development projects to provide financial sources for the faculty**
- **To increase the contribution of METU Foundations and related companies to the University**

- o By restructuring the foundation companies, to bring them to the level of leading companies of the country and to give support to the improvement of standards of living at the University

- **To raise health and cultural services to a more desirable level**
  - o By improving the health and cultural services to minimize the health expenses of the academic and administrative personnel and develop similar cost-effective methods

6. KNOWLEDGE-BASED ADMINISTRATION AND ORGANIZATION

The essential strategies to realize the administrative principles of METU based on transparency, democracy, participation, dynamism, accessibility and interaction with society and social solidarity are as follows:

- **To inform the faculty of the main activities and expenditures of the University through electronic mail**
- **To establish gradually a university information and administration system by using information technologies. To this end, to establish automation systems for the handling of the budget, personnel, student affairs, academic and administrative performance, to integrate these systems, do the necessary organizational changes and provide the required data and written reports through the use of a systematized data collection method**
- **To take an active role in the inter-university networks and to be a pioneer in the establishment of a national university network**
- **To review the organization of departmental structures, to encourage participation in the decision making process at the departmental level and to make the administrative cadre more attractive**

7. COMMUNICATION WITH SOCIETY

Middle East Technical University aims at maintaining the interaction among national and international education centers, associations, public institutions, industry and alumni in various areas and scientific, cultural and social issues and thus increasing the social solidarity

To achieve these following targets and strategies have been formulated:
- **To set up the Northern Cyprus Campus with a well planned infrastructure, qualified students accompanied by administrative and financial structures**
- **To go a step further and set up affiliated campuses in other countries after the successful completion of the Northern Cyprus Campus project**
- **To set up a Public Relations Center and arrange art courses and cultural and communication activities**
- **To build up better ties with the alumni**
  - o By encouraging the organization of METU alumni throughout the country, to provide support to find solutions to the country and the University centered problems and by means of various other activities to form a solidarity with the University
  - o By promoting the active participation of the alumni in the promotion of the University, improving the relations and cooperation with industry and actively getting involved in the search for job opportunities for the new graduates

- o By soliciting the opinion and getting the contribution of our successful alumni in the determination of education and research policies of the University

- **To initiate promotion programs for the University on the national and international levels**
    - o By preparing promotion materials in English and Turkish (CDs, brochures, web sites etc.)
    - o By integrating the Northern Cyprus Campus project to the promotion program of the university designed to attract high school students
    - o By designing promotion programs aiming at attracting high quality students from other universities to the graduate programs at METU.
    - o By promoting the research and development potential, Central Laboratory, METU-Technopolis and the Incubation Center of the university

- **To set up an Applied Ethics Center that will contribute to the awareness of ethics in the country as well as the university and its immediate environment. This will necessitate an awareness in deciding on the issues closely related to social life and thus result in the planning of the necessary infrastructures and procedures together with the improvement of education programs**
- **To organize scientific and cultural activities together with other universities**

SUPPLEMENTARY TARGETS AND STRATEGIES

1. LIBRARY AND DOCUMENTATION

It is imperative that Middle East Technical University trace the latest trends in libraries around the world in order to reach its main targets. It is also indispensable to support these efforts with financial resources and administrative reorganizations.

METU envisions to provide the best service to researchers throughout the country as well as its own students and researchers. The strategies the University follows can be summarized as:

- **To pass on to a model based on access to information instead of ownership of scientific publications**
- **To provide student and researcher access to the publications and to create suitable means to enable the effective use of the tools like photocopy machines, CD-ROMs in reaching publications**
- **To create new financial resources to increase the number of journals and books to be purchased**
- **To increase the number of subscription on the internet and hence, set up a structure for all university units to benefit evenly**
- **To improve the library automation system**
- **To make the Central Library user spaces more attractive and better equipped**
- **To develop an effective system to enrich the book collection**
- **To set up regional 'reserve' libraries to lessen the burden of the Central Library and in this way supply an easy access to the users**
    - o By keeping the course text books used by the departments in the 'reserve' libraries set up in these departments

- **To develop a system to meet the demands of the users in a fast, effective way and provide expert support for these services**
- **To increase the activity of the University publication unit**
  - By encouraging the faculty to write books.
  - By supporting the publication of PhD theses.

- **To increase the activities of the Academic Writing Center and organize conferences on effective and correct language use and thesis writing**

2. CAMPUS INFRASTRUCTURE

Middle East Technical University with a beautiful campus of 45,000 acres aims at changing it to an education, science, technology, culture and art center. The university plans to leave it to the future generations as a part of its heritage

The strategies to be followed to this end are:
- **To complete the METU-Technopolis Project**
- **To bring the Research Centers together by means of structural and social means**
- **To determine the physical growth strategy and the phases of gradual realization of the scheduled infrastructure investments of the University**
- **To formulate ways of full integration of METU-Erdemli Campus with the Main Campus, accompanied by measures to have at METU the infrastructure and social facilities that Erdemli Campus enjoys**
- **To determine the physical growth strategies of the departments**
- **To use the current available spaces in the most efficient possible way**
- **To complete the ODTUKENT (on-campus faculty housing) project**
- **To set up a Student Activity and Social Center enabling students to develop and increase the range of their activities**
- **To come up with new models to regulate the campus traffic**

3. BENEFITING FROM INFORMATION TECHNOLOGIES

Information technologies is one of the most important tools for Middle East Technical University to reach all those goals mentioned in this report. METU should be able to have all the necessary information hardware and software not only to realize these goals but also, during this process, to evaluate the results by utilizing various measurement and evaluation techniques. The University is expected to have and put into service the necessary information hardware and software to achieve a high standard in efficient utilization and the development of all educational and research activities.

The strategies to be adopted to reach this target are listed below:
- **To improve the web sites of all the academic units, centers and administrative units and use the internet efficiently for information sharing**
- **To think of ways of improving the Computer Center as a unit serving not only the University but also the country**
- **To organize the establishment of a structure to encourage the faculty to benefit from information technologies and improve the education quality.**
- **To update and upgrade student computer laboratories constantly besides increasing the total number of computers installed there**

- **To improve the standards in terms of communication protocols, writing and data transfer software and come up with new implementation opportunities for them**
- **To set up an IT infrastructure at METU to enable the realization of degree and certificate programs**
- **To play a leading role in developing the informatics and telecommunications infrastructure that Turkey needs for the widespread use of Internet-based education**
- **To cooperate with Turkish and international organizations together with the Incubation Center and METU-Technopolis firms to ensure that the software produced at the University will have an economic value**
- **To set up an electronic examination center on the campus and start working on an ETS model to conduct the examinations in an electronic medium with the help of this center**

QUANTITATIVE TARGETS

METU MAIN CAMPUS

EDUCATION

YEAR / NUMBER	2000	2001	2002	2003	2004	2005
Undergraduate Students	2,345	2,400	2,400	2,400	2,400	2,400
International Undergraduate Students	960	1,000	1,200	1,300	1,400	1,500
International Master's and PhD Students	93	120	150	180	220	250
Distance Education	1,100	1,200	1,400	1,600	1,800	2,000
Evening Graduate Programs	89	100	200	300	400	500

GRADUATE SCHOOLS (Excluding International Students)*

YEAR / NUMBER		2000	2001	2002	2003	2004	2005
Master's	New Enrollment	981	1,267	1,356	1,440	1,529	1,622
	Total	3,157	2,904	3,167	3,429	3,691	3,954
	Number of Graduates	502	736	818	902	996	1,092
PhD	New Enrollment	155	286	309	332	355	377
	Total	989	1,004	1,119	1,244	1,384	1,526
	Number of Graduates	74	90	102	114	126	138
Appointment in the Framework of Article 35 of Higher Education Law		170	175	200	230	260	300

*321 Master's and 88 PhD Students have enrolled under the Framework of Amnesty Law 4584

RESEARCH

YEAR / RESOURCES ($ 1000)	2000	2001	2002	2003	2004	2005
National R&D Projects	13,337	14,000	18,000	21,000	22,000	25,000
International R&D Projects	734	4,000	8,000	12,000	16,000	20,000
TOTAL	14,071	18,000	26,000	33,000	38,000	45,000

ACADEMIC STAFF

YEAR / NUMBER	2000	2001	2002	2003	2004	2005
Academic Staff (Asst. Profs., Assoc. Profs., Profs.)	689	700	725	750	775	800
Academic Staff (Instructors, Lecturers)	426	420	430	440	450	450
Research Assistants	998	1,000	1,050	1,100	1,150	1,200
International Academic Staff	48	60	70	80	90	100
Post-doctorate Researchers	-	2	10	20	30	50
Joint Education Programs	2	3	5	7	9	10

PUBLICATIONS

YEAR / NUMBER	2000	2001	2002	2003	2004	2005
Publications in International Journals	563	600	650	700	750	800
International Conference Proceedings	626	650	750	850	900	950

METU-TECHNOPOLIS

YEAR / NUMBER	2000	2001	2002	2003	2004	2005
Tenant Companies	7	18	25	40	60	100
Projects Supported	-	5	8	12	20	50
Theses Supported	-	1	3	5	10	15

METU NORTHERN-CYPRUS CAMPUS

EDUCATION

YEAR / NUMBER	2003	2004	2005
International Undergraduate Students	300	600	1,500
Turkish Students	700	1,400	2,500
TOTAL	1,000	2,000	4,000

STAFF

YEAR / NUMBER	2003	2004	2005
Administrative	25	50	75
Academic	75	150	225
TOTAL	100	200	300

APPENDIX

4

**APPENDIX 4
FACTS AND FIGURES**

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SECTION 8: RESEARCH ASSISTANTS WORKING IN THE FRAMEWORK OF ARTICLE 35 OF HIGHER EDUCATION LAW

SECTION 9: INTERNATIONAL PROCEEDINGS AND PUBLICATIONS

SECTION 1: NUMBER OF STUDENTS

Table 1: Number of Students*

	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002
PREPARATORY	2824	2014	2292	2228	2094	2065	2284	2278
UNDERGRADUATE	13389	13931	13343	12875	12408	11985	12010	12122
PREP+UNDERGR.	**16213**	**15945**	**15635**	**15103**	**14502**	**14050**	**14294**	**14400**
MASTERS	2092	2598	2508	2476	2286	2651	3157	3295
PhD	640	716	717	696	748	820	989	1118
MASTERS+PhD	**2732**	**3314**	**3225**	**3172**	**3034**	**3471**	**4146**	**4413**
CONDITIONAL PROG.	73	92	93	87	91	82	105	152
SPECIAL STUDENT	168	121	152	172	249	205	200	267
TOTAL	**19186**	**19472**	**19105**	**18534**	**17876**	**17808**	**18745**	**19232**

* First semester of each academic year

Table 2: Number of Students in Undergraduate Programs

	FACULTY OF ARCHITECTURE			FACULTY OF ARTS AND SCIENCES			FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES			FACULTY OF EDUCATION			FACULTY OF ENGINEERING			VOCATIONAL SCHOOL		
	PREP.	U.GRAD	TOTAL	PREP.	U.GRAD	TOTAL	PREP.	U.GRAD	TOTAL	PREP.	U.GRAD	TOTAL	PREP.	U.GRAD	TOTAL	PREP.	U.GRAD	TOTAL
1994-95	107	746	853	813	3154	3967	361	2055	2416	567	1629	2196	853	5744	6597	123	61	184
1995-96	92	756	848	459	3223	3682	262	2161	2423	364	1820	2184	727	5883	6610	110	88	198
1996-97	98	724	822	484	2961	3445	289	2031	2320	407	1843	2250	868	5694	6562	146	90	236
1997-98	113	683	796	450	2627	3077	323	1955	2278	374	1782	2156	869	5731	6600	99	97	196
1998-99	124	674	798	364	2414	2778	309	1932	2241	301	1701	2002	925	5600	6525	71	87	158
1999-00	117	660	777	391	2143	2534	287	1829	2116	292	1603	1895	976	5649	6625	2	101	103
2000-01	133	661	794	439	2085	2524	314	1797	2111	317	1587	1904	1079	5798	6877	2	82	84
2001-02	131	678	809	453	2076	2529	319	1800	2119	311	1548	1859	1064	5969	7033	0	51	51

Table 3: Number of Students in Graduate Programs

	GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES			GRADUATE SCHOOL OF SOCIAL SCIENCES			GRADUATE SCHOOL OF MARINE SCIENCES			GRADUATE SCHOOL OF INFORMATICS		
	MAST.	PhD	TOTAL	MAST.	PhD	TOTAL	MAST.	PhD	TOTAL	MAST.	PhD	TOTAL
1994-1995	1537	504	2041	521	113	634	6	11	17			
1995-1996	1880	552	2432	609	150	759	9	7	16			
1996-1997	1708	555	2263	592	149	741	7	5	12			
1997-1998	1703	578	2281	533	164	697	8	5	13	35	0	35
1998-1999	1678	586	2264	578	188	766	10	1	11	63	0	63
1999-2000	1784	620	2404	608	223	831	8	4	12	126	0	126
2000-2001	2056	709	2765	769	275	1044	9	7	16	151	9	160
2001-2002	2201	779	2980	901	306	1207	7	10	17	204	22	226

Figure 1: Number of Students (1957-2001)
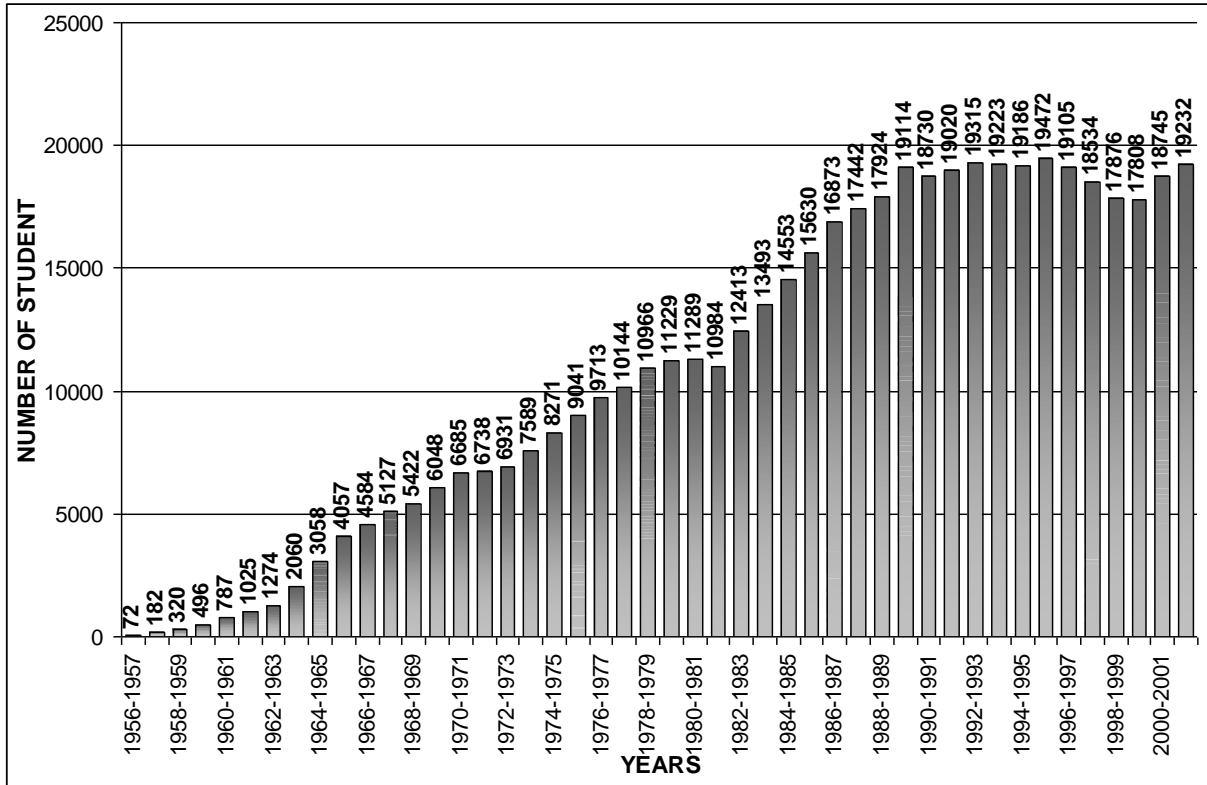
Figure 2: Number of Students (1994-2001)
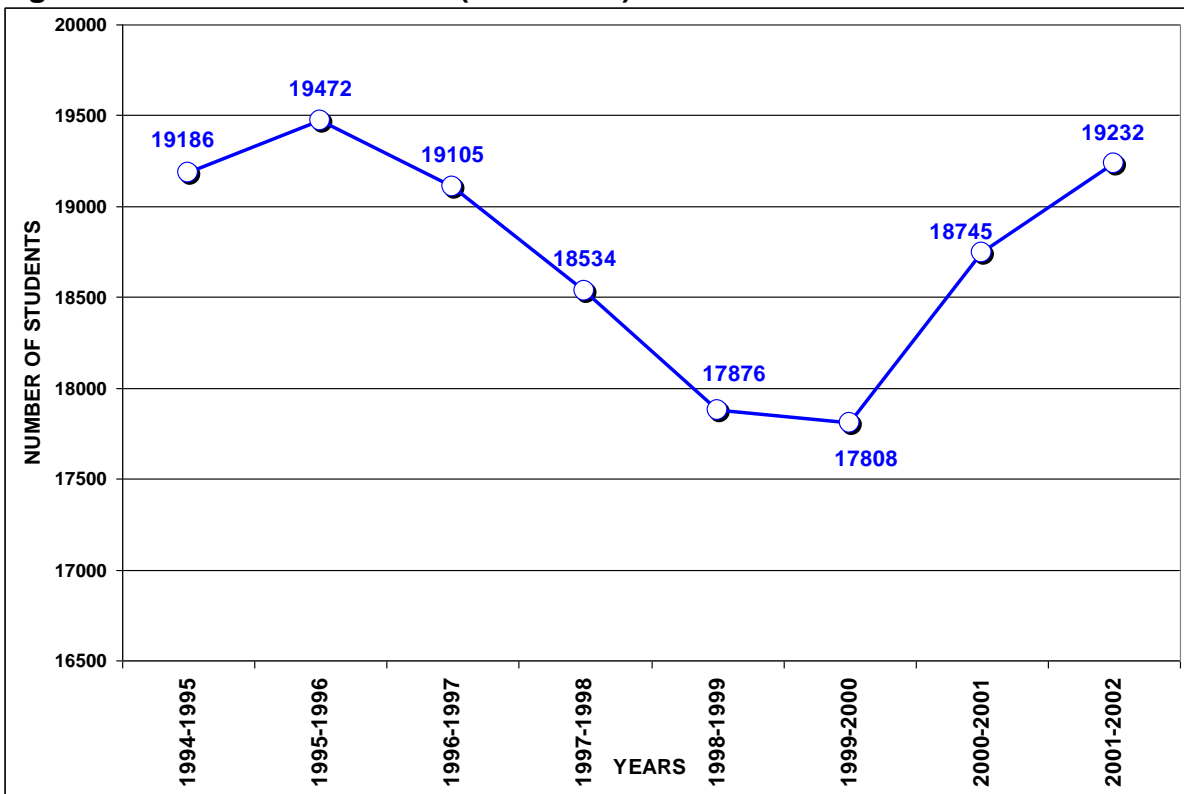
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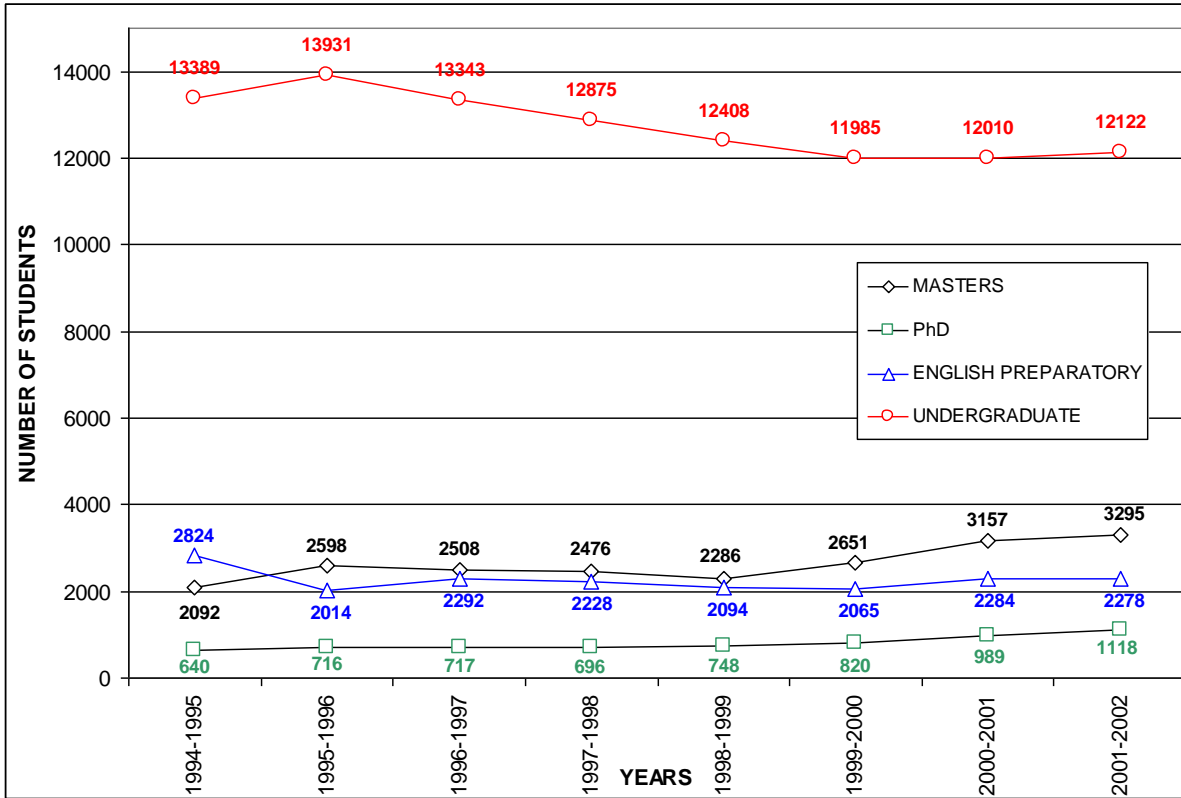
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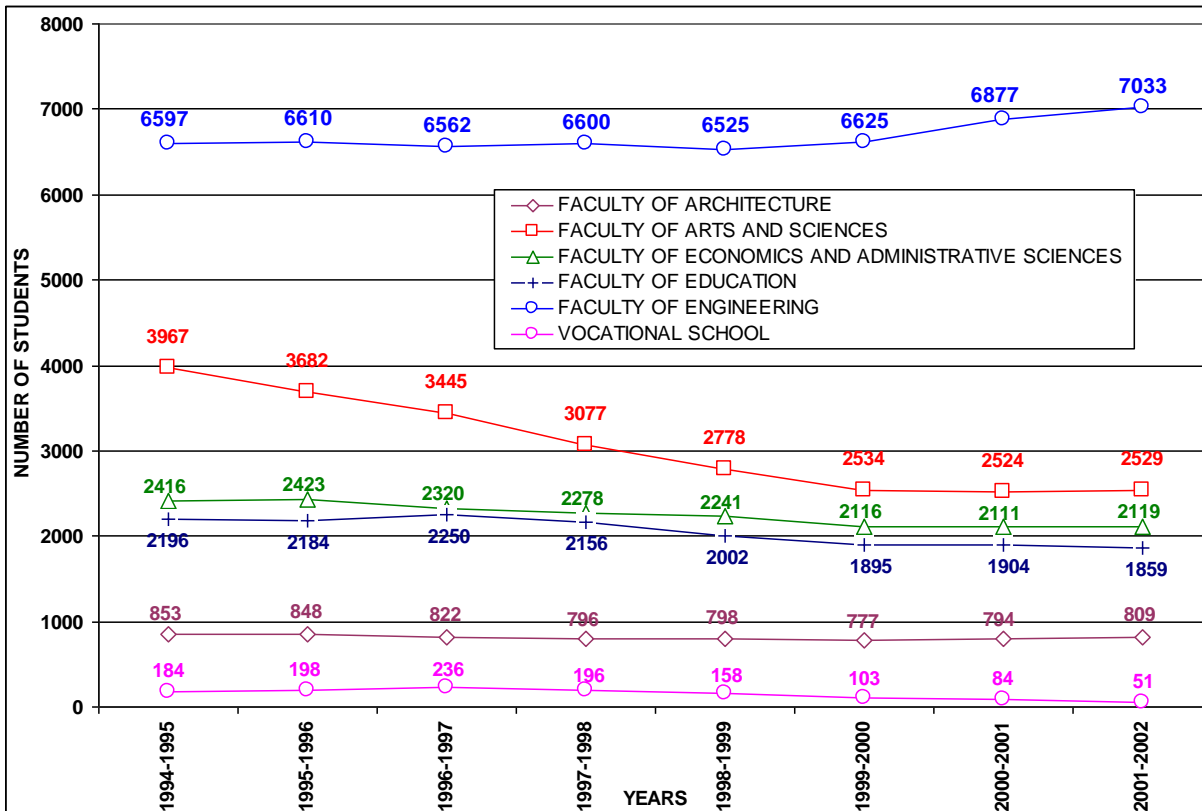
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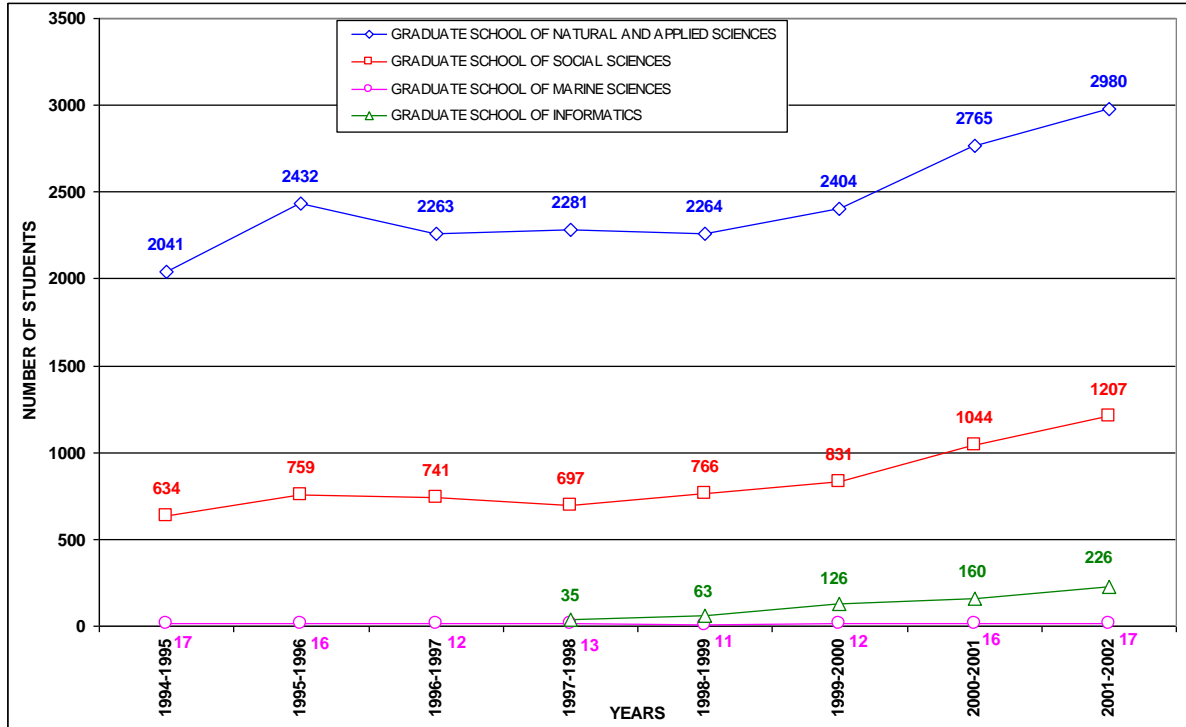
Figure 6: Number of Master's Students
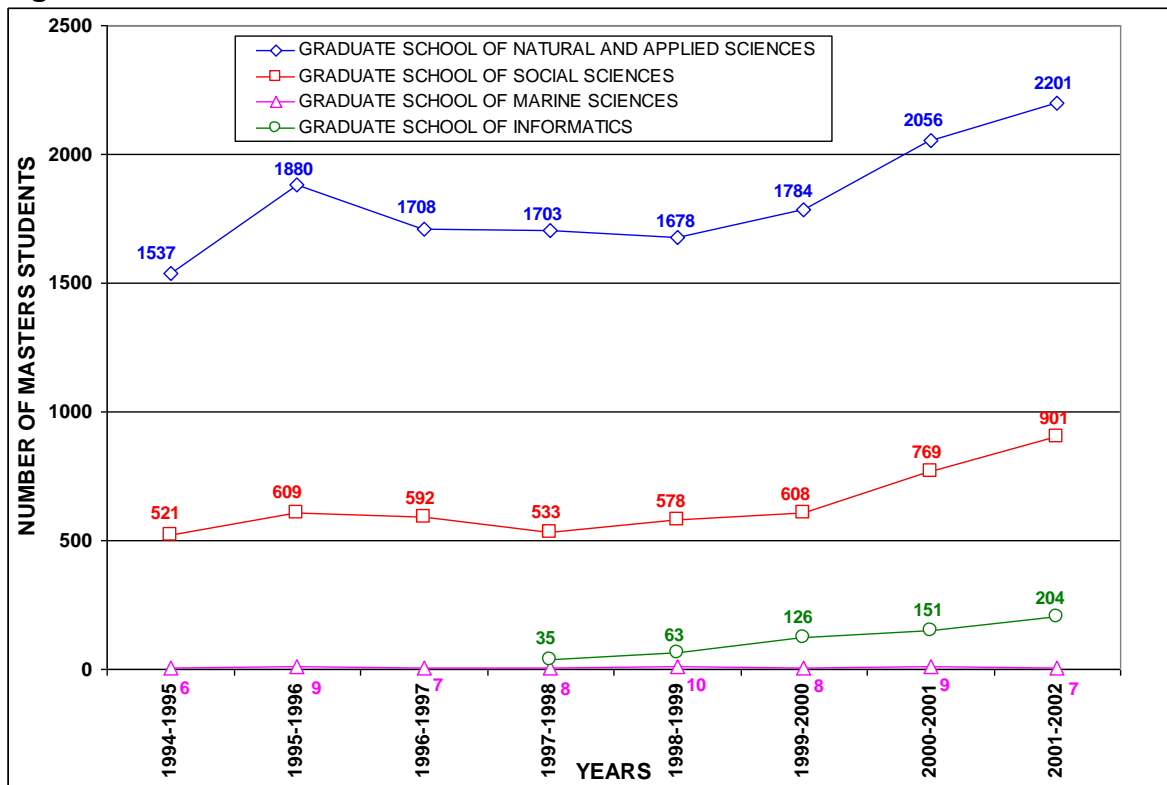
Figure 7: Number of PhD Students
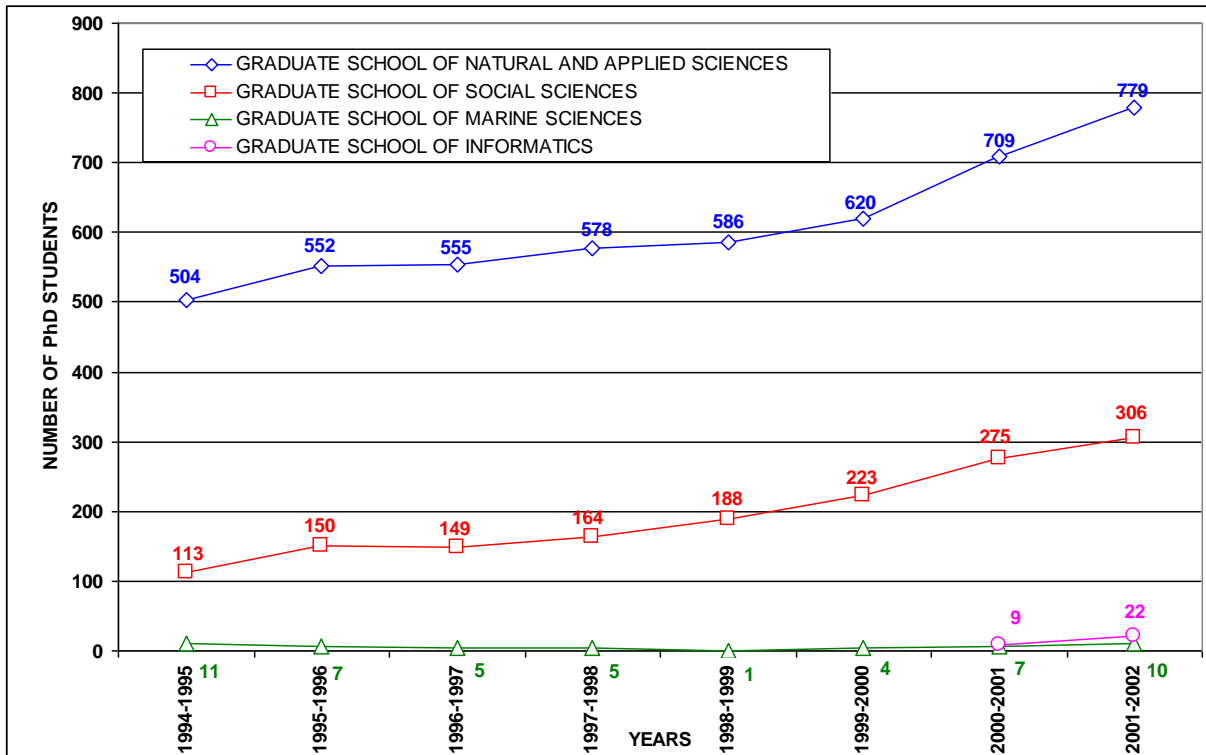
Figure 8: The Ratio of the Number of Graduate Students to the Total Number of Students
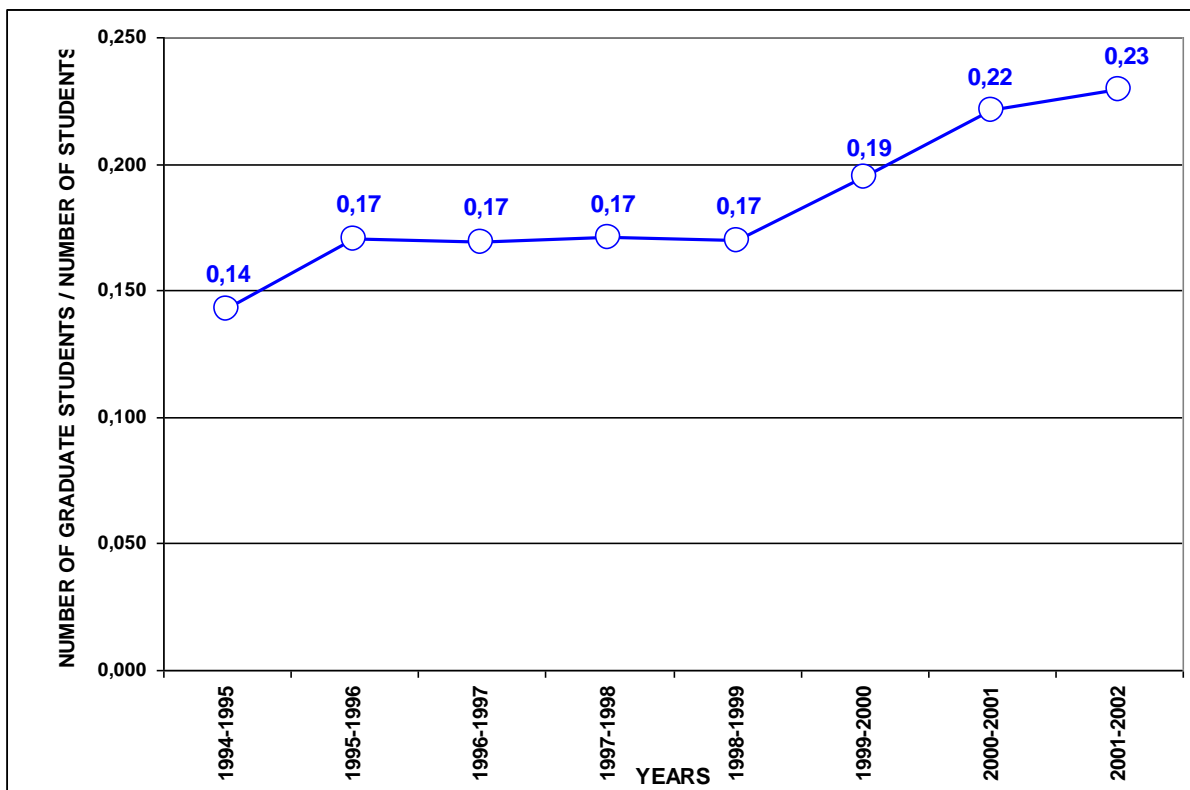
SECTION 2: NEW ENROLLMENT

Table 1: Number of Students Entering Undergraduate Programs*

	FACULTY OF ARCHITECTURE	FACULTY OF ARTS AND SCIENCES	FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES	FACULTY OF EDUCATION	FACULTY OF ENGINEERING	UNDERGRADUATE TOTAL	VOCAT. SCHOOL	TOTAL
1994-1995	166	749	493	547	1314	3269	85	3354
1995-1996	173	491	468	389	1305	2826	79	2905
1996-1997	161	468	409	416	1298	2752	80	2832
1997-1998	164	512	439	423	1350	2888	79	2967
1998-1999	163	466	414	369	1309	2721	72	2793
1999-2000	161	480	412	370	1374	2797	0	2797
2000-2001	169	493	424	374	1483	2943	0	2943
2001-2002	165	489	412	362	1418	2846	0	2846

* Shows the number of the enrollments in the first semester of the academic year.

Table 2: Number of Students Entering Graduate Programs*

	GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES			GRADUATE SCHOOL OF SOCIAL SCIENCES			GRADUATE SCHOOL OF MARINE SCIENCES			GRADUATE SCHOOL OF INFORMATICS			TOTAL		
	MAST.	PhD	TOTAL	MAST.	PhD	TOTAL	MAST.	PhD	TOTAL	MAST.	PhD	TOTAL	MAST.	PhD	TOTAL
1994	733	119	852	249	31	280	4	0	4				986	150	1136
1995	969	151	1120	301	51	352	6	2	8				1276	204	1480
1996	656	169	825	244	55	299	4	1	5				904	225	1129
1997	656	158	814	254	49	303	1	0	1	41	0	41	952	207	1159
1998	766	188	954	256	63	319	6	3	9	54	0	54	1082	254	1336
1999	990	205	1195	351	94	445	5	2	7	107	6	113	1453	307	1760
2000	837	166	1003	350	96	446	1	3	4	101	4	105	1289	269	1558

* Shows the number of the total new enrollments in the first and second semesters of the academic year.

Figure 1: Number of Students Entering Undergraduate Programs

NUMBER OF STUDENTS ENTERING

Legend:
- FACULTY OF ARCHITECTURE
- FACULTY OF ARTS AND SCIENCES
- FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES
- FACULTY OF EDUCATION
- FACULTY OF ENGINEERING
- VOCATIONAL SCHOOL

FACULTY OF ENGINEERING: 1314, 1305, 1298, 1350, 1309, 1374, 1483, 1418

FACULTY OF ARTS AND SCIENCES: 749, 491, 468, 512, 466, 480, 493, 489

FACULTY OF EDUCATION: 547, 389, 416, 423, 369, 370, 374, 362

FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES: 493, 468, 409, 439, 414, 412, 424, 412

FACULTY OF ARCHITECTURE: 166, 173, 161, 164, 163, 161, 169, 165

VOCATIONAL SCHOOL: 85, 79, 80, 79, 72

YEARS: 1994-1995, 1995-1996, 1996-1997, 1997-1998, 1998-1999, 1999-2000, 2000-2001, 2001-2002

Figure 2: Number of Students Entering Master's Programs

NUMBER OF STUDENTS ENTERING MASTERS PROGRAMS

Legend:
- GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
- GRADUATE SCHOOL OF SOCIAL SCIENCES
- GRADUATE SCHOOL OF MARINE SCIENCES
- GRADUATE SCHOOL OF INFORMATICS

GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES: 733, 969, 656, 656, 766, 990, 837

GRADUATE SCHOOL OF SOCIAL SCIENCES: 249, 301, 244, 254, 256, 351, 350

GRADUATE SCHOOL OF INFORMATICS: 41, 54, 107, 101

GRADUATE SCHOOL OF MARINE SCIENCES: 4, 6, 4, 1, 6, 5, 1

YEARS: 1994, 1995, 1996, 1997, 1998, 1999, 2000

Figure 3: Number of Students Entering PhD Programs
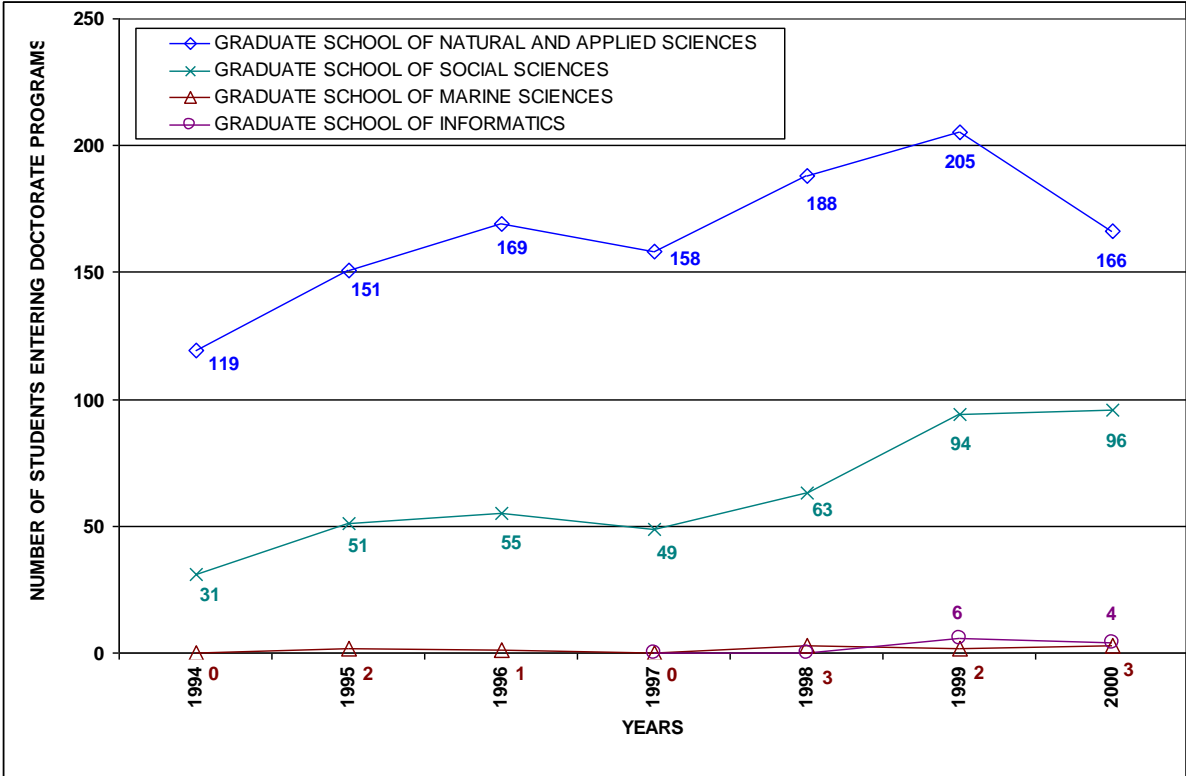
SECTION 3: GRADUATES

Table 1: Number of Graduates from Undergraduate Programs*

	FACULTY OF ARCHITECTURE	FACULTY OF ARTS AND SCIENCES	FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES	FACULTY OF EDUCATION	FACULTY OF ENGINEERING	UNDERGRAD. TOTAL	VOC. SCHOOL	TOTAL
1994	140	520	387	297	1239	2583	6	2589
1995	168	624	462	313	1261	2828	17	2845
1996	174	542	426	301	1125	2568	19	2587
1997	159	602	449	373	1132	2715	21	2736
1998	135	655	441	463	1201	2895	20	2915
1999	172	644	529	446	1251	3042	12	3054
2000	140	462	433	365	1111	2511	26	2537

* By the end of each academic year

Table 2: Number of Graduates from Graduate Programs*

	GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES			GRADUATE SCHOOL OF SOCIAL SCIENCES			GRADUATE SCHOOL OF INFORMATICS			GRADUATE SCHOOL OF MARINE SCIENCES			TOTAL		
	MAST.	PhD	TOTAL	MAST.	PhD	TOTAL	MAST.	PhD	TOTAL	MAST.	PhD	TOTAL	MAST.	PhD	TOTAL
1994	281	60	341	95	13	108	0	0	0	3	3	6	379	76	455
1995	391	62	453	95	7	102	0	0	0	2	2	4	488	71	559
1996	272	36	308	75	10	85	0	0	0	0	0	0	347	46	393
1997	149	21	170	59	2	61	0	0	0	0	0	0	208	23	231
1998	330	40	370	117	14	131	5	0	5	1	0	1	453	54	507
1999	373	61	434	132	10	142	8	0	8	2	0	2	515	71	586
2000	378	57	435	134	15	149	31	0	31	4	0	4	547	72	619

* By the end of each academic year

Figure 1: Number of Graduates from Undergraduate Programs
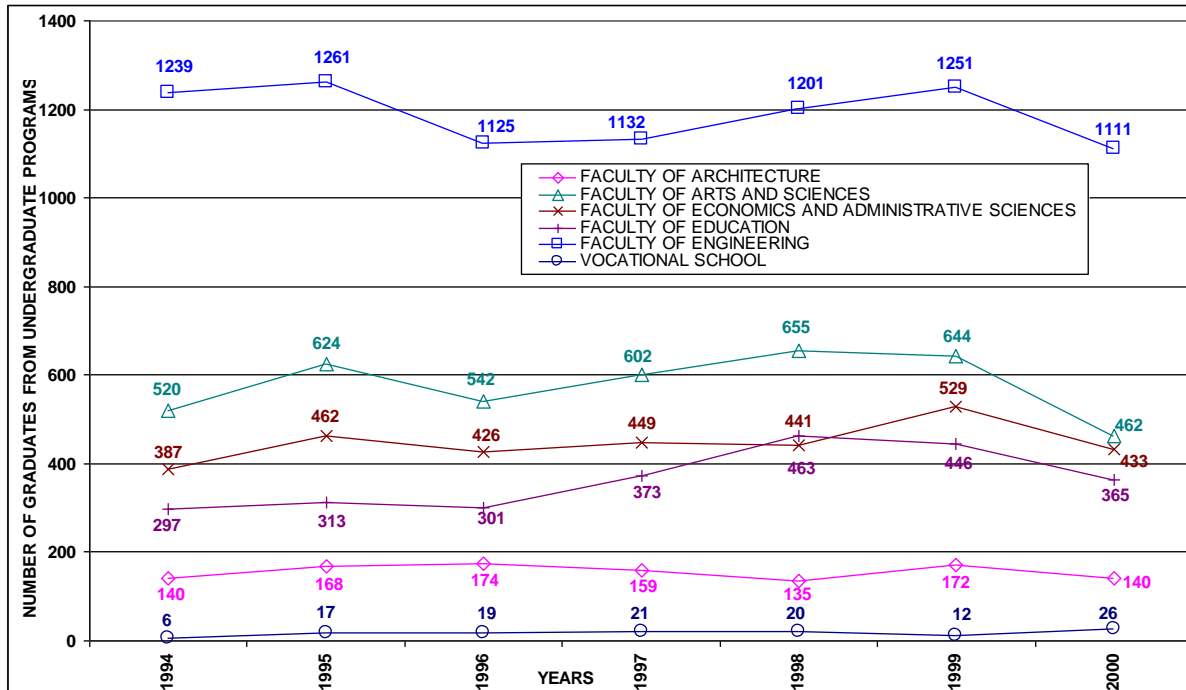
Figure 2: Number of Undergraduate, Master's and PhD Graduates
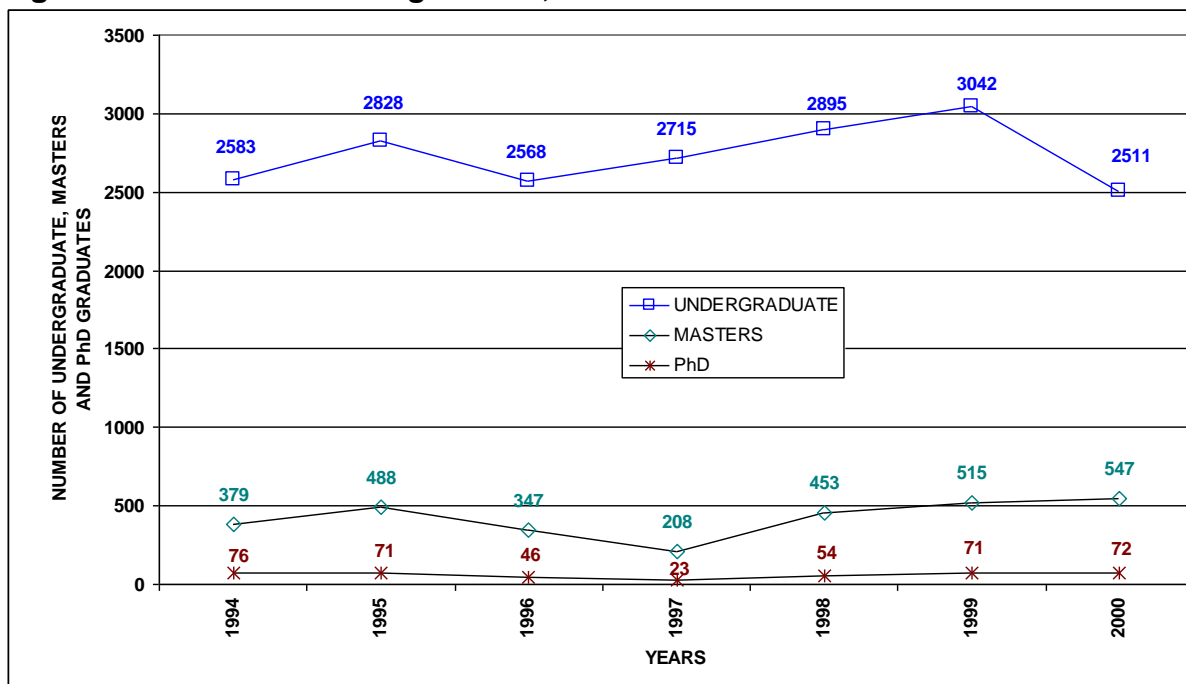
Figure 3: Number of Graduates from Master's Programs
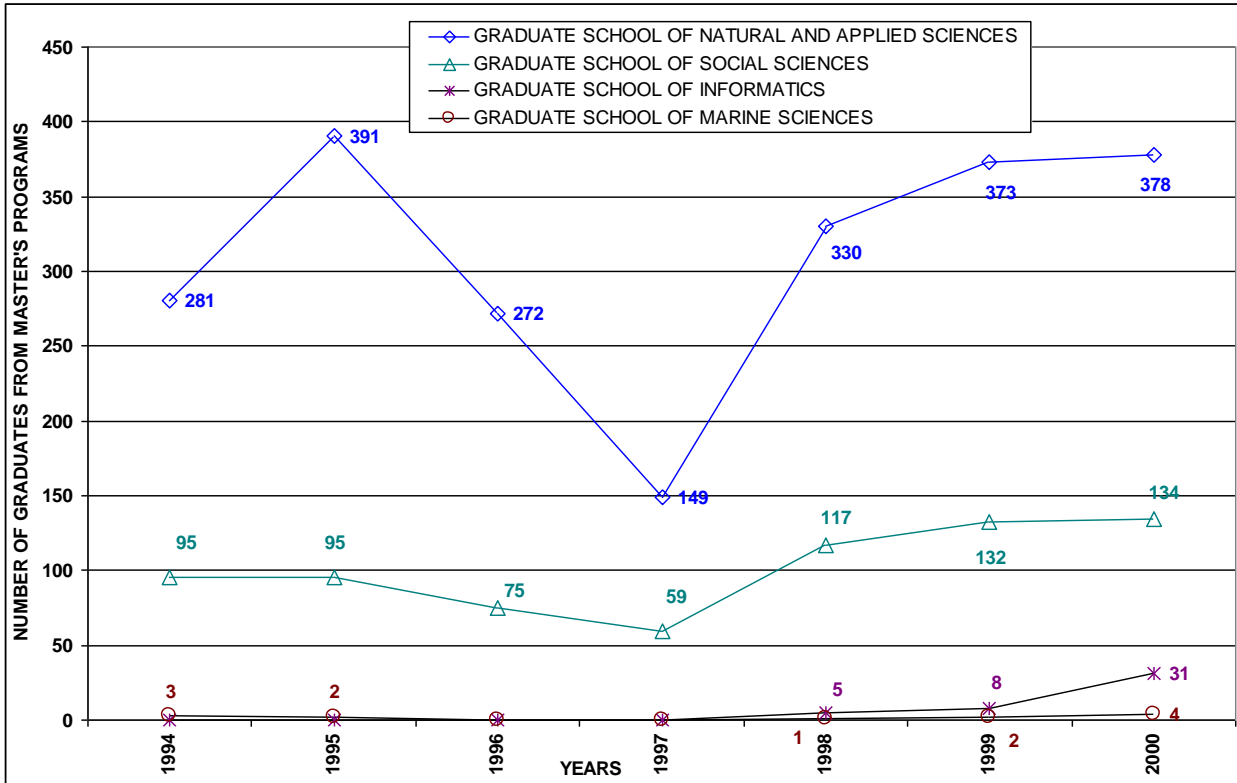
Figure 4: Number of Graduates from PhD Programs
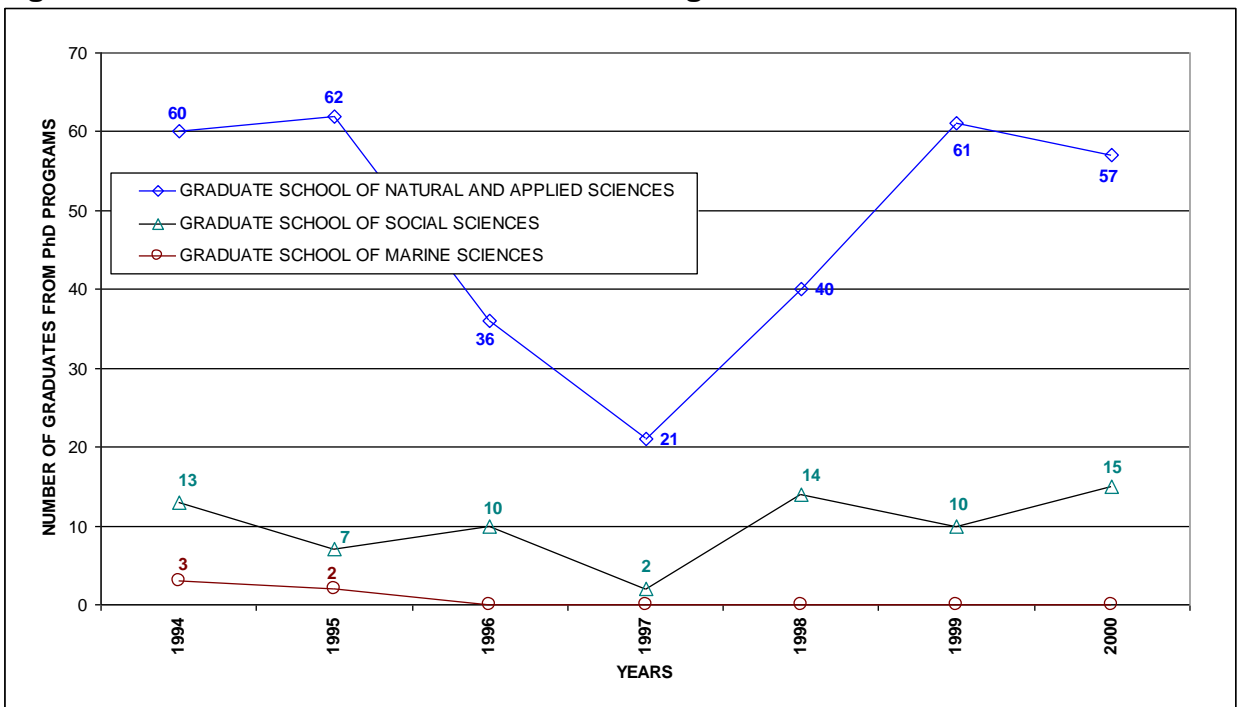
SECTION 4: INTERNATIONAL STUDENTS AT METU

Table1: Number of International Students

Year	Number of International Students	International Student Percentage
1987	1367	8.14
1988	1386	7.80
1989	1409	7.33
1990	1225	6.51
1991	1101	5.70
1992	1052	5.46
1993	1051	5.51
1994	949	4.95
1995	1027	5.27
1996	1010	5.29
1997	1002	5.41
1998	916	5.12
1999	914	5.13
2000	921	4.91
2001	901	4.68

Figure 1: Number of International Students
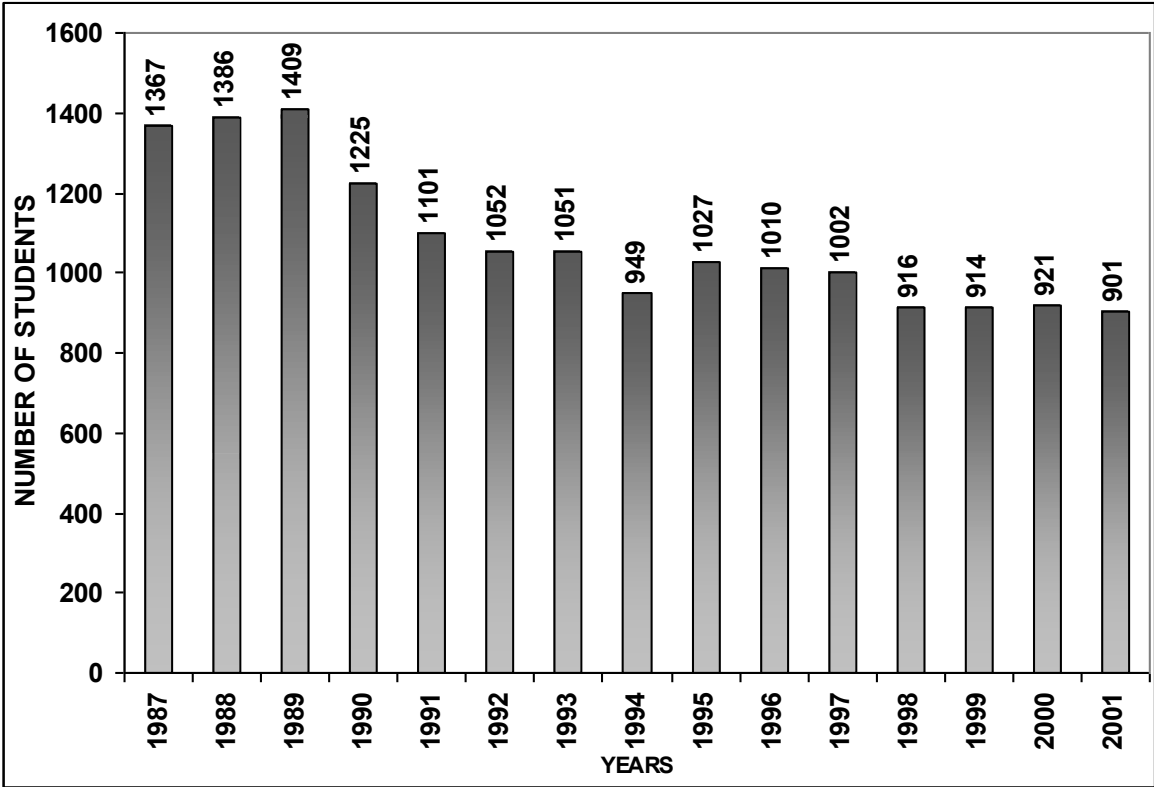
SECTION 5: RANKING OF SCORES FOR DEPARTMENTAL ADMISSION

Table 1: Ranking of Lowest Scores for Departmental Admission in Central University Placement Examination

DEPARTMENT	SCORE TYPE**	2000		2001	
		RANKING OF LOWEST SCORE ADMITTED***	NUMBER OF STUDENTS ADMITTED	RANKING OF LOWEST SCORE ADMITTED***	NUMBER OF STUDENTS ADMITTED
Industrial Design	Q	3610	32	3425	36
Architecture	Q	4488	63	4733	69
City and Regional Planning	Q	13863	53	14377	60
Biology	Q	17273	32	18535	37
Philosophy	E	23632	33	26264	30
Physics	Q	20800	73	21082	71
Molecular Biol.and Gen.	Q	2075	21	2688	34
Statistics	Q	8890	42	8867	47
Chemistry	Q	18025	63	18503	68
Mathematics	Q	6661	73	6193	78
Psychology	E	13877	42	16801	45
Sociology	E	18480	45	23143	47
History	V	16248	31	22829	34
Economics	E	2316	114	2801	120
Business Administration	E	1477	110	2055	118
Political Sc. and Public Adm.	E	8828	114	11514	108
International Relations	E	5560	63	8109	71
Computer and Inst. Tech.Edu.	Q	18050*	53	6530	56
Physics Education	Q	27581*	33	24696*	37
Elementary Science Education	Q	43331*	53	35557*	53
Elementary Mathematics Edu.	Q	34541*	42	26963*	42
Foreign Language Education	L	823*	106	658*	107
Chemistry Education	Q	27892*	31	27001*	41
Early Childhood Education	E	47663*	32	38062*	33
Computer Engineering	Q	907	116	814	121
Environmental Engineering	Q	11213	58	11308	66
Electrical and Electronics Engineering	Q	1095	217	1109	211
Industrial Engineering	Q	764	114	1090	118
Food Engineering	Q	6252	63	7254	75
Aeronautical Engineering	Q	5013	48	4567	61

DEPARTMENT	SCORE TYPE**	2000		2001	
		RANKING OF LOWEST SCORE ADMITTED***	NUMBER OF STUDENTS ADMITTED	RANKING OF LOWEST SCORE ADMITTED***	NUMBER OF STUDENTS ADMITTED
Civil Engineering	Q	5187	217	5456	213
Geological Engineering	Q	21197	42	21616	51
Chemical Engineering	Q	6901	94	7140	102
Mining Engineering	Q	21241	42	23635	54
Mechanical Engineering	Q	2855	217	2851	216
Metallurgical and Materials Engineering	Q	11474	73	10546	82
Petroleum and Natural Gas Engineering	Q	12784	42	12500	55
TOTAL			2591		2866

*: The rank of the student with the lowest score in the Placement Examination for Turkish Universities in these departments has been computed through extrapolation.

**: Q: QUANTITATIVE
   E: EQUALLY WEIGHED
   L: LANGUAGE
   V: VERBAL

***: Place of the student admitted to the department with the lowest score in the ranking of the respective score type of the Central University Placement Examination.

SECTION 6: ACADEMIC STAFF AT METU

Table 1: Number of Academic Staff

	PROFESSOR	ASSOCIATE PROFESSOR	ASSISTANT PROFESSOR	INSTRUCTOR	RESEARCH ASSISTANT*	TOTAL
1993	310	158	140	330	795	1733
1994	332	148	147	357	871	1855
1995	362	139	152	381	898	1932
1996	371	142	144	394	873	1924
1997	370	147	159	386	841	1903
1998	373	150	158	387	899	1967
1999	366	156	157	411	1107	2197
2000	371	150	165	427	1175	2288
2001	378	142	170	420	1292	2402

* Number of research assistants also includes those working in the framework of Article 35 of Higher Education Law.

Figure 1: Number of Academic Staff
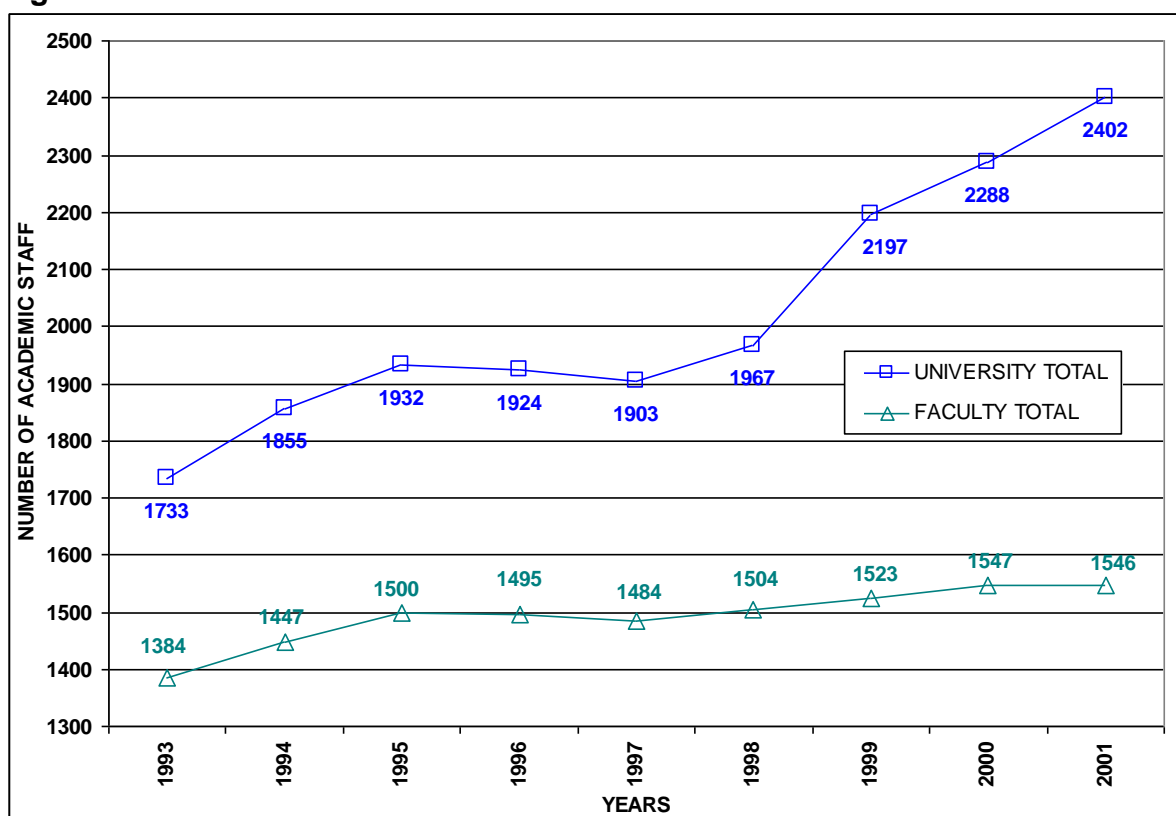
Figure 2: Distribution of Academic Staff
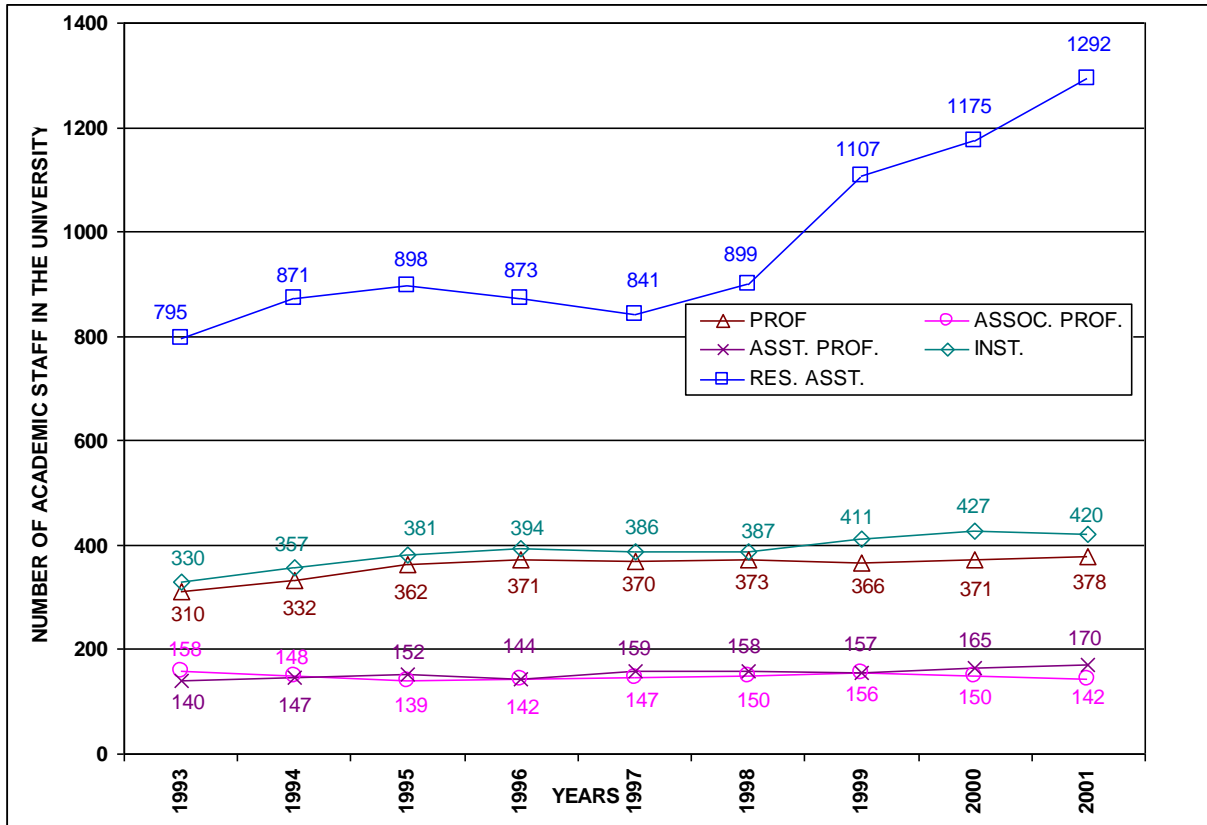
Figure 3: Number of Academic Staff in Faculties
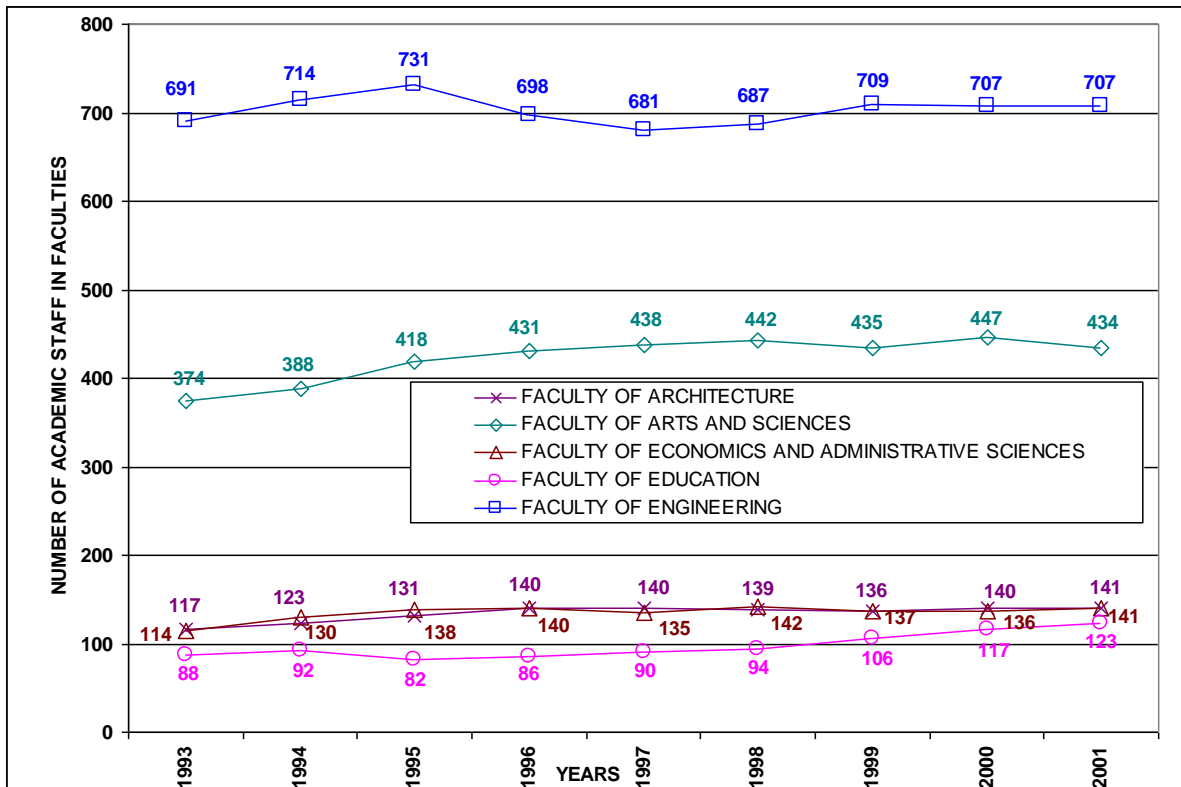
Table 2: Number of Academic Staff in Faculties*

		1993	1994	1995	1996	1997	1998	1999	2000	2001
FACULTY OF ARCHITECTURE	Professor	14	20	22	22	21	21	19	19	21
	Associate Professor	10	6	6	8	9	10	10	10	8
	Assistant Professor	12	12	26	23	26	27	21	21	24
	Instructor	28	25	16	20	18	17	34	34	36
	Research Assistant	53	60	61	67	66	64	52	56	52
	Total	117	123	131	140	140	139	136	140	141
FACULTY OF ARTS AND SCIENCES	Professor	89	89	99	101	108	107	109	110	111
	Associate Professor	53	48	42	43	44	42	40	38	40
	Assistant Professor	27	33	41	46	50	51	47	49	44
	Instructor	27	24	23	27	22	21	21	27	24
	Research Assistant	178	194	213	214	214	221	218	223	215
	Total	374	388	418	431	438	442	435	447	434
FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES	Professor	18	22	24	29	29	29	27	27	27
	Associate Professor	18	16	14	10	12	10	9	12	13
	Assistant Professor	16	15	20	21	21	24	21	17	23
	Instructor	4	6	6	7	7	7	20	22	18
	Research Assistant	58	71	74	73	66	72	60	58	60
	Total	114	130	138	140	135	142	137	136	141
FACULTY OF EDUCATION	Professor	16	20	18	20	19	15	15	16	17
	Associate Professor	13	13	11	15	12	16	14	14	7
	Assistant Professor	18	15	12	7	12	13	12	14	15
	Instructor	5	7	6	10	9	9	16	14	14
	Research Assistant	36	37	35	34	38	41	49	59	70
	Total	88	92	82	86	90	94	106	117	123
FACULTY OF ENGINEERING	Professor	167	174	185	188	182	189	185	190	194
	Associate Professor	75	72	63	63	66	64	76	72	66
	Assistant Professor	57	59	69	65	68	63	45	51	52
	Instructor	46	30	25	25	21	24	30	33	30
	Research Assistant	346	379	389	357	344	347	373	361	365
	Total	691	714	731	698	681	687	709	707	707
TOTAL	Professor	304	325	348	360	359	361	355	362	370
	Associate Professor	169	155	136	139	143	142	149	146	134
	Assistant Professor	130	134	168	162	177	178	146	152	158
	Instructor	110	92	76	89	77	78	121	130	122
	Res. Assistant	671	741	772	745	728	745	752	757	762
	TOTAL**	1384	1447	1500	1495	1484	1504	1523	1547	1546

* By the end of each calendar year.
** The table does not include the academic staff in graduate schools, School of Foreign Languages, Vocational School.

SECTION 7: NUMBER OF UNDERGRADUATE STUDENTS PER FACULTY MEMBER

Table 1: Number of Undergraduate Students per Faculty Member*

	1994	1995	1996	1997	1998	1999	2000	2001
FACULTY OF ARCHITECTURE	11,84	10,80	9,92	9,23	8,99	7,86	7,87	7,62
FACULTY OF ARTS AND SCIENCES	16,26	15,72	13,65	11,73	10,92	9,88	9,31	9,48
FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES	34,83	33,77	30,31	28,33	27,60	23,75	23,04	22,22
FACULTY OF EDUCATION	29,62	38,72	35,44	34,27	32,09	28,12	27,36	29,21
FACULTY OF ENGINEERING	17,15	17,20	16,70	17,01	16,47	16,81	16,76	17,45
OVERALL	**18,88**	**19,02**	**17,67**	**16,90**	**16,23**	**15,41**	**15,10**	**15,40**

* Total number of undergraduate students in a faculty is divided by the total number of academic staff excluding research assistants (professors, associate professors, assistant professors, and instructors) in that faculty.

Figure 1: Number of Undergraduate Students per Faculty Member
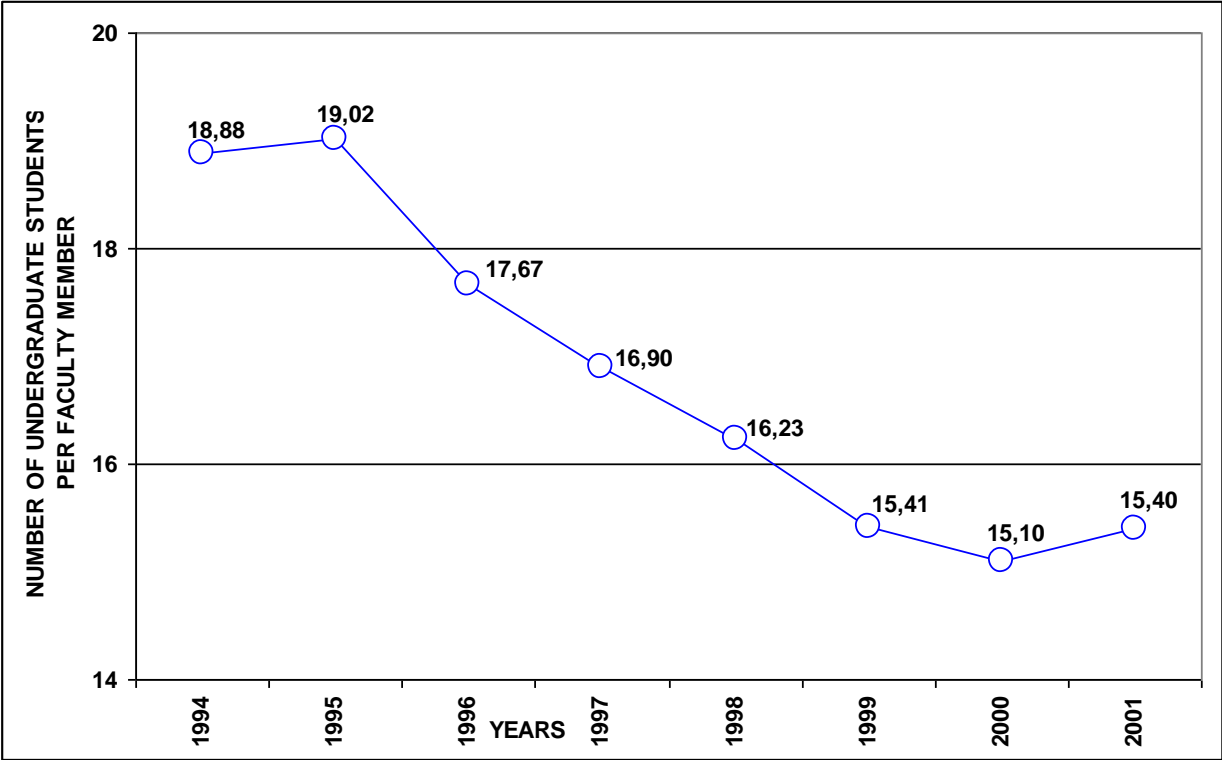
Figure 2: Number of Undergraduate Students per Faculty Member in Faculties
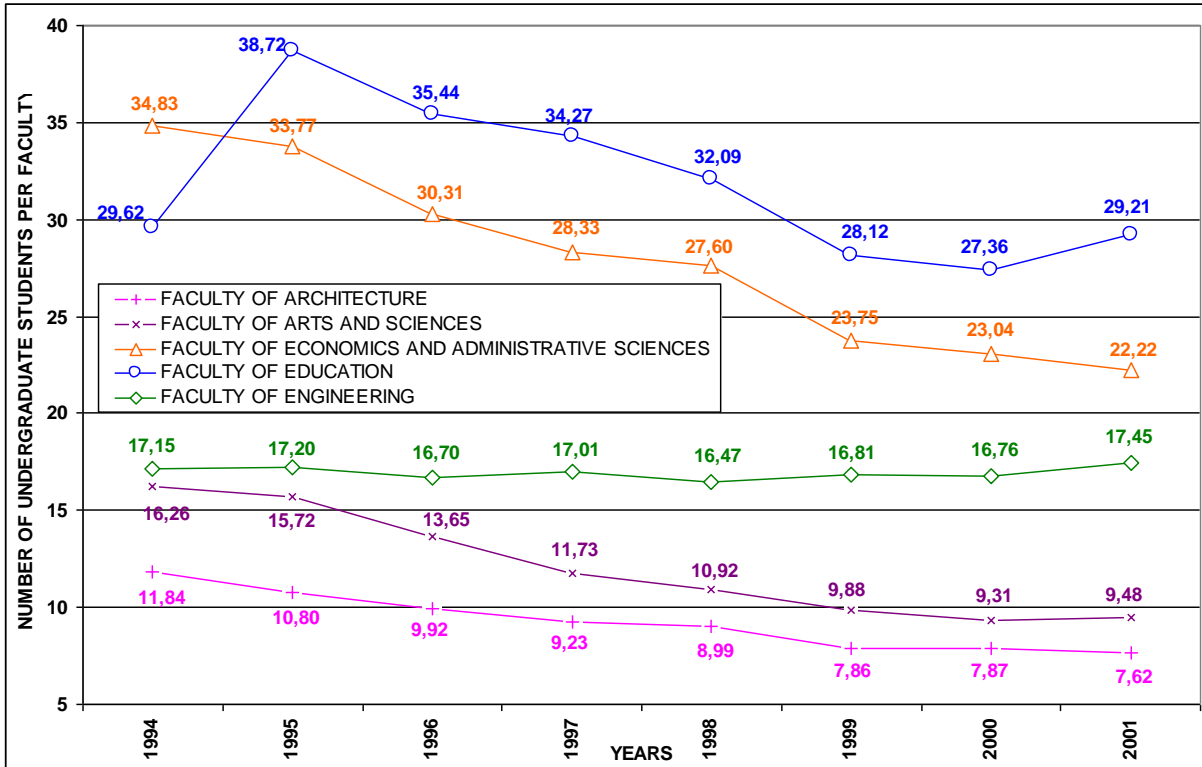
Figure 3: Total Number of Students (Undergraduate and Graduate) per Faculty Member
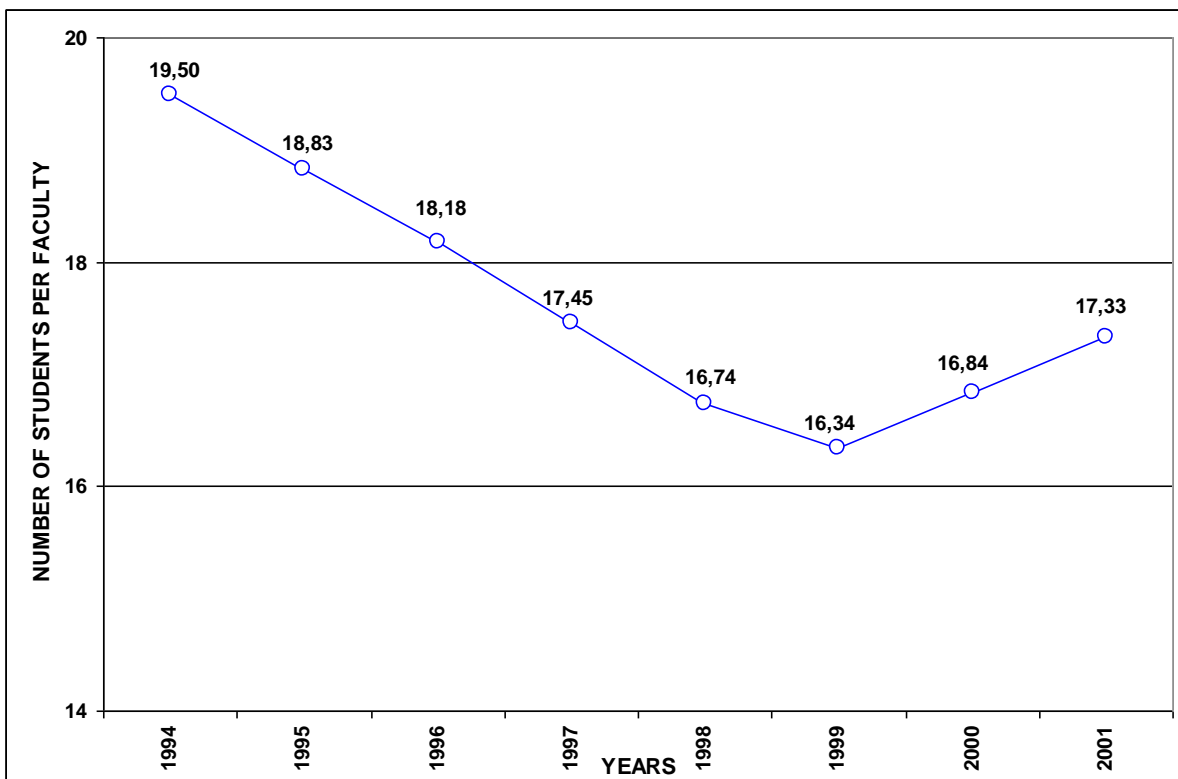
SECTION 8: RESEARCH ASSISTANTS WORKING IN THE FRAMEWORK OF ARTICLE 35 OF HIGHER EDUCATION LAW

Table1: Research Assistants Working in The Framework of Article 35 of Higher Education Law

DEPARTMENT/PROGRAM	NUMBER OF RESEARCH ASSISTANTS
Political Sciences and Public Administration	7
Aeronautical Engineering	1
History of Architecture	1
Architecture	9
Restoration	1
Biochemistry	6
Biology	6
Biotechnology	3
Civil Engineering	10
Computer Education and Instruction Tech.	5
Computer Engineering	3
Chemical Engineering	2
Chemistry	2
City and Regional Planning	4
Economics	9
Educational Sciences	3
Electrical and Electronics Engineering	5
English Literature	3
English Language Teaching	3
Environmental Engineering	6
Engineering Sciences	3
Food Engineering	2
History	1
Industrial Engineering	2
International Relations	4
Mathematics	9
Graduate School Of Marine Sciences	1
Metallurgical and Materials Engineering	2
Mining Engineering	5
Operational Research	1
Physical Education and Sports	4
Philosophy	7
Physics	24
Psychology	1
Sociology	9
Secondary Science and Math. Education	6
Urban Design	2
TOTAL	**172**

Table 2: Research Assistants Working in The Framework of Article 35 of Higher Education Law (According to University)

UNIVERSITY	NUMBER OF RESEARCH ASSISTANTS
ABANT İZZET BAYSAL	8
ADNAN MENDERES	2
AFYON KOCATEPE	4
AĞRI	1
AKDENİZ	1
ANADOLU	7
ATATÜRK	4
BALIKESİR	9
CELAL BAYAR	4
CUMHURİYET	5
ÇANAKKALE 18 MART	4
DİCLE	2
DUMLUPINAR	3
EGE	1
ERCİYES	4
FIRAT	2
GAZİANTEP	1
GAZİOSMANPAŞA	1
GEBZE YÜK.TEK.ENS.	1
HARRAN	2
İNÖNÜ	4
İZMİR YÜK.TEK.ENS	5
KARADENİZ TEKNİK	2
KARAELMAS	2
KIRIKKALE	10
KOCAELİ	6
KOCATEPE	1
MERSİN	20
MUĞLA	10
MUSTAFA KEMAL	6
NİĞDE	12
ONDOKUZ MAYIS	3
PAMUKKALE	9
SAKARYA	3
SELÇUK	5
SÜLEYMAN DEMİREL	4
TRAKYA	1
ULUDAĞ	3
TOTAL	**172**

SECTION 9: INTERNATIONAL PROCEEDINGS AND PUBLICATIONS

Figure 1: International Proceedings
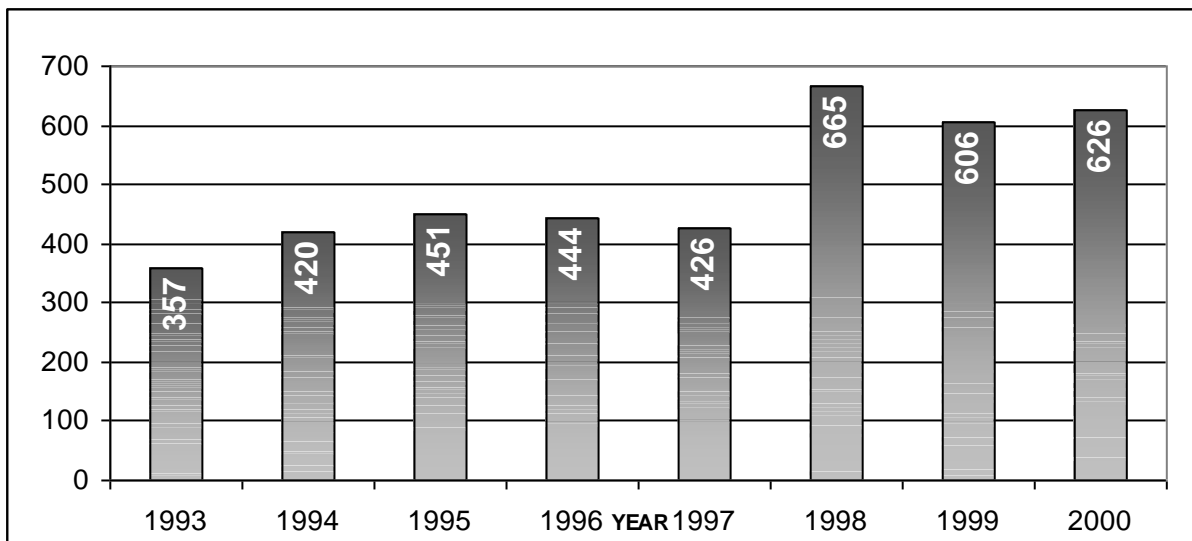
Figure 2: Number of Articles Listed in SCI
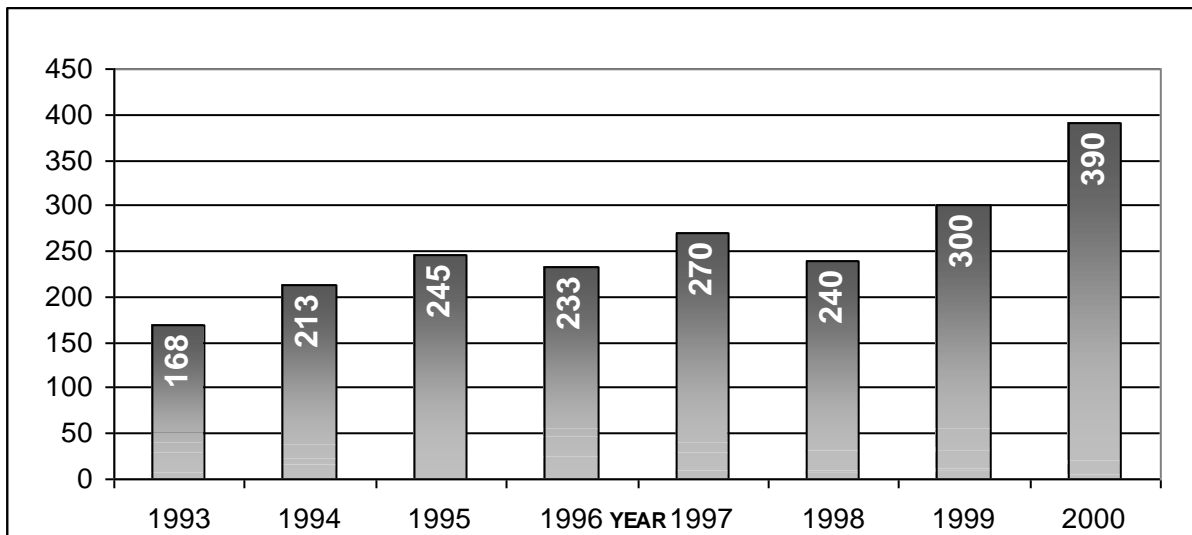
Figure 3: Articles in International Journals
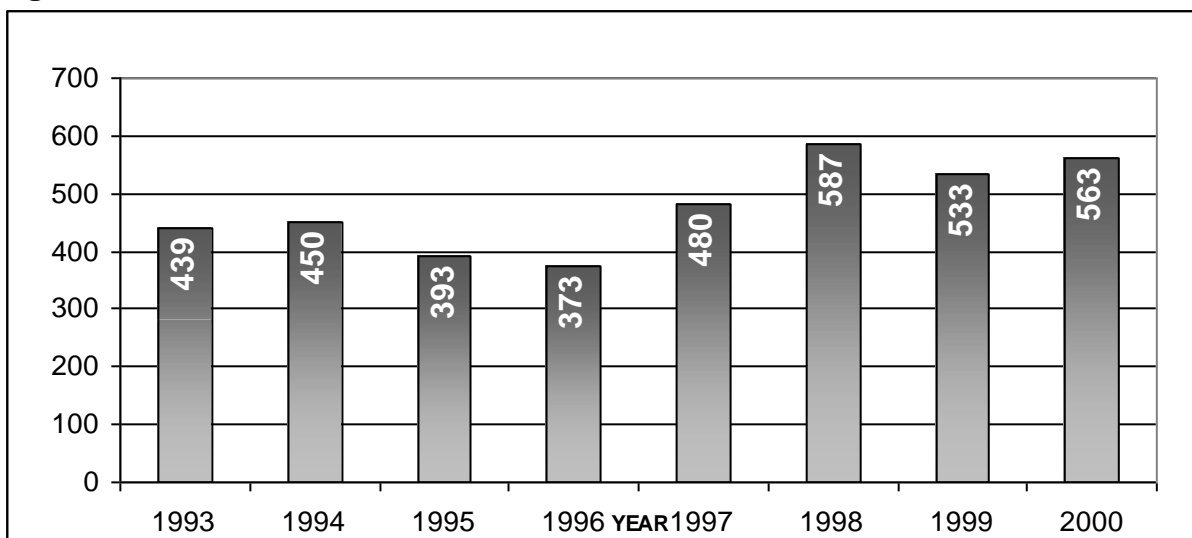
APPENDIX 5
SCHOLARSHIPS - DISTRIBUTION AND RESOURCES

SCHOLARSHIPS - DISTRIBUTION AND RESOURCES

	TYPE OF SCHOLARSHIP	NUMBER OF STUDENTS	DURATION	MONTHLY AMOUNT (MILLION TL)	ANNUAL TOTAL (MILLION TL)
• SELECTION OF SCHOLAR: METU • SUPPORT: METU • PAYMENT: METU	• METU ACADEMIC ACHIEVEMENT SCHOLARSHIP • METU MANAGEMENT INCOME SCHOLARSHIP • METU BASIC SCIENCE SCHOLARSHIP (FACULTY OF ARTS AND SCIENCES) • MEAL • DORMITORY	2487	9 MONTHS	19-80	641.367
• SELECTION OF SCHOLAR: METU • SUPPORT: METU OR SUPPORTING ENTERPRISES • PAYMENT: METU OR ALUMNI ASSOCIATIONS	• THE DEPARTMENT OF PHYSICS FACULTY • THE DEPARTMENT OF MATHEMATICS FACULTY • METU ALUMNI ASSOCIATION (ISTANBUL) • ASSOCIATION FOR SUPPORTING METU STUDENTS (ODD) • ODD-BM Co. • ODD-BURCELIK • ODD-ENERGY AND ENVIRONMENT INVESTMENTS Co. • ODD-SIEMENS • EYMIR CULTURE FOUNDATION • ODTU DEVELOPMENT FOUNDATION • PROF.DR. MUSTAFA PARLAR FOUNDATION • TURKISH EDUCATION FOUNDATION	1073	8-10 MONTHS	20-150	503.224
• SELECTION OF SCHOLAR: INDIVIDUAL PERSONS AND ENTERPRISES • SUPPORT: ALUMNI ASSOCIATIONS, INDIVIDUAL PERSONS AND ENTERPRISES • PAYMENT: INDIVIDUAL PERSONS AND ENTERPRISES	• METU ALUMNI ASSOCIATION (ANKARA) • OLCAY BIRGUL FOUNDATION • SABANCI FOUNDATION • THE DEPARTMENT OF CIVIL ENGINEERING • PRIME-MINISTRY SOCIAL ASSISTANCE AND SOLIDARITY FOUNDATION	3368	9-12 MONTHS	25-100	1.851.120

	TYPE OF SCHOLARSHIP	NUMBER OF STUDENTS	DURATION	MONTHLY AMOUNT (MILLION TL)	ANNUAL TOTAL (MILLION TL)
• SELECTION OF SCHOLAR: METU • SUPPORT: INDIVIDUAL PERSONS AND ENTERPRISES • PAYMENT: INDIVIDUAL PERSONS AND ENTERPRISES	• AKTAS ELECTRICITY • ALPAR KILINC • KAMIL GURBUZ • KLASIS COSMETICS COMMERCIAL Ltd. • KORAY ALTUNAY • KURT&KURT Co. • OPAN • OMER BAYIN • SAMI KIRDAR FOUNDATION • SONMAK Co. • TURKCELL • VEHBI KOC FOUNDATION • ALARKO • DEKA Ltd. • FINANCE FOUNDATION • GURIS Co. • MNG HOLGING • ROKETSAN • RUMELI HOLDING • UZKA CONSTRUCTION INDUSTRY AND COMMERCIAL Co. • VURAL BAYLAN • A. BEAR AWARD • IHSAN KOCAK • KAZIM YALCINOGLU • NOKIA • METU ALUMNI ASSOCIATION (BURSA) • METU ALUMNI ASSOCIATION (MERSIN) • METU ALUMNI ASSOCIATION (KAYSERI) • BERKAY TUNCTURK • UNILEVER IS LTD. • TURKISH-AMERICAN WOMEN'S FOUNDATION • TED ANKARA COLLEGE TEACHERS • YUMLU EDUCATION CULTURE AND SCIENTIFIC RESEARCH FOUNDATION • MINING DEVELOPMENT FOUNDATION	586	8-12 MONTHS	25-155	530.105

	TYPE OF SCHOLARSHIP	NUMBER OF STUDENTS	DURATION	MONTHLY AMOUNT (MILLION TL)	ANNUAL TOTAL (MILLION TL)
• SELECTION OF SCHOLAR: INSTITUTE OF LOANS AND DORMITORIES • SUPPORT: INSTITUTION OF LOANS AND DORMITORIES • PAYMENT: INSTITUTION OF LOANS AND DORMITORIES	• INSTITUTION OF LOANS AND DORMITORIES (TUITION) • INSTITUTION OFLOANS AND DORMITORIES (EDUCATION)	6092	12 MONTHS	TUITION 45	11.016
	GRAND TOTAL	13606			3.536.832

**APPENDIX 6
DORMITORIES**

DORMITORIES

There are 16 dormitories on the campus with the capacity of 2,436 female and 3,806 male students, the EBI Private Dormitory accommodating 316 students and ODTUKENT Guest House with a capacity of 72 students.

In addition to the academic success of students, a number of other criteria such as economic conditions of their families, the number of children in higher education are also taken into consideration in the placement of students applying for dormitories.

Table 1. Dormitory Capacity over 1990-2001

Academic Year	Total Capacity	Application	Registration
1990-1991	4,308	1,967	1,181
1991-1992	4,308	2,136	1,129
1992-1993	4,340	2,325	9,45
1993-1994	4,550	2,318	1,361
1994-1995	4,712	2,369	1,367
1995-1996	4,712	2,180	1,303
1996-1997	4,926	1,900	1,173
1997-1998	4,926	2,074	1,284
1998-1999	4,988	2,007	1,180
1999-2000	4,988	2,132	1,251
2000-2001	5,092	2,192	1,174

Table 2. Opening Year And Capacities Of Dormitories

DORMITORY NAME	OPENING YEAR	NUMBER OF ROOMS	ROOM CAPACITY	DORMITORY CAPACITY
1	1963	97	6	542
2	1965	97	6	568
3	1968	102	4	408
4	1969	102	4	404
5	1970	89	4	356
6	1970	88	4	354
7	1976	89	4	356
8	1980	121	6	720
9	1989	100	6	570
F.HIZIROĞLU GUEST HOUSE	1994	45	4	198
METU GUEST HOUSE	1994	110	1-2-4	330
EBİ PRIVATE DORMITORY	1994	179	1-2-4	316
O.YAZICI GUEST HOUSE	1996	69	1-2-3-4	214
ODTUKENT GUEST HOUSE	1998	72	1	72
M.PARLAR GUEST HOUSE	1999	95	1-2	230
İ.DEMİRAY DORMITORY	2001	154	2-4	604
TOTAL		**1609**		**6242**

APPENDIX

7

**APPENDIX 7
METU LIBRARY**

GENERAL INFORMATION ABOUT METU LIBRARY (WWW.LIB.METU.EDU.TR)

Being the most important support unit for research and education, METU Library since its establishment, has strived to enable students, faculty, and the community on the whole to benefit from new information technologies. The basic aim of the library is to meet the information needs of both METU and non-METU users.

METU Library covers an area of 12,058 m² with its eight reading and two meeting halls. The library serves 750 simultaneous sittings to the readers. There are overall 470,111 publications; of these 321,334 are books and 148,777 are bound periodicals. METU Library has subscribed to 1,624 periodicals and has access to 7,426 full-text e-journals as of January 2002 . Additionally , there are 550 films and 278 videos in its Audio-Visual Center, in the library.

METU students, academic, administrative and retired personnel can become a member of the library and obtain a library card. Library materials are accessible to anyone but cannot be borrowed by those who are not affiliated to METU in any way. The library is open from 08:45 to 21:15 on weekdays and from 10:00 to 18:00 on weekends. During the summer period and the holidays, it is open from 08:45 to 17:15 on weekdays and from 10:00 to 18:00 on weekends.

The Library makes use of the latest technological developments in providing automated services to the users. An international automation system, called VTLS, is used at METU Library. Access to OPAC (Online Public Access Catalogue) is available through the terminals in the library and from any other internet connection (http://virtua.metu.edu.tr). METU Library CD-ROM Network System helps the users to access frequently used CD-ROM databases from all departments of METU, regardless of their network environment. There is also a Multi-Media Laboratory in the library approximately 1,000 books and periodicals, CDs and 13 PCs which provide access to online databases, electronic journals and Internet.

OBES (Collective Document Delivery Service) is a new document delivery service which includes the library network of METU, Gazi University, Hacettepe University and ULAKBIM (National Academic Information and Network Center). METU provides about 5,000 articles per year to other universities via OBES.

METU Library was selected as the first library in Turkey for the assessment program "Public Expenditure and Institutional Review Project" by World Bank and Turkish Ministry of Finance. The aims are becoming a digital information and documentation center, improving organizational and administrative structure and working atmosphere, supplying additional support and answering information needs of the community.

METU Library is a member of IATUL (International Association of Technological University Libraries) which has 219 members from 45 countries.

ANKOS (www.lib.metu.edu.tr/ankos/)

ANKOS (Anatolian University Library Consortium) was established in 1999 to serve as a joint framework for maintaining shared licensing agreements to have access to electronic information resources. The basic principle behind ANKOS is to provide the Turkish universities and research libraries with modern information resources more efficiently and at a lower cost per institution through cooperation. The number of ANKOS members and online databases increased rapidly; from 12 members and three online databases in 2000 to 56 members and 16 online databases in 2002. These databases are; Academic Press IDEAL, Association for Computing Machinery, Blackwell, EBSCOHost, Engineering Village 2, Gale, IEEE, Institute of Physics, Kluwer, MathSciNet, Micromedex, Proquest, Science Direct, Springer LINK, Web of Science.

ANKOS provides the member Turkish universities and research libraries with information about new electronic products, consortium offers, and license agreements and organizes trials for new databases and electronic journal collections. Main areas in which ANKOS is active are setting up trials for electronic resources offered by publishers, evaluating the consortia offers, negotiating license agreements with publishers, and organizing international conferences and training seminars. ANKOS also provides information to the Turkish library community about the recent developments in worldwide consortia activities, collection management, Internet resources, digital libraries and scholarly communication. ANKOS is a member of ICOLC (International Coalition of Library Consortia) which has 150 members all around the world.

Table 1: ANKOS Subscriptions and Members

	ACM	E-Host	IDEAL	IOP	Kluwer	M-SciNet	Proquest	SciDirect	S-Link	WOS	Ev2	IEEE	Gale	Micromedex	Blackwell
Adnan Menderes University								▨							
Akdeniz University										▨					
Anadolu University		▨						▨							
Ankara University	▨	▨		▨	▨	▨	▨		▨		▨			▨	
Atatürk University						▨		▨	▨		▨			▨	▨
Balıkesir University								▨							
Başkent University		▨						▨	▨						
Beykent University								▨							
Bilkent University	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨		▨			
Boğaziçi University								▨				▨			
Celal Bayar University							▨	▨							
Cumhuriyet University		▨													
Çanakkale 18 Mart University										▨					
Çankaya University												▨			
Çukurova University		▨		▨	▨			▨	▨		▨				
Dicle University							▨					▨			
Dokuz Eylül University		▨		▨	▨			▨	▨			▨			
Ege University	▨							▨	▨	▨					▨
Erciyes University						▨		▨							
Fırat University								▨	▨	▨					
Galatasaray University		▨					▨								
Gazi University		▨	▨	▨	▨		▨		▨	▨	▨	▨		▨	
Gaziantep University				▨	▨			▨	▨	▨					▨
Gaziosmanpaşa University						▨									
Gebze High Technology Institute								▨							
Gülhane Military Academy of Medicine								▨	▨						
Hacettepe University	▨		▨			▨		▨	▨	▨	▨	▨			
Haliç University															
Işık University															
İnönü University		▨						▨	▨						
İstanbul Bilgi University	▨					▨									
İstanbul Technical University		▨		▨				▨		▨			▨		
İstanbul University								▨							
İzmir Economy University								▨							
İzmir High Technology Institute								▨				▨			
Kadir Has University															
KSU															
Karadeniz Technical University					▨			▨	▨						▨
Kocaeli University				▨				▨		▨					
Koç University	▨	▨				▨		▨	▨	▨		▨			
METU	▨	▨	▨	▨	▨	▨		▨	▨	▨	▨	▨			
Mimar Sinan University								▨							

	ACM	E-Host	IDEAL	IOP	Kluwer	M-SciNet	Proquest	SciDirect	S-Link	WOS	Ev2	IEEE	Gale	Micromedex	Blackwell
Muğla University							X	X							
Osman Gazi University										X					
Pamukkale University									X						
Sabancı University	X	X	X	X	X	X	X	X	X	X		X			
Sakarya University										X					
Selçuk University		X			X		X	X	X		X				
Süleyman Demirel University							X	X	X						
Central Bank of Turkey							X								
Trakya University										X					
ULAKBİM			X		X		X	X	X	X	X				
Uludağ University		X			X		X	X	X						X
Yıldız Teknik University							X	X		X	X				
Yüzüncü Yıl University		X			X	X	X	X	X						

**APPENDIX 8
METU COMPUTER CENTER INFRASTRUCTURE**

METU COMPUTER CENTER INFRASTRUCTURE

(www.cc.metu.edu.tr)

Hardware

The hardware park of METU Computer Center is comprised of the following servers:

- IBM Scalable POWERparallel Systems SP2 (nautilus)
- IBM RISC/6000 POWERserver J40 (orca)
- IBM RISC/6000 POWERserver G40 (albatros)
- IBM RISC/6000 POWERserver 590 (rorqual)
- IBM RISC/6000 POWERserver 590 (narwhal)
- IBM RISC/6000 POWERserver 590 (limyra)
- IBM S7A RS/6000 (sei)
- IBM 43P RS/6000 (aspendos)
- IBM F50 RS/6000 (perge)
- IBM F80 (beluga)
- IBM RS6000 H70 (knidos)
- TATUNG 10/41 system (ephesus)
- SUN UltraEnterprise 450 (tasman)
- SUN UltraEnterprise 450 (myra)
- SUN UltraEnterprise 450 (dns)
- SUN UltraEnterprise 450 (troya)
- SUN Ultra 10 (nms)

All servers are operated on 24-hours-a-day basis. Detailed information on these servers is given below:

IBM Scalable POWERparallel Systems SP2 *(nautilus)* Academic personnel and graduate/PhD students whose studies require high computational power use this server. Also those users who need parallel programming can benefit from this system.

Operating System	AIX 4.2.1
CPU	66 MHz POWER2 / node
Number of Nodes	8
Memory	7 nodes (128 MB), 1 node (256 MB)
High Performance Switch	1 unit
IBM SP2 - Control Workstation	
Operating System	AIX 4.2.1
CPU	POWER PC (1/1 unit)
Memory	64 MB
Control Workstation	IBM 22 W Control Workstation

IBM RISC/6000 POWERserver J40 *(orca)* It provides the students and academic/administrative personnel the environment to use the Internet services. It is also the license server for the software programs running on other systems.

Operating System	AIX 4.2.1
CPU	112 MHz Power PC 604 (8/8 unit)
Memory	1 GB

IBM RISC/6000 POWERserver G40 *(albatros)*

It is configured to develop applications for the administrative units of METU (Personnel Office & Registrar's Office). Personnel database is also located on this system.

Operating System	AIX 4.3.3
CPU	112 MHz Power PC 604 (4/4 unit)
Memory	512 MB

IBM RISC/6000 POWERserver 590 *(rorqual)*

rorqual provides academic/administrative personnel and students the access to Internet services.

Operating System	AIX 4.3.3
CPU	66 MHz POWER2 (1/1 unit)
Memory	1 GB
SPECint95	3.33
SPECfp	10.04
ROLTP	3.9

IBM RISC/6000 POWERserver 590 *(narwhal)*

narwhal provides academic/administrative personnel and students the access to Internet services

Operating System	AIX 4.3.3
CPU	66 MHz POWER2 (1/1 unit)
Memory	512 MB
SPECint95	3.33
SPECfp	10.04
ROLTP	3.9

IBM RISC/6000 POWERserver 590 *(limyra)*

limyra is configured as an FTP server for METU.

Operating System	AIX 4.3.3
CPU	66 MHz POWER2 (1/1 unit)
Memory	256 MB
SPECint95	3.33
SPECfp	10.04
ROLTP	3.9

IBM S7A RS/6000 *(sei)*

sei is used in Registrar's Office and as the RDBMS server.

Operating System	AIX 4.3.2
CPU	272 MHz (4/12 unit)
Memory	1 GB
ROLTP	46

IBM 43P RS/6000 *(aspendos)*

aspendos is the server of VTLS library applications.

Operating System	AIX 4.3.2
CPU	375 MHz (1/1 unit)
Memory	256 MB
SPECint95	15.1

| SPECfp95 | 10.1 |
| ROLTP | 6 |

IBM F50 RS/6000 *(perge)*

perge is a back-up server. It is also used as an application server for Registrar's Office.

Operating System	AIX 4.3.2
CPU	332 MHz (4/4 unit)
Memory	1 GB
SPECint95	14.4
SPECfp95	12.6
0ROLTP	32.8

IBM F80 *(beluga)*

beluga is used for interactive services. SPSS and Marc (version 2000) software can run on this server.

Operating System	AIX 4.3
CPU	450 MHz (4/4 unit)
Memory	2 GB

IBM RS6000 H70 *(knidos)*

knidos is used as a file server for disc space requirements of academic/administrative personnel and students.

Operating System	AIX 4.3.3
Memory	1 GB
CPU	2 Way RS64 II 340 MHz (4 unit)

TATUNG 10/41 system *(ephesus)*

ephesus is a SUN-based workstation. It is used in developing applications for Registrar's Office.

Operating System	Solaris 2.6
CPU	SPARC (1/1 unit)
Memory	64 MB

SUN UltraEnterprise 450 *(tasman)*

Academic/administrative personnel and students use this server for software development and package programs that require high computational power. Also used to give NFS service to rorqual, orca, narwhal and myra disk spaces of academic and administrative personnel.

Operating System	Solaris 2.6
CPU	UltraSPARC-II 300 MHz (4/4 unit)
Memory	1 GB

SUN UltraEnterprise 450 *(myra)*

myra is used in the e-mail and electronic list (listserve) services for students and academic/administrative personnel. The users conduct their e-mail operations using pop and imap directly through *myra*.

Operating System	Solaris 2.6
CPU	UltraSPARC-II 300 MHz (4/4 unit)
Memory	1 GB

SUN UltraEnterprise 450 *(dns)*	
dns is the Domain Name Service / DNS server of Turkey	
Operating System	Solaris 2.6
CPU	UltraSPARC-II 300 MHz (1/4 unit)
Memory	128 MB

SUN UltraEnterprise 450 *(troya)*	
troya has been configured as the server for web-based software developed by METU-CC.	
Operating System	Solaris 2.6
CPU	UltraSPARC-II 300 MHz (4/4 unit)
Memory	1 GB

SUN Ultra 10 *(nms)*	
nms used for ATM network monitoring and management.	
Operating System	Solaris 2.6
CPU	UltraSPARC-II 300 MHz (1/1 unit)
Memory	256 MB
SPECint95	12.1
SPECfp95	12.9

The Backbone Network

METU's campus technical infrastructure is comprised of a number of departmental networks and various sizes of multi-user hosts connected around a campus-wide backbone network. At the core of the campus infrastructure is the "METU-NET Backbone" network. METU-NET was installed in 1990 with 16 access points, and expanded to 60 access points in 1998.

The previous token ring backbone technology was cancelled in 2000 and the new infrastructure was based on ATM technology. Currently, all departments on the campus are connected to the new ATM Backbone.

Each departmental network is comprised of a collection of multi-user and/or single user systems that are connected to a departmental Local Area Network. This departmental LAN is in turn connected to the backbone via Ethernet switches with ATM uplinks. The METU Computer Center (METU-CC) has the full responsibility and control over the METU-NET. Departments' technical staff operate departmental LANs and METU-CC provides technical consultation upon request.

The commonly accepted and supported protocol for the communication of the computers within the METU campus technical infrastructure described above (over METU-NET) is IP (Internet Protocol).

Internet Access From Outside the Campus

As a result of the METU-CC's endeavors in 1999, two, 2 Mbps capacity ULAKNET connections and 16 Mbps capacity TTNET connections, now provide METU's outside campus - Internet access of 20 Mbps.

Line	Capacity
ULAKNET-1	2 Mbps
ULAKNET-2	2 Mbps
TTNET	16 Mbps
Total	**20 Mbps**

Dial-up Network Connection

Currently 4 groups of modem lines provide METU personnel and students Internet access from outside the campus, via dial-up network connection. Technological advancements led METU-CC to add a new group of ISDN / PRI lines in June 2000. With a capacity of 60 connections and 56 Kbps bandwidth provide users with a smoothly working Internet connection. Users can utilize all of these lines with their user codes and passwords.

Phone Number	Bandwidth	Number of Lines	Type	User
0 822 314 1014	56 Kb/s	60	PRI	Academic
210 1155	36.6 Kb/s	16	Analog	Academic
210 4300	36.6 Kb/s	12	Analog	Academic
210 1040	28.8 Kb/s	16	Analog	Student

APPENDIX 9
DISTANCE EDUCATION in METU

DISTANCE LEARNING CENTER (http://www.ii.metu.edu.tr/DLC/)

- Distance Learning Center (DLC) was founded under the Graduate School of Informatics.
- DLC aims to conduct and coordinate research on distance learning and monitor and lead current methods used for distance learning within and outside the University.
- The Center promotes an interdisciplinary approach to research and development in distance learning.
- DLC aims at systematic accumulation of knowledge and experience gained from current applications as well as the dissemination of this "know-how" to the University and other institutions.

DISTANCE EDUCATION PROGRAMS ADMINISTERED BY THE GRADUATE SCHOOL OF INFORMATICS

METU ONLINE (online.metu.edu.tr)

- METU-Online was developed by the Graduate School of Informatics and is the first web-based distance education system in Turkey. By largely decreasing the class hours and classroom barriers of traditional education, it supports active learning at any given time and place, with its interactive pages, multimedia applications and unlimited information sources of the Internet.
- Courses incorporate lecture notes, assignments, tests and interactive discussion lists.
- METU-Online offers undergraduate and graduate courses through the Internet. The credits of online courses are the same as the credits of classic classroom courses.
- Starting with the 1998-99 academic year, about 4,000 METU students as well as those accepted to these courses from elsewhere have benefited from the program. Currently, there are 2,700 students registered in the online courses.
- Other universities may request courses within the framework of the Higher Education Council's procedures.
- METU ONLINE Courses are listed in **Tables 2** and **3**

INFORMATICS ONLINE (ONLINE MS PROGRAM) (ion.ii.metu.edu.tr)

- The program is categorized as "non-thesis MS" and held as a graduate evening program in which course participation is exclusively via the Internet.
- Informatics Online provides expertise in the rapidly developing area of information technology and systems. It is intended for professionals in need of continuing education, without having to come to the METU campus to attend lectures.
- Graduates of any discipline may apply to this program. Admissions are based on the academic rules and regulations for graduate programs at METU.
- Courses cover fundamental and current concepts of information technology and systems in depth. The language of instruction is English.
- Students are expected to complete the program in approximately five terms.
- Course registration fee is 210 million TL per credit ($\approx$ \$150 /credit).

- The program first started in the year 2001. So far 37 students have attended the program and 15 are expected to graduate at the end of this academic year.
- INFORMATICS ONLINE Courses are listed in **Table 4**

NET-Class

- NET-Class is a learning management system that provides an asynchronous online environment for instructors and students. It helps the instructors to manage their courses without the need of extensive technical knowledge.
- All components of the NET-Class system have been developed by the Graduate School of Informatics in a period of three years, by taking into account the faculty and student feedbacks in campus-wide ALN courses.
- NET-Class allows both students and instructors to follow and manage web-based asynchronous courses using standard web interfaces. In addition, system administrators can also conduct a group of courses in the curriculum.
- The major features of NET-Class include forum, e-mail, test tools, gradebook and student tracking. It provides these utilities using graphical user interfaces.
- NET-Class provides a secure environment for creating and managing courses.
- NET-Class allows any browser as its user interface.
- The communication tools provided by NET-Class eliminate the need for third party tools.

OEE-WEB

- Operated by the Graduate School of Informatics, this is an interuniversity education program offering undergraduate and graduate courses on information systems and technologies to other higher education institutions through the Internet.

AVICENNA VIRTUAL CAMPUS PROJECT

- UNESCO and the European Commission support the Avicenna Virtual Campus Project, involving a consortium of 15 Mediterranean universities. (Algeria-Universitě de la Formation Continue, Cyprus-University of Cyprus, Egypt-Faculty of Computer and Information, France-Universitě de la Méditerranée, Italy-Network per l'Università Ovunque NETTUNO, Jordan-Philadelphia University in Amman, Lebanon-Lebanese University, Malta-Malta Council for Science and Technology, Morocco-Ecole Nationale Supérieure d'Informatique et d'Analyze des Systémes, Palestine-Al Quds Open University, Spain-Universitad National de Educacion a Distancia (UNED), Syria-University of de Damascus, Tunisia-Institut Supérieur de l'Education et de la Formation Continue in Tunis, Turkey-Middle East Technical University, United Kingdom-Open University)
- In Turkey, Graduate School of Informatics is the partner of the Avicenna Project.
- The Avicenna Virtual Campus aims to construct a network capable of transferring knowledge between entry points in each participating country known as Avicenna Knowledge Centers.
- Students will benefit from Avicenna in some unprecedented ways. For example, Avicenna will include an educational virtual library.
- "Cross-fertilization" of different contents made available by the participating universities will be encouraged.

- Credits gained from one Center will be accepted by other participating universities.

DISTANCE EDUCATION ADMINISTERED BY THE CONTINUOUS EDUCATION CENTER

IDE-A (Asynchronous Internet-Based Education) (idea.metu.edu.tr)

IDE-A is an Internet-based asynchronous education program offered by METU.

IDE-A COURSES (Asynchronous Internet Based Education)

- **Information Technologies Certificate Program**: This program intends to reduce the deficiency of information technologies expertise and personnel in Turkey. A total of eight courses are offered and the duration of the program is nine months. The program content is based on the courses of the Department of Computer Engineering and is prepared in Turkish by the faculty of the same department. Certificate examinations are held in actual classrooms at METU.

  The list of the courses in the Information Technologies Certificate Program is given below:
  - Computer Systems and Computer Architecture
  - Introduction to C Programming
  - Data Structures and Algorithms in C
  - Operating Systems-Unix
  - Software Engineering
  - Database Management Systems
  - Computer Networks
  - Software Development Project

There are also four other courses ready to be used in IDE-A. However, there has been no demand for them yet. These courses are listed below:

- **Unusual Manufacturing Methods**: A course on the usage of unusual material and manufacturing techniques, that play an important role in modern technology.
- **Total Quality Management**: This course introduces the basic concepts of total quality management, their implementation in organizations and the relation of the TQM concepts with management models.
- **Quality in Service in the Light of ISO 9000**: This course stresses the importance of quality principles in the service sector. The focus is on the ISO 9004-2 standard whereby common aspects of the ISO 9000 family of standards are also covered.
- **Total Quality in the Light of ISO 9000**: This course intends to share the experience concerning total quality and quality systems gained from 5,000 person-hours of education and from observations of more than 400 organizations of various sizes in Turkey, through examples and explanations.

IDE-A Facts and Figures

Table 1: Participant Statistics

	A	**B**	**C**	**D**
Term 1	92	28	57	7
Term 2	90	16	55	19
Term 3	97	36	32	29
Term 4	106	38	38	30
Term 5	88	57*	31	0*
TOTAL	473	175	213	85

A: Number of enrollments
B: Number of graduates
C: Number of program leavers and those on leave
D: Number of attendees who have completed the program but failed in some courses.

*IDE-A terms start in September and finish following June. Hence, IDE-A Term 5 courses are still continuing. The numbers given in columns B and D have therefore been calculated according to current data and may change following the completion of the program.

Contribution to the university budget by the end of each term:

Terms 1 & 2 : 46,678.million TL (~ US $ 111,000)
Term 3 : 70,849.million TL (~ US $ 114,000)
Term 4 : 88,360 million TL (~ US $ 70,000)
Term 5 : 92,008 million TL (~ US $ 67,000; end of April)

DISTANCE EDUCATION ADMINISTERED BY THE SCHOOL OF FOREIGN LANGUAGES; DEPARTMENT OF BASIC ENGLISH

DISTANCE INTERACTIVE LEARNING (diL)

- "diL" is an interactive distance language learning program running over the Internet.
- The program was developed with the purpose to help students to prepare for national or international English language examinations from their own homes, schools or offices.
- This program is one of the first examples of its kind in Turkey and was designed by the School of Foreign Languages in collaboration with a private company.
- The lectures have been prepared by the instructors of the School of Foreign Languages, Department of Basic English.
- Any person having access to the Internet can join the "diL" program. Once registered, besides studying individually, the participant able to interact with his/her classmates in a virtual environment, ask questions, and use all the facilities the program offers.
- Three course periods of four months each have been completed so far. A total of 170 students participated in the program in 2001.
- Course participation fee is 250 million TL per term (~165 USD/term)

METU ONLINE COURSES

Table 2: METU Online Courses, supported with lecture notes.

Course Code	Course Title	Fully Online	Semi Online	Online Supp.	Capacity	Credit
ASTR201	Astronomy I	-	YES	-	50	3-0
ASTR202	Astronomy II	-	YES	-	50	3-0
CENG462	Artificial Intelligence	-	-	YES	--	3-0
CENG561	Artificial Intelligence	-	-	YES	--	3-0
COGS501	Formal Languages and Linguistics	-	-	YES	20	3-0
EE543	Neurocomputers	--	-	YES	10	3-0
EE553	Optimization	--	-	YES	30	3-0
HIST220	History of the Turkish Revolution	--	YES	-	--	3-0
HIST221	Principles of Kemal Atatürk	--	YES	-	1200	3-0
IE545	Total Quality Management	---	YES	-	--	3-0
IS503	Database Concepts and Applications	--	-	YES	40	3-0
IS514	Multimedia	--	-	YES	40	3-0
IS566	Image Processing Algorithms	YES	-	-	30	3-0
IS572	Introduction to Medical Informatics	--	-	YES	10	3-0
IS704	Data Warehousing in Healthcare and Medicine: Fundamental Aspects	--	-	YES	15	3-0
ME203	Mechanisms	-	-	YES	--	3-0
ME533	Computer Aided Design	-	-	YES	30	3-0
PHYS443	Computational Physics I	-	-	YES	30	4-0

The courses shown below in **Table 3** are developed in NET-Class environment to provide some online materials and activities for instructors and students to enrich the classroom lectures. Instructors use the NET-Class system tools as supplementary materials in these courses in addition to classic lecturing. METU Online system does not confine the instructors to the system tools they use, on the contrary, instructors themselves determine to what extend they will use the functionality provided by METU Online for a specific course.

Table 3: METU Online Courses

Course Code	Course Title	Capacity	Credit
ARCH 461	Computer Literacy in Architecture	--	3-0
BIO 415	Physical Chemistry for Biological Sciences	--	3-0
BIO 427	Biotechnology	--	3-0
BIO 435	Animal Diversity	--	3-0
BIO 584	Advances in Biomaterials	--	3-0

Course Code	Course Title	Capacity	Credit
CE 492	Coastal Engineering II	35	3-0
CE 595	Coastal Sedimentation	12	3-0
CENG 111	Introduction to Computer Engineering Concepts	--	3-0
CENG 232	Logic Design	--	3-0
CENG 242	Programming Language Concepts	150	3-0
CENG 331	Computer Organization	--	3-0
CENG 335	Microprocessors and Microcomputers	--	3-0
CENG 340	Rapid Application Development	--	3-0
CENG 352	Database Management Systems	--	3-0
CENG 373	Numerical Computations II	--	3-0
CENG 378	Computer Graphics	--	3-0
CENG 435	Data Communication and Networking	--	3-0
CENG 469	Computer Graphics II	--	3-0
CENG 490	Senior Design Project and Seminar	--	4-0
CENG 530	Computer Networks and Communication Systems	30	3-0
CENG 538	Advanced Graphics and User Interfaces	--	3-0
CENG 567	Design and Analysis of Algorithms	50	3-0
CENG 581	Automated Reasoning	--	3-0
CENG 707	Data Structures and Algorithms	--	3-0
CENG 709	Computer Architecture and Operating Systems	--	3-0
CHE 102	Introduction to Chemical Engineering	--	3-0
CHE 418	Chemical Engineering Design II	20	4-0
CHE 512	Multiphase Reactors	--	3-0
CHEM 221	Analytical Chemistry	10	4-0
CHEM 223	Analytical Chemistry Laboratory I	10	3-0
CHEM 426	Chemometrics for Analytical Chemistry	10	3-0
CHEM 507	Nuclear Chemistry	10	3-0
COGS 502	Programming and Logic	20	3-0
COGS 511	Computational Models of Mind	10	3-0
COGS 523	Using Corpora for Language Research	10	3-0
COGS 551	Human Memory	15	3-0
COGS 552	Thought and Language Processes	15	3-0
COGS 553	Psychology of Reading	15	3-0
GEOE 409	Photogeology	15	3-0
ECON 448	Technology and Industrial Dynamics	--	3-0
EE 363	Electromechanical Energy Conservation II	--	3-0
EE 374	Electrical Equipment and Applications	--	3-0
EE 583	Pattern Recognition	30	3-0

Course Code	Course Title	Capacity	Credit
EE 701	Robot Vision	30	3-0
ENVE 202	Fundamentals of Environmental Microbiology	--	3-0
ENVE 206	Physico-chemical Principles of Environmental Engineering	--	3-0
ENVE 307	Air Pollution	140	3-0
ENVE 312	Water Supply Engineering	--	3-0
ENVE 316	Air Pollution Lab.	--	1-0
ENVE 404	Environmental Modeling	--	3-0
ENVE 417	Unit Operations and Processes Lab.	--	3-0
ENVE 422	Treatment and Disposal of Water and Wastewater Sludge	--	3-0
ENVE 430	Solid Waste Landfill Design	--	3-0
ES 301	Numerical Methods in Engineering	30	3-0
ES 303	Statistical Methods for Engineers	30	3-0
ES 305	Computing Methods in Engineering	30	3-0
FLE 126	Reading Skills II	--	3-0
FLE 245	Turkish Phonology and Morphology	--	3-0
FLE 246	Turkish Semantics and Syntax	--	3-0
IE 347	Engineering Economy and Cost Analysis II	--	3-0
IE 495	Off-line Quality Control	--	3-0
IE 571	System Simulation	--	3-0
IS 504	Computer Networking for Information Systems	--	3-0
IS 564	DDI of Instructional Software	--	3-0
IS 574	Medical Imaging Technology	10	3-0
MATH 522	Coding Theory	18	3-0
ME 101	Technical Drawing	--	3-0
ME 205	Statics	40	3-0
ME 510	Numerical Methods in ME II	50	3-0
PHIL 182	Introduction to History of Science	100	3-0
PHYS 202	Modern Physics	40	4-0
PHYS 221	Optics and Waves	105	4-0
PHYS 334	Electromagnetic Theory	60	4-0
PHYS 444	Computational Physics II	30	4-0
PHYS 471	Solar Energy I	105	4-0
PHYS 505	Electromagnetic Theory I	--	3-0
PSY 386	Auditory Perception	--	3-0
PSY 272	Human Nervous System	--	3-0
PSY 543	Adulthood Psychopathology and Psychotherapy I	--	3-0
SOC 522	Sociology of the Middle East	--	3-0
SCE 410	Practice Teaching in Science Education	--	3-0

Table 4: Informatics Online (ION) Courses

Course Code	Course Title & Description	Term	FaceTo Face	Semi Online	Fully Online
ION501	**Introduction to Information Systems** The course introduces the students to the fundamental concepts of information systems. These include: systems theory; management information; conceptual models of information in organizations; MIS; decision support systems; enterprise resource planning systems; information systems planning; organizing for information system projects; IS project lifecycle models; IS development and maintenance principles; organization, management and control of IS; IS outsourcing..	II	Register Exams	--	YES
ION502	**Introduction to Software Engineering** The course introduces the fundamentals of software management and software system models with an emphasis on software development process models, project management techniques and contemporary modeling notations.	I	Register Exams	--	YES
ION503	**Database Concepts and Applications** **Introduction to database concepts**: data abstraction/independence, data models (entity-relationship model, object oriented model, relational/network/hierarchical model), database languages (DDL, DML), database administrator/user. Storage and File Structures. Indexing and hashing. Relational Model: formal query languages (Relational algebra, Relational calculus), commercial query languages (SQL). Relational database design: integrity constraints, data dependencies, normal forms. Transaction processing and concurrency control.	II	Register Exams	--	YES
ION504	**Computer Networking for Information Systems** Introduction to networking, layered network architectures and standard layer functions. ALOHA, Ethernet and Token Ring networks. Framing and error control. Routing and switching. Internetworking. TCP/IP. The Internet. Application support protocols. Network security.	I	Register Exams	--	YES
ION505	**Information Systems On-Line Group Project** This course aims to integrate fundamental awareness and expertise obtained in earlier information systems and software engineering courses into a meaningful whole through an applied group project. Students are organized in teams and each team is responsible from a stage in a complete IS development project. Teams communicate via formal documentation prepared and reviewed over the Internet. Course material, in parallel with project stages, presents an overview of fundamental IS project planning and management techniques and approaches. The course aims to achieve a professional level of quality in all stages of work, through formal peer reviews, standards of documentation and quality assurance.	II	Register Exams	--	YES
ION590	**Graduate Seminar**	-	-	--	-
ION8xx	**Special Studies**	-	-	--	-
ION591	**Research Methods in Information Systems**	-	-	--	-
ION592	**Information Systems Design Project**	-	-	--	-

Course Code	Course Title & Description	Term	FaceTo Face	Semi Online	Fully Online
ION514	**Multimedia** Architectures for multimedia systems, digital audio, video technology and image compression, computer graphics, multimedia information systems, multimedia communication systems	-	-	--	-
ION525	**Artificial Intelligence** Problem solving and search strategies. Game playing. Knowledge and reasoning. Uncertainty. Machine learning. Artificial neural networks and genetic algorithms.	-	-	--	-
ION526	**Introduction to Neural Networks** This course aims to give basics of Artificial Neural Networks in an algorithmic approach. The following topics are to be covered in the course: biological and artificial neurons, perceptron training algorithm, multilayer perceptron and back propagation training algorithm, Hopfield Network as autoassociative memory, bi-directional associative memory, function interpolation and radial basis function networks, Kohonen self organizing feature maps, Hopfield Network for optimization problems, simulated annealing and Boltzman Machine.	II	Register Exams	--	YES
ION528	**Image Processing Algorithms** This course is designed to introduce the basic concepts, applications and practical issues of Image processing. The teaching material presented through Internet has been prepared to provide easy and effective learning using visual effects and interactive Java applets. The following topics are covered in the course: Image Processing in Java, digital image fundamentals, image transforms, image enhancement, edge detection, morphological image processing, segmentation	II	Register Exams	--	YES
ION535	**Introduction to Medical Informatics** Medical informatics is the application of computers, communications and information technology and systems to all fields of medicine - medical care, medical education and medical research. This course presents an overview of medical informatics and its main applications. Primary topics include : Medical informatics as a discipline, associations and institutes, medical data and records, coding classification, database and reference models, interfaces, data acquisition, processing and exchange standards, medical knowledge, decision and diagnostic support, medical information systems, administrative, clinical and ancillary information systems, implementations and evaluations, telemedicine and internet applications.	-	-	--	-
ION542	**Information Technology and Business Processes** This course covers the business process concepts and the impact of ICT as the enabling technology. Process organization and process innovation are the main emphasis. Methodologies such as integrated process engineering and extended integrated process engineering will also be in introduced	I	Register Exams	--	YES

Course Code	Course Title & Description	Term	FaceTo Face	Semi Online	Fully Online
ION545	**Software Quality Management** Software quality. Quality assurance. Quality metrics. Construction of Software quality. Quality management and control. Software quality assurance planning. Quality standards. Software testing techniques. Black box and white box testing. Test strategies, Unit test, and Integration test.	-	-	--	-
ION551	**Managing Technology and Innovation** 'Invention' and 'exploitation' are the two basic activities in this course. Invention is related with the management of research and development. Exploitation is related with the management of the linkages between R&D, marketing, production, and strategy. The course aims to explore the relationships between these activities and technological processes considering science and engineering principles.	-	-	--	-
ION561	**Fundamentals of Simulation** This course covers simulation modeling in dynamic and stochastic systems, relevant fundamentals of statistical analysis, computer simulation and other application specifics. Discrete event simulation is the main emphasis, however, continuous and combined models will also be introduced. Input data analysis, model verification and validation, experimentation and output analysis will be introduced. Computer simulation will be taught in SIMAN environment	II	Register Exams	--	YES
ION562	**Optimization** Introduction to optimization problems, problem formulation, mathematical preliminaries, convex analysis, unconstrained minimization, one dimensional search techniques, methods of steepest descent, Newton and quasi-Newton and conjugate directions, constrained minimization and Kuhn-Tucker conditions, linear programming, penalty function method, feasible direction techniques, evolutionary optimization, genetical algorithms.	I	Register Exams	--	YES

APPENDIX

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**APPENDIX 10
INTERNATIONAL AGREEMENTS**

Country	Institution	Starting Date
AUSTRALIA	Monash University (Clayton, Victoria)	1994
	Royal Melbourne I.T. (RMIT)	2000
	Queensland Univ.of Technology	2001
	Victoria University of Technology (Melbourne)	1994
AZERBAIJAN	Academy of Sciences of the Azerbaijan	1991
	Azerbaijan Civil Engineering Institute	1991
	Azerbaijan Physics and Photoelectronic Institute	1992
	Azerbaijan State Oil Academy	1992
	Baku State University	2000
BELGIUM	Vesalius College (Brussels)	1994
BULGARIA	Varna Technical University	1998
CANADA	University of Alberta(Edmonton)	1993
	University of Ottawa(Ottawa)	1989
	Université de Quebec a Montreal	2000
	Université de Montreal (Quebéc)	1998
CHINA	China Inst.of Contem. Inter. Rel.	2001
DENMARK	Technical University of Denmark	2001
FRANCE	Ecole Nationale Supérieure de Mécanique & Aérotechnique (ENSMA)	2000
	Paris VIII Institut Français d'Urbanisme	1998
	EPF Ecole d'Engenieurs (Sceaux)	1999
GERMANY	Hochschule fur Technik & Wirtschaft Fachhochschule Kempten	1993
	Techniche Hochschule Darmstadt	1983
	University of Paderborn	1995
	Osnabrück University	1999
	Fachhochscule Aachen	1999
	Burg Giebichenstein School of Arts&Design (Halle)	2000
GREECE	Athens Univ.of Econ.& Business	2000
HOLLAND	Tilburg University	2000
HUNGARY	Technical University of Budapest	1989
	Hungarian National Museum Archeometry	1997
IRAN	Islamic Azad University	1988
IRAQ	University of Technology Bagdad	1982
ISRAEL	Ben-Gurion Univ.of Negev (Beher-Sheva)	2001
ITALY	Universite Degli Studi Di Torino	1995
	Politecnico di Milano (Dept.of Industrial Design)	2000
	Politecnico of Bari	2000
JAPAN	Tokyo Institute of Technology	2000
	University of Tokyo Graduate School of Engineering	1998
JORDAN	Yarmouk University	1982
KAZAKHISTAN	Zhambyl University	1997
LIBYA	Al-Fateh University	1981
	Garyounis University	1981
MALAYSIA	University Technology Malaysia	1983
MEXICO	ITESM	1998
MOLDOVA	Technical University of Moldava	1996

Country	Institution	Starting Date
NEW ZEALAND	University of Waikato	2001
POLAND	Space Research Center of Polish Academy of Science	1998
ROMANIA	Ovidius University (Constanta)	1998
RUSSIAN FEDERATION	Institute of Coal Siberian Branch of Academy of Sciences (Kemerova)	1992
	Rostov State University (Rostov on Don)	1993
	The Krasnoyarsk State Academy of Architecture and Civil Engineering (Krasnoyarsk)	1998
	Krasnoyarsk State University	1998
SAUDI ARABIA	Riyadh University	1982
SINGAPORE	National University of Singapore	1990
SOUTH AFRICA	Technikon Pretoria (Pretoria)	1995
SPAIN	Universitat d'Alacant	1998
SUDAN	Sudan University of Science and Technology	1993
	University of Khartum	1994
SWEDEN	Göteborg University	1994
UKRAINE	National Technical University of Ukraine	2000
UK	University of Leeds	2000
	University of Manchester	1995
	University of Newcastle	1994
	University of Southampton	1991
	University of Sunderland	1996
	University College of Wales	1991
USA	Illinois Institute of Technology	1993
	Indiana University Perdue University (Indianapolis)	1997
	Iowa State University	1999
	Monterrey Inst. of Intern. Studies (Monterrey, California)	1997
	New Jersey Inst. of Technology	2001
	New Mexico Tech (Socorro, NM)	1991
	New Mexico Inst. of Mining&Tech	1998
	Northeastern University (Boston, MA)	1997
	Oklahoma State University	2000
	Penn State University	1989
	Pitzer College (Claremont,California)	1995
	Rice University	2001
	Saginaw Valley State Univ. (University Center, Michigan)	1992
	Southern Illinois University at Carbondale	1997
	Texas Tech Univ. (Lubbock, Texas)	1993
	Union College (Schenectady, N.Y)	2001
	University of California System	1998
	University of Hartford	1993
	University of Illinois, Urbana Champain	2000
	University of Massachusetts	1993
	University of Michigan	2000

Country	Institution	Starting Date
	University of North Texas	1991
	University of New Orleans	1999
	University of Wyoming	2001
	University of Oklahoma	1999
	University of Texas at Austin	1998
	University of Utah	1995
	University of Wisconsin-MilWaukee	1991
	University of Wisconsin-Platteville	1998

**APPENDIX 11
DEGREE PROGRAMS**

UNDERGRADUATE PROGRAMS

Faculty of Architecture

Program	Department	Duration (Year)	Degree
Architecture	Architecture	4	B.Arch.
City and Regional Planning	City and Regional Planning	4	B.C.P.
Industrial Design	Industrial Design	4	B.I.D.

Faculty of Arts and Sciences

Program	Department	Duration (Year)	Degree
Biology	Biology	4	B.S.
Molecular Biology and Genetics	Biology	4	B.S.
Chemistry	Chemistry	4	B.S.
History	History	4	B.S.
Mathematics	Mathematics	4	B.S.
Philosophy	Philosophy	4	B.S.
Physics	Physics	4	B.S.
Psychology	Psychology	4	B.S.
Sociology	Sociology	4	B.S.
Statistics	Statistics	4	B.S.

Faculty of Economics and Administrative Sciences

Program	Department	Duration (Year)	Degree
Business Administration	Business Administration	4	B.S.
Economics	Economics	4	B.S.
International Relations	International Relations	4	B.S.
Political Science and Public Administration	Political Science and Public Administration	4	B.S.

Faculty of Education

Program	Department	Duration (Year)	Degree
Foreign Language Education	Foreign Language Education	4	B.A.
Early Childhood Education	Elementary Education	4	B.S.
Elementary Science Education	Elementary Education	4	B.S.
Elementary Mathematics Education	Elementary Education	4	B.S.
Computer Education and Instructional Technology	Computer Education and Instructional Technology	4	B.S.
Physics Education	Secondary School Science & Mathematics Education	5	M.S.
Chemistry Education	Secondary School Science & Mathematics Education	5	M.S.

Faculty of Engineering

Program	Department	Duration (Year)	Degree
Aeronautical Engineering	Aeronautical Engineering	4	B.S.
Chemical Engineering	Chemical Engineering	4	B.S.
Civil Engineering	Civil Engineering	4	B.S.
Computer Engineering	Computer Engineering	4	B.S.
Electrical and Electronic Engineering	Electrical and Electronic Engineering	4	B.S.
Environmental Engineering	Environmental Engineering	4	B.S.
Food Engineering	Food Engineering	4	B.S.
Geological Engineering	Geological Engineering	4	B.S.
Industrial Engineering	Industrial Engineering	4	B.S.
Mechanical Engineering	Mechanical Engineering	4	B.S.
Metallurgical and Materials Engineering	Metallurgical and Materials Engineering	4	B.S.
Mining Engineering	Mining Engineering	4	B.S.
Petroleum & Natural Gas Engineering	Petroleum & Natural Gas Engineering	4	B.S.

GRADUATE PROGRAMS

(* Interdisciplinary programs are in *italic* typeface)

Graduate School of Natural and Applied Sciences

Program	Degrees Offered	
Aeronautical Engineering	M.S. [1]	PhD
Archaeometry	M.S. [1]	
Architecture	M.ARCH. [1]	PhD
Biochemistry	M.S. [1]	PhD
Biology	M.S. [1]	PhD
Biomedical Engineering	M.S. [1]	PhD
Biotechnology	M.S. [1]	PhD
Building Science	M.S. [1]	PhD
Chemical Engineering	M.S. [1]	PhD
Chemistry	M.S. [1]	PhD
City and Regional Planning		PhD
City Planning	M.C.P. [1]	
Civil Engineering	M.S. [1]	PhD
Computer Education and Instructional Technology	M.S. [1]	PhD
Computer Engineering	M.S. [1,3]	PhD
Electrical and Electronic Engineering	M.S. [1]	PhD
Engineering Management	M.S. [3]	
Engineering Sciences	M.S. [1]	PhD
Environmental Engineering	M.S. [1]	PhD
Food Engineering	M.S. [1]	PhD
Geodetic and Geographic Information Technologies	M.S. [1,2]	
Geological Engineering	M.S. [1]	PhD
Industrial Design	M.S. [1]	

Industrial Engineering	M.S. (1)	PhD
Mathematics	M.S. (1)	PhD
Mechanical Engineering	M.S. (1)	PhD
Metallurgical and Materials Engineering	M.S. (1)	PhD
Mining Engineering	M.S. (1)	PhD
Operational Research	M.S. (1)	PhD
Petroleum and Natural Gas Engineering	M.S. (1)	PhD
Physics	M.S. (1)	PhD
Polymer Science and Technology	M.S. (1)	PhD
Regional Planning	M.R.P. (1)	
Restoration	M.S. (1)	PhD
Secondary School Mathematics Education	M.S. (4)	
Secondary School Physics Education	M.S. (4)	
Secondary Science and Mathematics Education	M.S. (1)	PhD
Software Engineering	M.S. (3)	
Statistics	M.S. (1)	PhD
Urban Design	M.C.P. (1)	

Graduate School of Social Sciences

Program	Degrees Offered	
Applied Ethics	M.S. (3)	
Business Administration	M.B.A. (1)	PhD
Economics	M.S. (1)	PhD
Educational Sciences	M.S. (1)	PhD
English Language Teaching	M.A. (1)	PhD
English Literature	M.A. (1)	PhD
Eurasian Studies	M.A. (1,2)	
European Studies	M.S. (1,2)	
Gender and Women's Studies	M.S. (1,2)	
History	M.S. (1)	PhD
History of Architecture	M.A. (1)	
Human Resources Development in Education	M.A. (3)	
Industrial and Organizational Psychology	M.S. (1,2)	
International Relations	M.S. (1)	PhD
Philosophy	M.A. (1)	PhD
Physical Education and Sports	M.S. (1)	
Political Science and Public Administration	M.S. (1)	PhD
Psychology	M.S. (1)	PhD
Science and Technology Policy Studies	M.S. (1,2)	
Settlement Archaeology	M.S. (1)	
Sociology	M.S. (1)	PhD
Urban Policy Planning and Local Governments	M.S. (1,2)	

Graduate School of Marine Sciences

Program	Degrees Offered	
Chemical Oceanography	M.S. (1)	PhD
Marine Geology and Geophysics	M.S. (1)	PhD
Marine Biology and Fisheries	M.S. (1)	PhD
Physical Oceanography	M.S. (1)	PhD

Graduate School of Informatics

Program	Degrees Offered	
Cognitive Sciences	M.S. (1)	PhD
Informatics Online	M.S. (3)	
Information Systems	M.S. (1)	PhD
Modeling and Simulation	M.S. (3)	
Software Management	M.S. (3)	

(1) With thesis,
(2) Without thesis,
(3) Evening program without thesis, with special fee
(4) Five-year Degree Programs

**APPENDIX 12
THE CONTINUOUS EDUCATION CENTER**

THE CONTINUOUS EDUCATION CENTER (CEC)
(www.sem.metu.edu.tr)

The Continuous Education Center (CEC) was established in 1991.

Offering continuous education from the University's pool of expertise, the main objectives of CEC are

- to improve the University's collaboration with public and private sector organizations as well as international institutions,
- to support the development of the Turkish Industry, and
- to provide its services at international standards.

Since the establishment of CEC, a total of 788 seminars with 18,959 participants were conducted, corresponding to 52,506 hours of education and 1,437,176 person-hour value. The Center is a member of IACEE (International Association for Continuing Engineering Education) and EUCEN (European Universities Continuing Education Network).

CEC offers various programmed / contracted seminars under the topics of computer systems, education, industrial systems and management, civil and electronics engineering, statistics, quality assurance, welding technology and materials, petroleum and natural gas, psychological guidance and counseling and health. Among these, popular certificate programs are listed below:

CERTIFICATE PROGRAMS

- **CISCO Network Academy**: The CISCO Network Academy Program of 7 months duration provides the opportunity to gain skills and expertise in the establishment and operation of computer networks.
- **Microsoft MSCE**: The "Microsoft Certified System Engineer" program aims at contributing to the increase of skilled technical personnel in Turkey. The course has duration of 31 workdays.
- **Human Resources Management**: Designed to provide the basic knowledge in human resources management to personnel and candidates of managerial positions, this course has duration of 13 weeks.
- **Management Information Systems**: A 16-week certificate program on the methods of effective design and operation of information systems based on information technologies.
- **Media Ethics**: Designed for current or future media professionals, this program intends to educate participants in decision making from the ethical perspective. (Duration: 10 weeks)
- **Quality Management**: The program is geared at training professionals on the concept of total quality management. Participants will be able to play a leading role in their companies in adopting a total quality management system and solving quality related problems. (Duration: 11 weeks)
- **IDE-A**: An Internet based certificate program designed for those participants who would like to attain basic knowledge on computers and information systems. (Duration: 9 months)

Table 1: CEC Seminars Conducted Between 1991 and 2001

TYPE OF SEMINAR	Number of Seminars	Number of Participants	Duration of Education (Hour)	Person-Hour Value	REAL VALUE OF PROJECT COSTS (Million TL)	REAL VALUE OF FACULTY PAYMENTS (Million TL)	REAL VALUE OF UNIVERSITY SHARE (Million TL)
1991							
CONTRACTED	20	320	1,923	28,684	204,054	101,720	48,620
PROGRAMMED	17	202	444	5,090	43,004	24,656	12,918
TOTAL	37	522	2,367	33,774	247,059	126,377	61,538
1992							
CONTRACTED	24	578	1,782	31,935	107,353	71,919	25,604
PROGRAMMED	36	464	1,086	13,906	85,348	49,562	33,178
TOTAL	60	1,042	2,868	45,841	192,702	121,481	58,783
1993							
CONTRACTED	49	832	4,196	59,662	218,594	135,070	76,508
PROGRAMMED	38	505	1,174	10,145	87,030	42,445	30,460
TOTAL	87	1,337	5,370	69,807	305,625	177,516	106,968
1994							
CONTRACTED	35	639	2,905	86,199	268,548	135,951	94,034
PROGRAMMED	19	235	346	4,242	21,505	9,569	7,527
TOTAL	54	874	3,251	90,441	290,054	145,521	101,562
1995							
CONTRACTED	31	685	2,207	41,356	201,675	106,573	70,459
PROGRAMMED	24	433	1,109	15,889	75,182	28,578	25,166
TOTAL	60	1,476	3,331	58,319	276,858	135,152	95,625
1996							
CONTRACTED	43	1,128	2,957	67,380	301,851	143,115	87,953
PROGRAMMED	27	347	1,050	14,470	93,888	42,522	29,105
TOTAL	78	1,908	4,031	83,149	395,739	185,637	117,058
1997							
CONTRACTED	87	2,448	5,677	318,985	506,659	273,559	83,579
PROGRAMMED	27	336	819	11,715	85,945	14,723	22,497
TOTAL	118	3,018	6,508	331,402	592,604	288,283	106,077
1998							
CONTRACTED	75	1,703	4,491	121,493	462,495	278,318	73,255
PROGRAMMED	12	318	382	2,590	136,466	51,770	21,834
TOTAL	91	2,221	4,888	124,803	598,962	330,088	95,090
1999							
CONTRACTED	66	2,808	6,889	248,506	575,184	339,473	92,593
PROGRAMMED	14	470	232	6,868	139,368	96,792	18,975
TOTAL	80	3,278	7,121	255,374	714,553	436,265	111,568
2000							
CONTRACTED	60	1,773	5,698	168,610	720,776	438,992	115,323
PROGRAMMED	6	264	248	7,330	150,392	20,024	24,062
TOTAL	66	2,037	5,946	175,978	871,169	459,016	139,386
2001							
CONTRACTED	49	885	5,802	136,586	314,715	192,198	50,146
PROGRAMMED	7	412	268	7,852	150,119	16,602	18,831
TOTAL	56	1,297	6,070	144,438	464,834	208,801	68,978
GRAND TOTAL	**788**	**19,010**	**51,753**	**1,413,326**	**4,950,164**	**776,495**	**1,062,638**

IN-SERVICE TRAINING FOR ACADEMIC AND ADMINISTRATIVE STAFF FOR HUMAN RESOURCE DEVELOPMENT

Continuous Education Center organizes various courses, seminars and training programs for improving the quality of service and education at METU. These training activities can be grouped in two categories as summarized below:

1- PROFESSIONAL DEVELOPMENT PROGRAM ON EFFECTIVE TEACHING

The coordination of Professional Development Program on Effective Teaching is also within the scope of the activities CEC is involved in.

The basic goal of this program, which is specifically designed for METU faculty, is to develop the necessary skills and awareness related to instructional orientation, communication and social interaction underlying instruction, instructional planning, effective teaching, instructional strategies, active learning, assessment and evaluation in teaching. The priority is given to the young academic staff in the Faculties of Engineering, Arts and Sciences, Architecture, Economics and Administrative Sciences.

To realize this goal, a group of senior faculty members and education specialists have organized training seminars/workshops for the newly employed as well as some volunteering faculty. The program was evaluated through several procedures and improved prior to the second implementation.

Following the positive and encouraging feedback received related to the seminar/workshop impacts, extending the program to the rest of the faculty volunteering to participate and establishing a permanent system for professional development are being considered.

2- ADMINISTRATIVE STAFF DEVELOPMENT PRACTICES

CEC offers various opportunities for the progress and advancement of the administrative staff. Having gone through a pre-service training following their employment, METU administrative personnel at all levels are encouraged to participate in in-service training programs related to their expertise. Among these are foreign language courses at different levels; computer training seminars for computer literacy and conference, workshop and symposium organizations to expose the administrative personnel to the recent applications and recent technological developments in their fields.

**APPENDIX 13
METU-TECHNOPOLIS**

METU-TECHNOPOLIS (www.metutech.metu.edu.tr)

METU-Technopolis is located on the west side of the METU campus, on 70 hectares of land. As of March 2001, METU-Technopolis is offering a total office space of 12,000 square meters in two groups of buildings (METU-Halıcı Software House and the METU-Twins) to the use of companies meeting certain acceptance criteria.

The planning of METU-Technopolis foresees that up to 200,000 square meters of use area, including social and cultural facilities, will be offered to its tenants by the time the project is completed. Today, 39 companies, mainly involved in software development, design and innovation of informational networks, computer systems and electronic systems, inhabit the METU-Halıcı Software House and the METU-Twins Buildings.

The METU-Technopolis and the Incubator (TEKMER) companies and their main fields of interest are given in the following table:

METU-TWINS BUILDING

Firm	Web	Interest	Area m^2
ADA-NET	www.ada.net.tr	E-Mail, FTP, WEB Design, WEB Hosting, Virtual Domain, Virtual Web Server, Virtual E-Mail Server, Dial-Up access (Analog and ISDN), Static IP, Mail MX, Co-Location, Mirror, Leased Line Connections, X.25 Connections, Frame Relay Connections, VPN Services, Virtual Shopping Center Installation And Operating Services, Security, Virus Security Systems, Web-Mail Server Installations	33
ADA-SOFT	www.ada.com.tr	• Consulting, Software Development, • Web Based Data Base Applications, • Secure Payment Systems, • Portal Applications	
ATİKUS	http://www.karuzel.com	• Traffic Radar Systems • Ultrasonic Nebulisers • Animated Traffic Lights • Electronic Tachometers • Tachometer Test & Control Devices • Ultrasonic Cleaners • Thermal Printer Drivers • Shuttle Printer Drivers • Dog Repellers • Concrete Test Devices	42
AYDIN	www.ayesas.com	• High technology software • Electronics • Real time software engineering and hardware/software systems integration • Custom manufacturing involving electronic assembly, metalwork fabrication, ruggedizing equipment, communications hardware, shelterization, radar data integration, real time C3 systems, data fusion, command center design and installation.	445
BİLDEM	www.bildem.com.tr	• Software integration • Electronic, avionic, crypto instrumentation	42
BİLGİ	www.bilgiltd.com	• GIS application development, • Orthophoto map production and tata	33

Firm	Web	Interest	Area m^2
		conversion BİLGİ has also signed a BOA (Basic Ordering Agreement) with NATO NC3A agency as the only Turkish GIS company today that has been selected as eligible for NATO GIS Software and Services.	
BİZNET	www.biznet.com.tr	• Information security • Document management and work flow management systems • Local area network • Wide area network • On site consultancy services	145
EBİ	www.ebi.com.tr	• Electronic macrograph • Electronic taximeter • Pulsar printer taximeter • Pulsar taximeter • Ultrasonic dog repeller • Index reader • Electronic cash registers • Radar for recording traffic violations	139
ETA	www.target.com.tr	• Shooting ranges • Access control systems • Test program sets • Wide range of high-tech products.	445
FORBİS	www.forbis.com.tr	• World Bank certified management consultancy • United Nations/World Bank funded development project • Custom-made software development, • Enterprise Resource Planning (ERP) application and implementation consultation • Development of logistic support solutions. • Defense industry (logistics management and human resources management) SAP R/3 applications: • Materials Management • Plant Maintenance • Production Planning • Advanced Planning and Optimization • Quality Management • Project Systems • Human Resources Management	33
INNOCENT		• Design, construction and management policy/software • Advanced research in new design, construction and management technologies.	
İNNOVA	www.innova.com.tr	• E-Business • B2B, B2C applications • Portal applications • Customer relationship management (e-CRM) • Virtual payment solutions • Electronic bill presentation and payment (EBPP) • Organizational security solutions • Kiosk applications	478

Firm	Web	Interest	Area m²
		• Operational systems • Design and development of customized critical applications • Customer care and billing (CCB)	
KALE	www.kaleyazilim.com.tr	• Development of large-scale application software • Custom solutions to meet specific needs of institutions	145
MİLSOFT	www.milsoft.com.tr	• Radar Command & Control Integration System • Ethernet and Modem Based Communication System s • Digital Terrain Aerial Mission Planning Systems • Artillery Fire Support Systems • Vehicle Tracking Systems • Price & Cost Analysis Systems • Supply & Maintenance Information Systems • Commodity Exchange Information Systems • Scenario Editor and Player Systems • Tactical Area Command and Control Systems	890
MVS	www.mekansal.com.tr	• GIS • Infrastructure Information Systems • Engineering Applications	42
OK	www.okltd.com	• Injection, filling and isolation foams • Prevention of gas and air leakage in coal mines • Consolidating tunnels and galleries in construction and mining industries • Fluid Transfer Pumps Lunafleks – Steropes: Special foams used in prevention of air and gas leakages and filling of cavities in coalmines are produced. With its high expansion ratio up to 30 times, the foams can be used for all kinds of filling and sealing processes.	33
OPTİMAL		• Software • Electronics • Radar	66
ROKETSAN		• Defense Industries • Rockets	33
RÖNESAN		• Air-Conditioning • Building Automation • Energy • Software	42
SALTUS	www.saltus.com.tr	• Software • Software architecture • Computer aided education • Engineering	100
SAVRONİK		• "Electronic Defense Systems" solutions for the Turkish Defense Industry • Design, manufacturing, testing and servicing fire control systems.	42
SCT	www.sct.com.tr	• Software • System analysis	42

Firm	Web	Interest	Area m²
S.P.A.C.	www.spac.com.tr	• Software • Statistical education software • Experiment design • Design For Six Sigma	42
STM	www.stm.com.tr	• Mission Support Systems • Tactical Command Control Systems • UAV Ground Control Application Software • Image Intelligence Processing / Evaluation / Valuation Systems • Avionics Application Software • Software Support / Maintenance / Test Services for EW Systems • Command Control Information Systems • Computerized Maintenance Management Systems • Technical Support, Consulting and Engineering Services STM maintains a quality system, currently certified as AQAP 150 NATO Quality Assurance Requirements for Software Design, Development and Maintenance compliant.	445
TEKNOPLAZMA	www.teknoplazma.com.tr	• Wear-resistant ceramic coatings • Corrosion-resistant metallic coatings	50
TR.NET	www.tr.net	• ISS (the first ISP in Turkey) • Hosting	495
YENEL	www.yenel.com.tr	• Creating innovative and inventive electronic systems • Medical Electronics, Industrial Electronics, Automotive Electronics, Consumer Electronics and Software development • Infant Incubator Controller, Motor Performance Tester, Internet Accessible Equipment and Data Logging and Reporting System • R&D, design and product development work.	66

METU-HALICI SOFTWARE BUILDING

Firm	Web	Interest	Area m²
GATE ELEKTRONIK	www.gateelektronik.com.tr	• Testing, fault finding and repairing of any electronic system, device or printed circuit assembly. • Production, repair and maintenance activities in accordance with military workmanship standards. • Maintenance and repair laboratories, production lines related training and consultancy for military, public and private sector. • Logistics support for electronic components	140 + 455
HALICI	www.halici.com.tr	• Software, • Computer-Based Education Software, • Multi Media Applications, • Document Archives Management Systems, • MRP-ERP Package,	1500

Firm	Web	Interest	Area m^2
		• MIDI Music Applications, • Turkish Dictionary Project, • Fingerprint Identity System, • MIS Applications.	
INTERMEDIA	www.im.com.tr	Training services in the fields of • Information Technology, • Desktop Computing, Personal and Professional Development, • Project Management and Foreign Language Training	200
INTRO	www.introsolutions.com	• Information technologies • Software development • Information security	33
KOÇ.NET	www.kocsistem.com.tr	• B2B • B2C • ISP • Hosting • Enterprise Management	1462
KOÇSİSTEM	www.kocsistem.com.tr	• System integration • Hardware-Software Support	
MICROSOFT ACADEMIC EDUCATION CENTER	www.microsoft.com.tr	• Information Technologies education • Software education	150
TÜRK ZEKA VAKFI (Turkish Intelligence Foundation)	www.zeka.org.tr	• Utilization of Intelligence • High IQ - Genius Group • Information Society • Artificial Intelligence • Brain Sports	60

TECHNOLOGY DEVELOPMENT CENTER (INCUBATOR)

(www.tekmer.gov.tr)

Firm	web	Interest
ADT Mühendislik		• Engineering • Machine automation and modernization • Automatic barrier systems
APSİS Kontrol Sistemleri		• Observation and mapping for GPS and GIS • Production of data collection systems • Production of materials test systems
ATD Çevre Teknolojileri		• Solid waste – hazardous waste management • Waste water treatment
DİZGE Analitik	www.dizgeanalitik.com.tr	• Data processing systems for test and measurement equipments • Software and hardware for chromatograph data processing systems
EGİS Elektronik	www.egis.com.tr	• High quality products • Innovative solutions
EKON Kontrol Sistemleri	www.ekon-ltd.com.tr	• Designing and manufacturing of devices and software for energy measurement and process control instruments.
FİLKON Elektronik		• RF and microwave circuits, module and sub-system design and development • development of real-time software for microprocessors
HEMOSOFT		• Software

		• Medical software
İNTER-AK		• Web-based education
		• Software for distance education
KOMES Komünikasyon	www.komes.com.tr	• Communication systems
		• DECT
		• WLAN
LETRA	www.letra.com.tr	• Development of hardware for data collection and storage
MEDİSPO Medikal		• Medical hardware
		• Medical software
NANOMANYETİK	www.nanomagnetics-inst.com	Development of Scanning Hall Probe Microscopes for quantitative and non-invasive imaging of magnetic materials with nanometer scale resolution.
ORCA	www.orca.com.tr	Upgrading Textile machinery
PCK Elektronik		Software development for numerical angiographies system
POLAR Mühendislik	www.polar-ltd.com.tr	• Multi-processing software systems,
		• Client / server applications,
		• Internet and/or Intranet applications,
		• Data communication protocols,
		• Telecommunications,
		• Artificial Intelligence and search techniques,
		• Computer graphics and 3D computer animation
		• Neural networks,
		• Object oriented techniques in design and development
PROJE GRUP		Model-based object definer
PROTEM Mekatronik		• Testing equipment
		• Experimental setups
		• Data collection systems
SİDATA Yazılım		• Software
		• Software for the measurements on semi-conductors
SİGMA Yazılım		• Software
		• Communication security systems
SİMART Mühendislik		Development of testing systems.
TÜMEL Mühendislik		Development of security systems.
UDEA Elektronik	www.udea.com.tr	• Car alarm products
		• Home / office security systems,
		• Digital Communicators, panel type ampermeters, voltmeters, wattmeters, pulse counters
		• PLC based electro-pneumatic control systems
VERİSEL Elektronik		Software and hardware for programmable hand terminals

SOFTWARE DEVELOPMENT CENTER

(www.ygm.metu.edu.tr)

Firm	web	Interest
AB	www.abyazilim.com	Software
LOTUS		Software
MENTOR		Software
SİSTEM	www.sistemanaliz.com	Software
SAYARTEK	www.ygm.metu.edu.tr/sayartek	Software
USTA	www.prosoftyazilim.com.tr	Software
VERİTEK		Software

APPENDIX

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APPENDIX 14
THE TURKISH HIGHER EDUCATION LAW

The Higher Education Law of 1981 has undergone a number of relatively minor changes since its enactment. The major change came in 1992, when new procedures for the nomination and appointment of rectors were implemented. According to the new procedures, six candidates from among full professors of that or any other university are elected by the assembly of faculty members, which includes all full, associate and assistant professors in that university. From among these six, HEC elects three nominees by secret ballot, and submits their names to the President of the Republic, who appoints one of them as the rector for a period of four years, renewable only once.

The right of all Turkish citizens to petition and to appeal all matters concerning themselves are under constitutional guarantee. Furthermore, the Constitution also subjects all administrative and executive decisions and actions to the scrutiny of the courts.

Thus, all staff and students can petition and appeal matters concerning themselves, such as academic promotions, disciplinary action, and grades. The process generally starts at the departmental level, with the right to appeal to a board at the next level, and can eventually reach the Supreme Court of Appeals, a constitutional body that protects the rights of citizens vis-à-vis the state.

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THE LAW ON HIGHER EDUCATION

Law Number: 2547
Date of enactment: November 4, 1981
Published in the Official Gazette No: 17506; Date: November 6, 1981

PART ONE
AIM AND SCOPE OF THE LAW AND DEFINITIONS

Aim
ARTICLE 1
The aim of this law is to define the goals and principles pertaining to higher education and to establish principles, related to the functioning, duties, authority, and responsibilities in connection with education, research, publication, teaching staff, students and other personnel of institutions of higher education and their governing bodies.

Scope
ARTICLE 2
This law covers the activities and principles of governing bodies of higher education, all institutions of higher education, and their sub-divisions. Matters concerning institutions of higher education of the Turkish Armed Forces and Security Organization are subject to other separate laws.

Definitions
ARTICLE 3
The concepts and terms used in this law are defined as follows:
a. Higher Education: All post-secondary education consisting of at least four semesters, within the national education system, at every stage.
b. Governing Bodies: The Council of Higher Education and the Inter-university Board.

c. Institutions of Higher Education: Universities, Higher Institutes of Technology, Faculties, Graduate Schools, Schools of Higher Education, Conservatories, Vocational Schools and Research Centers.

d. A Higher Institute of Technology is an institution of higher education possessing academic autonomy and juristic personality, carrying out high-level research, education, production, publication, and consultancy specifically in the areas of technology.

e. University: An institution of higher education possessing academic autonomy and juristic personality, conducting advanced-level education, scholarly research, publication and consultancy; it is composed of faculties, graduate schools, schools of higher education and similar institutions and units.

f. Faculty: An institution of higher education conducting high-level education, scholarly research and publication; sub-divisions may be attached to it.

g. Graduate School: An institution in universities and in faculties which is concerned with graduate education, scholarly research and applied studies in more than one related academic area.

h. School of Higher Education: An institution of higher education mainly concerned with providing instruction for a specific vocation.

i. Conservatory: An institution of higher education in music and the performing arts.

j. Higher Vocational School: An institution of higher education carrying out four-semester education aimed at training manpower in specific areas.

k. Research and Applied Studies Center: An institution of higher education carrying out research and applied studies to meet the applied study needs of various areas and to provide preparatory and support activities for various professional areas, with the aim of supporting education in institutions of higher education.

l. Department: A unit of a Faculty or of a School of Higher Education giving instruction and carrying out research; it embraces similar or related areas of the sciences or arts, forming a whole in aim, scope and character. It is sub-divided into departmental sections. Departments directly attached to the office of the Rector can also be established for the purpose of offering courses common to various departments.

m. Teaching Faculty Members: Teaching staff members as well as instructors, lecturers, and ancillary staff.

    1. Instructor: A teaching faculty member responsible for teaching courses and conducting applied study sessions.

    2. Lecturer: A teaching faculty member responsible for teaching certain compulsory subjects common to students in various programs.

    3. Ancillary Staff: These include research assistants, specialists, translators, and educational planners. Ancillary staff are appointed for a specific period of time.

n. Teaching Staff Members: Professors, Associate Professors, and Assistant Professors at institutions of higher education.

    1. Professor: A teaching staff member holding the highest academic title.

    2. Associate Professor: A teaching staff member who has successfully fulfilled the requirements of the Inter-university Board and been granted the title of Associate Professor.

    3. Assistant Professor: A teaching staff member at the first stage, who has received a PhD, or qualified as a specialist in a medical field, or received a certificate of competence in one of the areas of the fine arts.

o. Pre-Baccalaureate Stage: Post-secondary higher education involving a program of at least four semesters, aiming at training for a vocation or comprising the first level of the baccalaureate.

p. Baccalaureate Stage: A post-secondary program of at least eight semesters.

q. Post-graduate Study: A term covering programs for the master's and PhD degrees, Specialist training in medicine or competency in the Arts; it includes:

1. Master's Degree Program: A post-baccalaureate stage of higher education consisting of course work and research.

2. PhD Program: A program of higher education of at least six semesters (post-baccalaureate) or at least four semesters (post-master's, or post-specialization in a laboratory field approved by the Ministry of Health for graduates of Faculties of Pharmacy or Science) culminating in the presentation of an original work of scholarly research.

3. Specialization in Medicine: A program of higher education conducted in accordance with the regulations established by the Ministry of Health and leading to specialization in one of the fields of medical science.

4. Competency in the Arts: A post-baccalaureate program (of at least six semesters) or post-master's program (of at least four semesters) equivalent to PhD-level programs. It requires the presentation of an original work of art, or, in music and the performing arts, a superior, creative performance.

r. Types of Higher Education:

1. Formal Education: Programs requiring attendance during the entire course of education.

2. Distance Education: Education conducted by means of radio, television, and educational materials.

3. External Education: Programs offering courses outside of working hours. Class attendance is not compulsory, but students are required to take midterm and final examinations.

4. Non-Formal Education: Programs offered to the general public with the aim of disseminating knowledge and enabling the acquisition of skills in various areas.

PART TWO
GENERAL PROVISIONS

Aims
ARTICLE 4

The aims of higher education:

a. To educate students so that they:

1. will be loyal to Atatürk nationalism and to Atatürk's reforms and principles,

2. will be in accord with the national, ethical, human, spiritual and cultural values of the Turkish Nation and conscious of the privilege of being a Turk,

3. will put the common good above their own personal interests and have full devotion to family, country and nation,

4. will be fully conscious of their duties and responsibilities towards their country and will act accordingly,

5. will be objective, broad-minded, and respectful of human rights,

6. will develop in a balanced way, physically, mentally, psychologically, morally, and emotionally,

7. will prove to be good citizens contributing to the country's development and welfare and at the same time acquire the necessary knowledge and skills for their future vocations.

b. To enhance the welfare of the Turkish State as a whole, conducive to national and territorial indivisibility; to implement programs contributing to and accelerating the economic, social and cultural development of the country; and to ensure that students are constructive, creative and outstanding participants in contemporary civilization.

c. As higher educational institutions, to carry out studies and research of high academic level, to promote knowledge and technology, to disseminate scientific findings to assist progress and development at the national level, and, through cooperation with national

and international institutions, to become recognized members of the academic world and contribute to universal, contemporary progress.

Basic Principles

ARTICLE 5
Higher education is organized, planned, and programmed in accordance with the following basic principles:

a. To ensure that students develop a sense of duty in line with Atatürk's reforms and principles, loyal to Atatürk nationalism.

b. National culture integrated with universal culture, will be developed and fostered in keeping with Turkish mores and traditions so that the students develop a strong sense of national unity and solidarity.

c. The principle of basic unity within the educational system is to be achieved with due regard to the aims and goals, and particular characteristics of various higher educational institutions and fields of study.

d. Short and long term plans and programs are to be devised on the basis of scientific and technological principles, in accordance with national and regional needs, and will be regularly up-dated.

e. Measures are to be taken to secure equality of opportunity in higher education.

f. New universities and higher institutes of technology as well as new faculties, graduate schools, and schools of higher education within universities are established by law upon the recommendation or proposal of the Council of Higher Education in accordance with the principles and goals of national development plans and within the context of higher education planning.

g. Vocational schools of higher education attached to ministries are founded by a decision of the Council of Ministers on the basis of principles set forth by the Council of Higher Education.

h. Developing institutions of higher education, improving their efficiency, increasing their numbers so as to cover the whole country, training teaching staff in-country and abroad, and their proper assignment; securing a balance between manpower needs and education; distribution of resources and specialized manpower and education; meeting the national and local needs and specific requirements of the fields of practice in accordance with the principles and aims of the national education policy and the national development plans, are planned and achieved in a manner to cover formal and non-formal, continuing, and distance education.

i. In the course of education in the institutions of higher education, Atatürk's Principles and the History of the Turkish Reforms, the Turkish language and a foreign language are all compulsory courses. In addition, a non-compulsory course in physical education or in one of the fine arts shall be included in the curriculum. All of these courses are to be planned and implemented for a minimum of two semesters.

PART THREE
GOVERNING BODIES

The Council of Higher Education
ARTICLE 6
a. The Council of Higher Education is an autonomous body with juristic personality which governs all higher education, directs the activities of the institutions of higher education, within the context of duties and powers given by this law. To the Council of Higher Education are attached the Higher Education Supervisory Board and the Student

Selection and Placement Center together with the relevant units responsible for planning, research, development, evaluation, budget, investment and coordination.

b. The Council of Higher Education consists of:
    1. Seven members selected by the President of the Republic, preferably from among former Rectors and distinguished professors,
    2. Seven members selected by the Council of Ministers, from among distinguished, high-ranking civil servants, either active or retired (with the approval of the Ministry of Justice and their personal consent in the case of judges or prosecutors),
    3. One member selected by the Chief of the General Staff,
    4. Seven professors selected by the Inter-university Board from among non-members of the Board.

The memberships of those selected and nominated according to paragraphs (2), (3), and (4) become final upon the approval of the President of the Republic. The nomination of members specified in the above paragraphs is to be made within one month; in case of membership not being approved by the President of the Republic, nomination of new candidates shall be made within two weeks, otherwise the appointment is to be made directly by the President of the Republic.

Members selected from those holding positions in public institutions will maintain their relationship with the institution concerned.

The term of office of Council members is four years. New elections are held to replace those who leave for any reason and on completion of a term of office. Those whose term expires are eligible for re-election.

c. The organs of the Council of Higher Education are the General Assembly, the President and the Executive Board.

The members of the General Assembly are specified in section (b) above. The General Assembly meets at least three times each semester. Meetings can also be called by the President of the Council or upon written application by at least one-third of the members.

The President of the Republic selects the President from among the Council members for four years. The President of the Council is responsible for implementation of laws, regulations, as well as decisions of the General Assembly and the Executive Board; the President represents the Council and appoints academic personnel and other persons whose selection falls within the authority of the Council.

The Minister of National Education, when (s)he deems necessary, participates and chairs the meetings.

The Executive Board is composed of nine members, including the President. Two Vice-Presidents are selected from among the members of the General Assembly as members of the Board, one by the President of the Board and the other by the General Assembly. The remaining members of the Board are selected by the General Assembly as follows: two members from among those specified in Article 6, section b, sub-section 1; two from those specified in Article 6, section b, sub-sections 2 and 3; two from those specified in Article 6, section b, sub-section 4. A member of the General Assembly selected from among judges or prosecutors cannot be elected to the Executive Board.

The President chairs meetings of the General Assembly and the Executive Board. In the absence of the President, one of the Vice-Presidents represents the President.

The General Assembly may delegate to the Executive Board authority and responsibility vested in it by the Law on Higher Education, as it deems appropriate, with the exception of: planning, organization, direction and supervision of higher education, preparation of regulations, examination and approval of budgets prepared by governing bodies of higher education and by universities, and nomination of candidates for university rector.

The quorum for meetings of the General Assembly is 14, while that for the Executive Board is 6. Decisions in both bodies are taken by majority of votes cast. In the event of a tie, the President's vote counts as two.

d. The salaries of the President and members of the Executive Board are determined by the Council of Ministers with the proviso that this amount is no more than two times the salary paid to the highest-ranking civil servant (including supplementary indicator, auxiliary payment, and compensation) in accordance with Law No. 657, the Civil Service Law. Members of the Executive Board receive no further salary from public institutions. Those receiving a retirement pension continue to receive that pension. Civil servants who serve as members of the Executive Board are considered to be on leave without pay from the institution at which they are employed and retain all of their accumulated rights as personnel.

The sum to be paid to members of the General Assembly other than Executive Board members as an honorarium for attendance at meetings shall be calculated by multiplying the monthly salary coefficient for civil servants by 4,000. However, a maximum of twelve such participation honoraria can be paid in one year.

e. Members of the Executive Board are appointed on a full-time basis. The President of the Council and Executive Board Members are not permitted to have any employment in a public or private institution except for associations founded for the public interest, foundations, and affiliated institutions where they receive no remuneration for their services and in the case of temporary assignments given them by the Council of Ministers.

Members of the Executive Board who are absent for a total of one month in a year for any reason other than assignments by the Council of Ministers shall be presumed to have forfeited their membership.

f. Apart from those members who have not resigned from their primary employment, members of the Council of Higher Education shall not be subject to the legally stipulated maximum age limit, as long as they continue to be elected and serve as members.

The Functions of the Council of Higher Education
ARTICLE 7
The functions of the Council of Higher Education are as follows:
a. To prepare short and long-term plans for the establishment, development, and realization of educational activities of the higher educational institutions; to see to the training of the teaching staff, in-country and abroad, according to the aims, goals and principles set forth in this law; to supervise efficiently the resources allocated to universities within the framework of these plans and programs.

b. To promote continual and harmonious cooperation and coordination among the institutions of higher education, aiming at unification and integration, in accordance with the aims, principles and targets specified in this law.

c. To determine the extent of growth compatible with the running of the universities at maximum efficiency and the taking of such measures as summer courses, night courses and two-shift education.

d. In accordance with the principles and targets of the national development plans and in the context of higher education planning:

    1. To present to the Ministry of National Education proposals or views on the establishment, and, if necessary, unification of newly established universities,

    2. To make decisions directly or on the basis of proposals made by universities concerning the opening, unification, or closing down of faculties, graduate schools and schools of higher education within a university and to convey the above decisions to the Ministry of National Education for appropriate action in due course,

    3. To make decisions and to have them implemented directly or on the basis of proposals made by universities, regarding the opening, unification, or closing down of departments, sections, research and applied studies centers, as well as the opening of conservatories, higher vocational schools, preparatory schools or units,

    4. In the event of circumstances causing a breakdown in education, to make decisions directly or on the basis of proposals made by universities regarding a temporary close-down or a recommencement of education and to put them into effect,

    5. To study the aims and rationale of higher educational institutions to be established by ministries and to present opinions to the competent authorities.

e. To specify, taking into consideration the views of the Inter-university Board, the principles related to minimum number of contact hours and minimum period of study in educational curricula, conditions for passing to the subsequent year of study, intra- and inter-mural transfer of students in the institutions of higher education and the principles whereby graduates of schools of higher education continue their studies at a higher level.

f. To fix, in a balanced ratio, the positions of professors, associate professors, and assistant professors in universities on the basis of needs, education programs, characteristics of the branches of learning, research activities, fields of application, buildings, materials and equipment and similar facilities and the number of students of the universities and other related matters.

g. To examine and evaluate the annual activity reports submitted by the universities; to pinpoint the highly successful and those considered to be inadequate and to take necessary measures.

h. To decide on the maximum yearly student intake into each academic program after examining the proposals of the universities on this question and further to determine the principles whereby the selection and admission of students be carried out with a view to manpower planning, the capacity of the institutions and the students' interests and skills, taking into account on the orientation principles of secondary education.

i. To take measures to realize equality of opportunity and possibility in the institutions of higher education and during admission.

j. To arrive at a decision concerning the proposals of higher education institutions concerning the fees to be charged to the students in each academic year.

k. To submit to the Ministry of National Education the budgets prepared by the governing bodies and universities after examining and approving them.

l. To conduct and decide upon disciplinary proceedings concerning rectors, to initiate the regular proceedings for the dismissal or transfer on a probationary status to another institution of higher education of those faculty members who fail to carry out in a

satisfactory manner their duties as specified in this law or who act in a manner incompatible with the aims, fundamental principles and prescribed order as indicated in this law, upon the proposal of the rector or directly.

m. To establish national scholarly committees and working groups in various fields of the arts and sciences.

n. To devise the principles related to the contribution to be made by developed universities to newly-established or developing universities with regard to education and staff development and, when necessary, to assign developed universities to provide such services.

o. To present to the Ministry of National Education opinions and proposals concerning the institutions of higher education to be established by foundations within the provisions of this law, to take the necessary measures concerning such institutions and to supervise them.

p. To determine the equivalency of pre-baccalaureate, baccalaureate, and graduate degrees received at institutions of higher education abroad.

q. To fulfill other obligations assigned by this law.

The Higher Education Supervisory Board
ARTICLE 8
a. The Higher Education Supervisory Board is a body, which, on behalf of the Council of Higher Education, supervises and controls the universities together with the units attached to them and teaching staff and their activities.

b. The Higher Education Supervisory Board consists of:
    1. Five members holding the rank of professor, proposed by the Council of Higher Education,
    2. Three members to be selected and nominated by the Council of Higher Education from among nine candidates; of these the Supreme Court proposes three as do the Council of State and the Court of Accounts,
    3. Two further members, one to be selected by the Chief of the General Staff and the other by the Ministry of National Education.

The appointment of the members thus defined to the Higher Education Supervisory Board will be carried out according to current procedures.

The Chairperson of the Higher Education Supervisory Board is appointed from among board members by the President of the Council of Higher Education.

The term of the member selected by the Chief of the General Staff is two years; that of the other members is six years. The member selected by the Chief of the General Staff will be assumed to be on unpaid leave but all his/her other rights arising from personnel legislation are reserved. All other members' relations with their institutions are discontinued. The age limit (for retirement) of board members is the same as that of teaching staff members.

One third of the members are renewed every two years, with the exception of the member selected by the Chief of the General Staff. Members whose term expires can be re-elected. Upon termination (irrespective of reason) of membership before the completion of the normal term, a new member with the same status is selected to complete the remaining term.

The salaries of the board members are fixed by the Council of Ministers so as not to exceed those of the members of the Council of Higher Education. Retired persons selected continue to receive their pensions.

The members of the Higher Education Supervisory Board are not allowed to work for any public or private organization, with or without pay, except in the case of exceptional temporary duties assigned by the Council of Ministers and by the Council of Higher Education. Any member who is absent from duty for a period of three months within a year for any reason other than temporary assignment and annual leave will be assumed to have left the Board.

Duties of the Higher Education Supervisory Board
ARTICLE 9
The duties of the Higher Education Supervisory Board are as follows:
a. To supervise, on behalf of the Council of Higher Education, the educational and other activities in universities as regards their conformity with the aims and main principles specified in this law and with the principles to be laid down by the Council of Higher Education.
b. To carry out investigative procedures in accordance with Article 53 of this law, upon the request of the President of the Council of Higher Education.
c. To fulfill other obligations assigned by this law.

The Student Selection and Placement Center
ARTICLE 10
The Student Selection and Placement Center determines, in the context of fundamentals established by the Council of Higher Education, the examination principles of the students to be admitted to the institutions of higher education, it prepares, administers and evaluates the examinations on the basis of their results and the principles determined by the Council of Higher Education, and in the light of student preferences, places student candidates in universities and other higher educational institutions, as well as carrying out research related to these activities and performing other services.

The Student Selection and Placement Center, upon the request of institutions of higher education, carries out questionnaire-based research, examinations and evaluation at all levels, including the Associate Professorship examinations, student registration procedures, and other duties assigned by the Council of Higher Education.

Candidates pay a fee for these services. These fees are to be collected in the Council of Higher Education Student Selection and Placement Fund. The President of the Council of Higher Education is responsible for the fund. This fund is to be used for selection and placement services. In expenditures to be made from the fund and in other financial matters, the principles of a revolving fund are applied. The fundamentals relating to its administration, management and supervision are determined by the Council of Higher Education. At the end of each year, the money remaining in the fund is transferred to the following year's fund.

Inter-university Board
ARTICLE 11
a. The Inter-university Board consists of the university rectors, a professor selected by the Chief of the General Staff from the Armed Forces, appointed for a period of four years and one professor from each university selected by their senates for a period of four years.

The rectors act as the Chairperson of the Inter-university Board in turn and consecutively for a term of one year, in the order of the date of foundation of their universities since the establishment of the Turkish Republic.

The Board may form permanent and temporary units and commissions in order to facilitate its activities and secure cooperation among the universities and with international institutions of higher education. The organization and working procedures of these units and commissions are specified by the Inter-university Board.

The Board meets at least twice a year in the city where the Chairperson's university is located unless otherwise specified, and the Board's agenda is sent beforehand to the Ministry of National Education, the Council of Higher Education and the Board members.

The Minister of National Education and the President of the Council of Higher Education may participate in the Board's meetings if they deem it necessary.

b. The Inter-university Board is an academic organ with the following duties:
    1. To coordinate, within the scope of higher education planning, the universities' teaching, research, and publication activities, to evaluate implementations and to make recommendations to the Council of Higher Education and to universities,
    2. To propose measures to meet the needs of universities for teaching staff members, bearing in mind organization and academic staff positions and in line with the decisions of the Council of Higher Education,
    3. To prepare regulations on education, research, and publication activities concerning all universities or to express views on these matters,
    4. To ensure coordination in terms of principles and periods of education in faculties of the same or similar characteristics or in other institutions of higher education attached to the universities or faculties,
    5. To establish the principles regarding doctoral work and to evaluate the doctoral degrees and the academic titles of Associate Professor and Professor received abroad,
    6. To organize the Associate Professorship examinations and determine the principles for the evaluation of the publications and research work of Associate Professorship candidates, according to the relevant regulations, and to select the juries,
    7. To fulfill other obligations assigned by this law.

PART FOUR
INSTITUTIONS OF HIGHER EDUCATION

Duties of the Institutions of Higher Education
ARTICLE 12
In accordance with the aims and basic principles of this law, the duties of the institutions of higher education are as follows:
a. To carry out post-secondary education at various levels, undertake scholarly research, engage in publication, and act in the capacity of consultant, in accordance with the principles and objectives of the development plans and the needs of society, with regard to the conditions of modern societies and contemporary education.
b. Utilizing its own specialist abilities and material resources in a rational, productive and economic way, to train sufficient manpower in the required fields to meet the needs

of the country; in line with the national education policy and principles and objectives of development plans and programs as prepared by the Council of Higher Education.

c. To disseminate, in oral, written, or other forms, scientific data and scholarly findings such as might be expected to raise the standard of living of Turkish society and enlighten the public in general.

d. To train people, especially in the fields of industrialization, and the modernization of agriculture, through formal, informal, continuous and adult education.

e. To carry out research and educational activities pertaining to the country's scientific, cultural, social and economic progress and development, and through cooperation with other organizations to encourage public organizations to contribute to such activities; to make research results available to the public, to carry out studies requested by public institutions, and to offer relevant proposals.

f. To take measures that will contribute to the institutions responsible for formal, informal, continuous, widespread, constant and adult education in mobilizing literacy campaigns.

g. To contribute to the training and development of agricultural and industrial workers, to modernize services in the fields of industry, agriculture and health, to prepare and implement programs that will encourage productivity, and to participate in such activities as the solution of environmental problems.

h. To develop, apply and disseminate educational technology.

i. To develop the principles of education with a view to a more practical approach to higher education, to set up revolving funds and operate them productively and to take necessary measures for the development of these activities.

UNIVERSITY ORGANS

Rector
ARTICLE 13

a. In state universities, the Rector is appointed by the President of the Republic from among candidates holding the academic title of professor, selected by the teaching staff members of the university upon the announcement of the currently-serving rector. The term of office is four years, at the end of which a Rector may be re-appointed by the same means, for a maximum of two terms of office. The Rector is the representative of the juristic personality of the institution of higher education. Selection of candidates is carried out by secret ballot. Each teaching staff member may write the name of only one candidate on the ballot. A minimum of one half of the teaching staff members must be present in order for the ballot to take place. In the absence of this number, the selection is postponed for 48 hours with no quorum specified. The Council of Higher Education proposes to the President of the Republic three candidates which it selects from among the six candidates receiving the highest number of votes in the afore-mentioned balloting. In private universities established by foundations, the selection of candidates and appointment of the Rector are carried out by the board of trustees concerned.

In order to be appointed as a rector, a candidate must be less than 67 years of age. However, rectors who reach the age of 67 while in office are permitted to continue until the end of their term of office without regard to the age limit.

The Rector may select up to three of the university's salaried professors to act as Vice-Rectors. However, in the case of universities responsible for centralized distance education, a Rector may select five Vice-Rectors, when deemed necessary.

The Vice-Rectors are appointed by the Rector for a period of five years.

In his/her absence, the Rector appoints one of the Vice-Rectors to act as acting rector. The Rector informs the Council of Higher Education if (s)he is to be away from his/her office for more than two weeks. If the acting rectorship lasts for more than six months, a new Rector is appointed.

b. Duties, powers and responsibilities:

1. To preside over university boards, implement the resolutions of the governing bodies of higher education, review and decide on the proposals of university boards, and ensure coordination among organizations attached to universities,

2. At the end of each academic year, and whenever necessary, to report to the Inter-university Board on the university's academic activities as regards education, research and publication,

3. After having received the proposals of the attached bodies and having consulted the Senate and the Administrative Board of the university, to prepare the investment programs, budget and personnel requirements of the university and to submit them to the Council of Higher Education,

4. To change, when deemed necessary, the service location of the teaching staff and other personnel in organizations and units comprising the university or to delegate new duties to them,

5. To supervise the constituent units of the university and personnel at every level,

6. To carry out other duties assigned by this law.

7. The Rector is invested with final authority and responsibility for the rational use and development of the educational capacity of a university and its attached organizations, for providing the students with essential social services, for taking security measures whenever necessary, for the planning and implementation of instruction, research and publications in accordance with the principles and objectives of the national development plans, for the supervision of academic and administrative duties, for the devolution of these duties to the bodies below, and for the supervision and review of the results of this policy.

The Senate
ARTICLE 14

a. Under the chairmanship of the Rector, the Senate consists of the Vice-Rectors, the Deans of each faculty, a teaching staff member elected for a term of three years by the respective faculty board and Directors of the Graduate Schools and Schools of Higher Education attached to the office of the Rector.

The Senate meets at least twice a year, once at the beginning and once at the end of each academic year.

When (s)he deems necessary, the Rector calls for a meeting of the Senate.

b. The Senate is the university's academic organ with the following functions:

1. To decide on the principles relating to the university's educational programs, research, and publication activities,

2. To prepare drafts of laws and regulations concerning the university as a whole or to express its views thereof,

3. To prepare regulations concerning the university or its attached units to take effect upon publication in the Official Gazette following approval by the Rector,

4. To examine and decide on the university's annual academic program and calendar,

5. To award honorary academic titles (no examination being required) on the recommendations of the Faculty Board,

6. To intervene in the case of objections raised against decisions of the Faculty Boards and the Boards of the Graduate Schools and Schools of Higher Education attached to the office of the Rector,

7. To elect the members of the University Administrative Board,

8. To perform other duties assigned by this law.

The University Administrative Board
ARTICLE 15

a. Under the chairmanship of the Rector, the University Administrative Board consists of the Deans and three professors to be selected by the Senate for a period of four years. The professors shall represent various fields in the university.

The Rector calls for a meeting of the University Administrative Board when necessary.

The Vice-Rectors may participate in the meetings of the Administrative Board as ex officio members.

b. The University Administrative Board is an organ that assists the Rector in his/her administrative duties and has the following responsibilities:

1. To assist the Rector in the implementation of decisions of the Senate and governing bodies of higher education in line with specified plans and programs,

2. To ensure that plans and programs are put into effect, and, taking into consideration the proposals of the constituent units of the university, to examine the investment program and budgetary draft proposals and submit to the office of the Rector its opinions and suggestions thereto relating,

3. To decide on matters brought up by the Rector related to university administration,

4. To examine and reach a final decision concerning objections raised against the decisions of the Faculty Administrative Boards and those of graduate schools and schools of higher education,

5. To perform other duties assigned by this law.

FACULTY ORGANS

Dean
ARTICLE 16

a. The Dean, who is the representative of a Faculty and its units, is selected by the Council of Higher Education from among three professors (regardless of whether they are staff members of the university concerned) nominated by the Rector, and is appointed by normal procedure. When his/her term of office expires a Dean may be re-appointed.

From among the Faculty's regular staff members, the Dean appoints at the most two Assistant Deans to help him/her in his/her work. In the case of universities responsible for centralized distance education, four Assistant Deans may be selected.

The Assistant Deans are appointed by the Dean for a period not to exceed three years.

One of the Assistant Deans acts as acting dean in his/her absence. Should this continue for more than six months, a new Dean shall be appointed.

b. Duties, powers and responsibilities:

1. To chair the Faculty boards, implement their decisions and ensure the coordination of Faculty units,

2. To report to the Rector on the general situation and functioning of the Faculty at the end of each academic year and when requested,

3. To present to the office of the Rector the rationale for the budgetary and staff requirements of the Faculty, taking into consideration the views of the Faculty Administrative Board concerning the budget,

4. To generally supervise and control the constituent units and personnel at every level of the faculty,

5. To perform other duties assigned by this law.

The Dean is directly responsible to the Rector for the rational utilization and improvement of the educational potential of the Faculty and its units, for taking security measures when necessary, for the provision of needed social services to the students, for the orderly implementation of educational programs, research and publication activities and for the supervision of all of these activities.

Faculty Board
ARTICLE 17

a. Under the chairmanship of the Dean, the Faculty Board is composed of the heads of departments, the directors of any graduate schools and schools of higher education attached to the faculty, three professors to be selected from among the professors of the faculty for three years, two associate professors and one assistant professor selected in the same manner and for the same term.

The Faculty Board normally meets at the beginning and end of each semester.

The Dean, when (s)he deems necessary, calls a for a meeting of the Faculty Board.

b. The Faculty Board is an academic organ with the following duties:

1. To decide on the educational program, research and publication activities of the faculty and the main principles thereof, the plans and programs thereto related, and the academic calendar,

2. To elect members of the Faculty Administrative Board,

3. To perform other duties assigned by this law.

Faculty Administrative Board
ARTICLE 18

a. Under the chairmanship of the Dean, the Faculty Administrative Board consists of three professors, two associate professors and two assistant professors, all of whom are chosen by the Faculty Board for a period of three years.

The Faculty Administrative Board meets when called by the Dean.

When necessary, the Administrative Board may organize temporary working groups, or appoint coordinators for educational programs and regulate their functions.

b. The Faculty Administrative Board, an organ which assists the Dean in administrative activities, has the following duties:

1. To assist the Dean in the implementation of essential matters specified in the decisions of the Faculty Board,

2. To ensure the implementation of academic plans and programs as well as the academic calendar,

3. To draft proposals for the investment schemes, programs and budget of the Faculty,

4. To decide on all matters brought up by the Dean concerning faculty administration,

5. To decide on questions regarding the admission of students, equivalency of courses, dismissal and other matters related to education and examinations,
6. To perform other duties assigned by this law.

GRADUATE SCHOOLS

Organs
ARTICLE 19
a. The organs of the graduate schools are the Graduate School Director, the Graduate School Board and the Graduate School Administrative Board.
b. Upon the nomination of the Faculty Dean, the Graduate School Director is appointed by the Rector for three years. Where graduate schools are directly attached to the office of the Rector, the appointment is made directly by the Rector. A Director whose term of office has expired may be re-appointed.

The Director will have at most two assistants, whom (s)he appoints from among the full-time teaching staff of the graduate school for a period of three years.

In case of the absence of the Director or his/her cadre being vacant, the procedure is the same as in the case of Deans.

Within the framework of the graduate school, the Graduate School Director performs the duties assigned to Deans by this law.

c. The Graduate School Board meets under the chairmanship of the Director and consists of the Assistant Directors and the heads of the departments of the graduate school.
d. The Graduate School Administrative Board meets under the chairmanship of the Director and is composed of the Assistant Directors and three teaching staff members to be selected for a period of three years by the Graduate School Board from among six candidates nominated by the Director.
e. Within the framework of the graduate school, the Graduate School Board and the Graduate School Administrative Board perform the duties assigned by this law to the Faculty Board and the Faculty Administrative Board.

SCHOOLS OF HIGHER EDUCATION

Organs
ARTICLE 20
a. The organs of the schools of higher education are the Directors of schools of higher education, their Boards and Administrative Boards.
b. The Director of a school of higher education is appointed by the Rector for a period of three years upon nomination by the respective faculty dean. In schools of higher education, attached to the office of the Rector, appointment is made directly by the Rector. A Director whose term of office has expired may be re-appointed.

The Director has at most two assistant directors whom (s)he appoints for three years from among the full-time teaching staff of the school of higher education.

In case of the absence of the Director, or his/her place being vacant, the procedure is the same as in the case of Deans.

Within the framework of the schools of higher education, the Director performs the duties assigned to the Deans by this law.

c. The Board of a school of higher education meets under the chairmanship of the Director and consists of the Assistant Directors and the heads of the departments or sections of the school of higher education.

d. The Administrative Board meets under the chairmanship of the Director and consists of the Assistant Directors and three teaching staff members to be selected for a period of three years by the Board of the school of higher education from among six candidates nominated by the Director.

e. Within the framework of the school of higher education, the Board and the Administrative Board of the school of higher education perform the duties assigned by this law to the Faculty Board and the Faculty Administrative Board.

Department
ARTICLE 21
In a faculty or in a school of higher education, there cannot be more than one department engaged in the same or similar education.

The Department is administered by the Head of the Department. The Head of the Department is appointed for three years from among full-time professors in the Department; if none, from among the associate professors; if none, from among the assistant professors. The appointment is made by the Dean in the case of faculties, in the case of schools of higher education attached to the faculty, by the Dean upon the nomination of the Director, and by the Rector upon the nomination of the Director in schools of higher education attached to the office of the Rector. The Head of the Department may be re-appointed, at the end of his/her term of office.

The Head of the Department appoints one of the teaching staff members as his/her deputy during his/her absence.

In case of an absence lasting, for any reason whatsoever, for more than six months, a new Head is appointed following the procedures outlined above, to complete the remaining part of the term.

The Head of the Department is responsible for education and research at every level in the Department and for the orderly and productive functioning of all activities within the Department.

PART FIVE
TEACHING FACULTY MEMBERS

The Duties of the Teaching Staff Members
ARTICLE 22
a. To carry out and have carried out education and practical studies at the pre-baccalaureate, baccalaureate and post-graduate (post-baccalaureate) levels in the institutions of higher education in line with the purpose and objectives of this law, and to direct project preparations and seminars.
b. To undertake scientific and scholarly research for publication in the institutions of higher education.

c. In accordance with a program arranged by the head of the related unit, to set aside certain days for the advising and guidance of students, helping them as needed and directing them in line with the aims and basic principles of this law.

d. To carry out the duties assigned by authorized organs.

e. To perform other duties assigned by this law.

Appointment to Assistant Professorship
ARTICLE 23

a. A vacancy for an Assistant Professor position in a unit of the university is advertised by the rectorate and applications are invited. In faculties and organizations attached to the faculties, the Dean, in graduate schools and schools of higher education attached to the rectorate, the Director assigns three Professors or Associate Professors (one of whom shall be from outside the university in question, and one an administrator of that unit) to give written statements upon each of the candidates. The Dean or the Director upon receipt of the opinion of the Administrative Board concerned submits his/her nominations to the Rector. The appointment is made by the Rector.

The Assistant Professor(s) may be appointed to any one university for no longer than 12 years, each time for a term of two or three years. Appointment is not automatically renewable.

b. Prerequisites for the appointment of Assistant Professors:

1. To have acquired a PhD, or specialist status in medicine, or proficiency in certain branches of the fine arts to be determined by the Council of Higher Education upon the recommendation of the Inter-university Board,

2. To pass the foreign language examination, which will cover a translation in the candidate's major field of about 150-200 words from Turkish into a foreign language and from the foreign language into Turkish to the satisfaction of a jury of three members, one of them a teaching staff member in the relevant language. The jury shall be selected by the Administrative Board of the Faculty, Graduate School or School of Higher Education.

Associate Professorship Examinations
ARTICLE 24

a. The Associate Professorship examinations are held once a year by the Inter-university Board.

Candidates possessing the following qualifications may apply to the Inter-university Board by the date which it decides upon, with the necessary documents and publications, also stating their major area of study, specialization and research. The Inter-university Board appoints a jury of three or five members according to the regulations concerning the Promotion and Appointment of Academic Staff, taking into consideration their major area. This jury examines the work, gives the candidates an oral or, if necessary, a practical and applied examination and awards the successful candidates the title of Associate Professorship in the relevant subject.

b. In order to take the Associate Professorship examinations, the following conditions are necessary:

1. After receiving a bachelor's degree, to have received a PhD degree, specialization in medicine, or proficiency in certain branches of the fine arts to be determined by the Council of Higher Education upon the proposal of the Inter-university Board,

2. To have produced original research and publications,

3. To have passed a centralized foreign language examination to be prepared by the Inter-university Board.

It is not necessary for the foreign language examination referred to in paragraph (3) above to be related to the major branch of the candidate. If the candidate's major area is a foreign language, the examination is to be taken in another foreign language.

Appointment to Associate Professorship
ARTICLE 25
a. When there is a vacancy for an Associate Professorship in a university unit, this is advertised by the office of the Rector, specifying whether the position is full-time or part-time. The Rector assigns three professors, one of them from outside the university and one of them the administrator of the related unit if there is one, to examine the candidates. These professors relay their views to the Rector on each candidate separately. Based on these views and those of the University Administrative Board, the Rector makes the appointment.
b. Requirements for appointment to Associate Professorship:
    1. To have received the title of Associate Professor.

ARTICLE 26
a. To be promoted to professorship, it is necessary:
    1. To have worked in the relevant field of study for five years after receiving the title of Associate Professor,
    2. To have done work of practical application and to have published original research of an international standard,
    3. To have been appointed to a staff position of professorship.
One of the publications referred to in paragraph (2) above is designated as the main research work.
b. Appointment to a Professorship Staff Position:
    1. Associate Professors having the above qualifications and professors having at least two years of service in another university may be appointed to a vacant professorship position,
    2. Upon the vacancy of a professorship cadre in universities, the Rectors advertise vacant cadres of the universities, with details of the areas of study and the special qualifications that are required,
    3. At least five professors, including at least three from outside the university, are appointed by the Rector to evaluate the applicants. The Rector submits to the University Administrative Board each of the separate assessments of the professors on the candidates including their preferences in the case of more than one candidate. The appointment is made by the Rector upon the decision of the administrative board of the institution of higher education, taking these reports into consideration.

The Title of Associate Professor Obtained in Foreign Countries
ARTICLE 27
Those who have been granted an Associate Professorship title in a foreign country after they have received a PhD degree or qualified as a specialist in a medical field may apply to the Inter-university Board for confirmation of the validity of this title provided they have worked under this title in a higher education institution or at a research center for at least two years in foreign countries. In order for the title to be granted equivalency, the Inter-university Board must recognize the foreign institution of higher education at which the candidate has worked as being of a standard equal to that of such institutions in Turkey.

The Title of Professorship Obtained in Foreign Countries
ARTICLE 28
Those who have obtained the title of Professor in a foreign country after receiving the PhD degree, or specialization in medicine, or have worked in the fine arts for a specified period, and have worked for at least two years with this title in institutions of higher education and research in foreign countries, may apply to the Inter-university Board for confirmation of the validity of this title. In order for the title to be granted equivalency, the Inter-university Board must recognize the foreign institution of higher education at which the candidate has worked as being of a standard equal to that of such institutions in Turkey.

The Maintaining of Titles
ARTICLE 29
Teaching staff members may not be deprived of the academic titles they have earned except under the provisions of this law.

Those leaving the teaching profession consequent on changing their jobs, retiring or resigning or being considered to have done so, may keep their academic titles. The titles of Professor, Associate Professor and Assistant Professor may only be used in places of work other than institutions of higher education if the bearer has completed at least two years in an institution of higher education after being granted the title.

Retirement Age
ARTICLE 30
Teaching staff members will retire, at the latest, at the age of 67.

Instructors
ARTICLE 31
Instructors may be appointed on a full-time or hourly basis in universities and attached units to teach courses or conduct applied practical studies for which a teaching staff member has not been appointed in accordance with this law, or courses requiring particular specialization, from among individuals recognized as specialists in their field on the basis of their experience and works. Instructors may be appointed to positions designated for teaching staff members, ancillary staff or instructors, by a rector, upon the proposal of the Faculty Administrative Board and the Dean in the case of faculties, or the head of department in the case of departments attached to the office of the Rector. They may also be appointed on a part-time (hourly) basis or on a contract basis. Instructors may be appointed to a position designated for a teaching staff member for a maximum two-year period. If, at the end of this period, no teaching staff member has applied for the said position, and the institution deems it appropriate, they may be re-appointed in the same manner. Such appointments are not automatically renewed. Conservatories and schools of higher education may appoint instructors on a regular basis, when necessary.

Lecturers
ARTICLE 32
Lecturers can be appointed by the Rector upon the proposal of Deans, in the case of faculties and units attached to faculties, or of Directors, in the case of graduate schools or schools of higher education attached to the office of the Rector. They may be appointed on a part-time or full-time basis. Re-appointment is possible, but not

automatic. In the case of re-appointment, the procedures originally followed are to be repeated.

ANCILLARY STAFF

Research assistants, specialists, translators, and educational planners
ARTICLE 33

a. Research assistants are members of the ancillary staff who assist with research, studies, and experiments in higher education institutions, as well as carrying out other duties assigned by authorized bodies. Upon the proposal of the section head concerned and the approval of the Department Head, Dean, Graduate School, School of Higher Education or Conservatory Director, they are appointed by the Rector for a maximum period of three years, at the end of which their appointment automatically comes to an end.

The Council of Higher Education sets the criteria concerning those research assistants who are to be sent abroad for graduate study, as well as those appointed for the first time with this aim in view.

The stipulation stated above with regard to the period of appointment is not applied in the case of research assistants sent abroad for graduate study. Tuition fees, travel expenses and other relevant expenditures of such research assistants are paid for out of special funds within the personnel expenditures of the universities concerned. During the period of their graduate study abroad the appointments of such research assistants remain in force and they are paid 60% of their net monthly salaries by the institution concerned [with the exception of those who receive scholarships (for the period after one year) and those who secure scholarships on their own and have been granted leave of absence without pay]. Those who are sent by their institutions are also paid a sum stipulated by Law No. 1416 on Students to be Sent to Foreign Countries, equivalent to that paid to students in the same country. In the case of scholarship holders, if the amount of their scholarship is less than this amount, the difference is paid by their institution. Tuition fees and fees for courses which are prerequisite to begin their studies are also paid by their institutions. Each year, in the months of March and September, they are also paid two equal supplementary payments (each equivalent to their monthly remuneration) to cover textbook, stationery, and other educational expenses).

b. Specialists are ancillary staff who are required, for a specific period, to carry out duties directly or indirectly related to instruction or to assist in laboratory work or in libraries where special skills or specialized knowledge is required.

c. Translators are ancillary staff employed for specific periods to carry out oral or written translation.

d. Educational Planners are ancillary staff responsible for the planning of instruction and education at institutions of higher education.

e. The appointment of Specialists, Translators and Educational Planners is made by the Rector of the university, upon the proposal of the respective Deans of Faculties or Directors of Graduate Schools or Schools of Higher Education. The Deans and the Rectors have to consult the respective Administrative Boards, before making their proposals. Such appointments are made for a maximum of two years, and automatically expire at the end of this period. Re-appointments can be made following the same procedures. After the third appointment, full-time appointment can be made.

Foreign National Teaching Staff Members
ARTICLE 34
Teaching staff of foreign nationality, who are to be employed on a temporary basis at higher education institutions, are appointed by the Rector in accordance with the recommendations of the University Administrative Board following the proposals of the Administrative Board of the relevant Faculty or Graduate School or School of Higher Education. The provisions as set down in this law regarding teaching duties for the permanent teaching staff also apply for these foreign appointees.

The appointment of such foreign nationals is made upon the approval of the Ministry of the Interior, without being subject to the provisions of Law No. 657 on Civil Servants, which require a decision on the part of the Cabinet. The Ministry of the Interior is to reply within two months, and such foreign nationals are hired on a contract basis.

Training of Teaching Faculty Members
ARTICLE 35
To meet their own needs and those of other higher education institutions either newly established or yet to be established, higher education institutions are responsible for the training of their faculty members, at home or abroad, and in accordance with the principles and objectives of development plans and also in accordance with the needs and principles set down by the Council of Higher Education.

The positions allocated to research assistants may be transferred on a temporary basis by the Council of Higher Education to other universities for the purpose of training faculty members in order for them to carry out research or doctoral studies. Those who obtain their PhD, specialization in medicine, or proficiency in the arts in this manner are to return to their own universities upon the completion of their studies. In this event the staff position is re-allocated to the research assistant's university.

Faculty members trained in Turkey or abroad are required to carry out compulsory service to their institutions in accordance with general provisions in force. Those who do not carry out this requirement are not appointed to higher education institutions. Forms of compulsory service stipulated by special laws are not covered by this provision.

PART SIX
ACTIVITIES AND SUPERVISION

Working Principles
ARTICLE 36
a. Professors and Associate Professors fall into two groups, those employed on a full-time, permanent basis and those on a part-time one:
   1. Those employed on a permanent basis at the university

   Professors and Associate Professors of this category devote all their working time to activities relating to the university.

   Except in the case of special duties set down in special laws, they may not take on any work of any kind, paid or unpaid, official or private, outside the higher education institutions, with the exception of royalty payments and duties stipulated by special laws.

Their work in public institutions, and in such organizations as aim to serve the public interest, and with which the University Administrative Board has agreed to cooperate, is counted as work carried out within the university.

All payments due from work of this kind are entered as income in the Revolving Fund of the organization at which the Professor or Associate Professor is employed.

2. Those employed on a part-time basis at the university
Those Professors and Associate Professors, who are appointed for a period of two years at a time, are obliged to be present for at least twenty hours a week at the university. They are to undertake teaching duties, practical work and research under the direction of the Head of the Department. They:
* receive no supplementary salary nor any increment of any kind; nor may they benefit from the revenue of the Revolving Fund.
* cannot serve as Rector, Dean, Director of Graduate Schools and Schools of Higher Education, or Head of Department; nor can they become their deputies. However, they may serve as Graduate School Director, Department Head, or Section Head within the working hours and period stipulated for civil servants.
* may go abroad to further their knowledge, to carry out research work and to take part in any academic activity, but their expenses are not to be paid for out of the budget or out of university funds.
The appointment of those whose services are still required after two years is reserved according to the same procedure as of the original appointment. The appointment of those who wish to be employed on a permanent basis can be made in accordance with the provisions of this law if there is an opening in the relevant department, for such an appointment.
b. Assistant Professors may only be employed on a permanent basis in the university and in the units attached to it.
c. Teaching staff members, employed on a permanent basis, and the salaried ancillary staff, are to carry out such duties as those of teaching, research, practical and administrative work and whatever is assigned to them by the university organs. Their minimum working hours will correspond to those of civil servants.
d. The decision as to how much of the practical work, seminars and PhD work either carried out or supervised by teaching staff members is to be counted towards the minimum total of ten hours of teaching per week rests with the Council of Higher Education.
e. The weekly load of teaching work for instructors and lecturers employed at a university and at its attached organizations is to be determined by the Council of Higher Education, with a minimum of 12 hours per week.
f. The work of teaching faculty members will be supervised by Heads of Departments, Directors of Graduate Schools and Schools of Higher Education, Deans and Rectors.
g. Rectors, Deans, Directors of Graduate Schools and Schools of Higher Education are exempted from the requirement of the weekly teaching load. The weekly teaching load for Vice-Rectors, Assistant Deans, and Assistant Directors of Graduate Schools and Schools of Higher Education, and for Heads of Departments is half the term specified above.

Practical Contributions of Universities
ARTICLE 37
The requests of individuals or organizations outside the institutions of higher education for scientific and academic expertise, projects, research and similar services along with the medical examination and treatment of patients, and also laboratory tests and the

research related to them, either at the university or at the place of service, may be performed in accordance with the principles laid down by the University Executive Board. All payments due from such services are entered as income into the Revolving Fund of the relevant higher education institution or of its attached organization.

Assignment to Public Organization
ARTICLE 38

Upon the request of the concerned institution and the willingness of the person concerned, and with the agreement of the relevant University Executive Board and the approval of the Rector, and of the Council of Higher Education, teaching faculty members, without loss of their acquired rights, and still benefiting from them at their own institutions, can temporarily be assigned to any such institutions or organizations as the Ministries, the Armed Forces, the Scientific and Technical Research Council of Turkey, The Center for Forensic Medicine, The Atomic Energy Commission, the Foundation for the Development of the Turkish Armed Forces, institutions working for the public benefit, foundations, and research and development centers, and other public institutions. Those assigned in such a manner (with the exception of the Center for Forensic Medicine, foundation hospitals, health centers, and mobile health facilities) cannot benefit from the Revolving Fund, but continue to receive their monthly salaries and other payments from the institution of higher education to which they are attached, as well as retaining all relevant rights.

Upon the request of the judicial authorities concerned, the approval of the Council of Higher Education, and within the framework of the regulations concerning forensic medicine, the academic staff of higher educational institutions or of their attached units can be required to act as expert witnesses in forensic medicine cases as well as in other legal matters.

Assignment at Home and Abroad
ARTICLE 39

For those faculty members who, without requesting any traveling expenses from their institutions, wish to attend congresses, conferences, seminars or similar academic meetings, in Turkey or abroad, or to undertake and carry out a research project involving traveling, leave of absence up to one week is given by the Dean or the Director of the Graduate School or School of Higher Education, and for up to fifteen days by the Rector of the relevant university. When a period of more than 15 days is involved, and when travel expenses, or the expenses incurred by the research project, are to be paid out of the budget of the university or of its attached units, or out of the Revolving Fund, the resolution of the concerned Administrative Board and the approval of the Rector must be sought.

Apart from the conditions stipulated in Article 33 of this law and in the first paragraph of the present article, teaching faculty members may be sent abroad for professional training, or to increase their knowledge. Upon the proposal of the Council of Higher Education, the Council of Ministers shall determine quotas and time periods each year with regard to the universities, concerning those to be sent abroad for a maximum of one year. Similarly, teaching faculty members who receive grants from foreign sources may also be sent abroad. The quotas shall be distributed among the units of the universities by the decision of the University Administrative Board and the approval of the Rector, as shall also be the case for the selection of those to be sent abroad. When deemed necessary, the period spent abroad may be extended by 50% upon the decision of the Administrative Board concerned and the approval of the Rector. Those

sent abroad accordingly are subject to the provisions of Law No. 657 on Civil Servants with regard to those sent abroad for the same purpose. However, the University Administrative Board may decide to pay them an amount which does not exceed that paid to civil servants. Those who receive scholarships, grants, or salaries from sources abroad, may be granted leave with or without pay, for the period that they are assigned, according to provisions determined by the institution concerned and upon the decision of the University Administrative Board.

Traveling expenses shall be determined in accordance with general provisions, equivalent to that paid to civil servants of an equivalent status. This applies both to those referred to in the first paragraph, sent on a short-term basis, and those referred to in the second paragraph. Traveling expenses of those sent on a short-term basis are to be met by the institution concerned, be it their own institution or another institution.

Upon the decision of the University Administrative Board and the approval of the Ministry of National Education, teaching faculty members may be granted leave with pay, when officially invited by institutions of higher education in the Turkic Republics or related communities for a period not to exceed 3 years, in which case they will retain all rights.

Interinstitutional Cooperation
ARTICLE 40
a. Should the teaching staff members or the ancillary staff of an institution of higher education have a teaching load of less than is prescribed, the Rector can assign them to teaching duties either in other departments of their own universities or in other higher education institutions in the same city. They are eligible for extra payment by the institution to which they are assigned only if the weekly teaching load is then exceeded.
b. A teaching staff member may be asked to take up teaching duties at a university which has asked for such help. Following the approval of the Rector (s)he will be assigned by the Council of Higher Education for a minimum period of one academic year if both (s)he and the respective Administrative Board agree. The staff position of the teaching staff member thus assigned shall be kept open for him/her for a period of five years. When a vacancy is being filled, priority will be given to the candidate who, all else being equal, has served for at least 5 years at a higher education institution in one of the developing regions of the country.
c. The needs for teaching staff members of the higher education institutions of the Turkish Armed Forces and the Security Forces - which are not covered by this law - shall be met from among the chosen staff preferably in higher education institutions of the same city. Assignment procedures are the same as those described in paragraph (a) above. Such teaching staff members are to be requested by name.

Procedures for Meeting the Needs for Teaching Staff Members
ARTICLE 41
The Council of Higher Education shall determine the needs for teaching staff members in various disciplines at state institutions of higher education which fall within the provisions of this law, as well as determining which institutions are to meet these needs, and shall communicate this decision to the universities concerned with the aim of their meeting these needs. Within two weeks of receipt of these lists, the rectors of the universities concerned shall inform the Council of Higher Education of the teaching staff members who have been assigned for this purpose. Such assignments are made for a minimum of one and a maximum of four semesters, in which case the teaching staff positions of the staff members concerned are retained by them at their own institutions.

Assignments made in accordance with this article or paragraph (b) of Article 40 come within the provisions regarding civil servants with regard to notification, separation from post, period of assignment and starting date.

Assignments made in accordance with this article or paragraph (b) of Article 40 shall state the period of assignment as part of the written decision concerned. Salaries, supplementary payments, and traveling expenses are to be paid for by the university to which they have been assigned, in accordance with Law No. 6245 on Travel Allowances.

Those assigned within the provisions of this article or paragraph (b) of Article 40, and who do not take up their new posts within the period specified by law, following official notification, will be considered to have resigned, and will not be permitted to be re-appointed to a higher education institution or work in a public institution as long as they fail to carry out this assignment.

Intramural Academic Supervision
ARTICLE 42
a. Academic supervision of teaching faculty members includes their activities pertaining to education, research, publication, seminars, clinical and practical work.
b. At the end of each academic year the Head of Department submits a report to the respective Dean on the educational and research activities of the department for the previous year, together with a work plan for the coming year. The Dean adds his/her comments and sends the report to the Rector. The Rector evaluates the report itself as well as the views of the Dean, takes the necessary measures and notifies the Council of Higher Education of his/her decision on inadequacy. The Director of a Graduate School or a School of Higher Education sends his/her report to the Rector or Dean to whom (s)he is responsible.
c. Each teaching faculty member shall submit to the Rectorate, through the administrator of his/her own unit, a list showing his/her academic research, publications, courses taught, seminars organized, practical work and a copy of each paper presented at an academic congress whether in the country or abroad. If papers have not been published, a type-written copy should be presented to the Rectorate. The rights granted by Law No. 5846 on Copyright are reserved.
d. The academic publications of the faculty members will be kept in special archives by the universities and by the Council of Higher Education.

PART FOUR
INSTITUTIONS OF HIGHER EDUCATION

Duties of the Institutions of Higher Education
ARTICLE 12

PART SEVEN
EDUCATION AND STUDENTS

Education at Bachelor's Level
ARTICLE 43
Higher education for which a fee is charged, is organized as follows in accordance with the aims and basic principles specified by this law:

a. Guidelines for education conducted according to the special objectives of individual units, within the higher education institutions, as well as diplomas granted based on these educational programs, shall be specified in the regulations regarding education and examination to be prepared by each university.

b. In universities where education is given in the same fields or branches of a discipline, the Council of Higher Education, upon the recommendations of the Inter-university Board will regulate the education, methods, scope, teaching duration and the principles of evaluation within each academic year in order to establish a uniformity of expected standards and degrees granted as well as of rights and privileges. In the case of teacher-training units, this procedure will be carried out in cooperation with the Ministry of National Education.

c. Institutions of higher education may use any kind of educational method: formal, informal, and open.

Duration of Education
ARTICLE 44
A maximum of 4 years is to be granted to students for the completion of 2-year pre-baccalaureate programs, and of 7 years for 4-year bachelor's degree programs. As for programs normally taking 5 and 6 years, the maximum periods shall be 8 and 9 years, respectively. However, at the end of this period, those final-year students shall be given the right to take two additional examinations for all courses which they have failed, one of them being a make-up examination, in order that they might graduate. Those, who after these examinations are still failing in a maximum of 5 courses, will be allowed to take examinations for these 5 courses for a period of 3 semesters. Those students who fail up to 5 courses without taking additional examinations will be granted 4 additional semesters to pass the examinations (or two academic years for those institutions operating on a yearly rather than a semester basis). With the exception of the Gülhane Military Academy of Medicine, students failing 3 or fewer courses will be granted the right to take an unlimited number of examinations. Those students who have passed all courses required for graduation, but whose grade point average is below the minimum required for them not to be dismissed, and are in their last semester of study (or last year, in the case of institutions operating on a yearly basis) will be given the right to take an unlimited number of examinations in any two courses in the last two years of the curriculum in order to raise their grade point average. Apart from courses requiring practical sessions and such courses as they have not already taken, attendance shall not be a pre-condition for passing. Students who do not take any additional examinations for three consecutive or non-consecutive academic years, shall be considered to have forfeited their right to take an unlimited number of examinations and may not benefit from it. Those students who do benefit from this right are required to continue to pay tuition fees, but do not benefit from any rights granted to students, other than the right of examination. Students enrolled in open education programs are not subject to these time limitations and do not benefit from student rights.

In the case of those students who met attendance requirements but who failed to carry out their responsibilities with regard to midterm and final examinations as stipulated by this article and who have consequently been dismissed, preparatory year and first year students, for a maximum of one course, second and third year students, for a maximum of three courses, are to be given three additional examinations. In the case of those students who have lost a year due to an insufficient grade point average, including those in the preparatory year and those in the second and third years, one additional examination in each of 3 courses of their own choice is to be given. Those who have been granted the right to take such examinations, shall be permitted to do so, at the

beginning of each academic year, upon application to the institution concerned, without regard to whether the examination is a midterm or a final examination. Those who pass all the courses for which they are responsible, as a result of these examinations, continue with their education from the point at which they were. The period during which they were taking examinations is not taken into account in calculating their maximum period of study. Students taking such examinations do not benefit from any student rights.

The Senate of each university determines requirements concerning pre-baccalaureate and bachelor's level education, and prepares regulations concerning attendance, number and weight of midterm examinations, practice, examinations, and make-up conditions.

The granting of pre-baccalaureate degrees to those who have or have not completed bachelor's degree programs, or their transfer to higher schools of vocational education is to be carried out in accordance with the provisions of regulations to be prepared by the Council of Higher Education.

Admission to Higher Education
ARTICLE 45
a. Students are admitted to institutions of higher education by means of an examination prepared in accordance with provisions specified by the Council of Higher Education. In the evaluation of examination results, the performance of students during their secondary education is taken into account. Quotas are allocated for the placement of top-ranking graduates of secondary schools, placement being carried out taking into account their preferences and entrance examination scores.

In the selection of students for higher education institutions, supplementary points are calculated based on performance during secondary education, in a manner to be determined by the Student Selection and Placement Center, and added to their entrance examination scores.

Those students who are graduates of professionally- or vocationally-oriented secondary schools (lycees) and who apply for an undergraduate program in the same area, will also have their entrance examination scores supplemented by a coefficient to be determined.

b. Students demonstrating outstanding talent in certain branches of the arts, may be admitted to undergraduate programs in those same branches on the basis of selection procedures to be determined by the Council of Higher Education.

Fees
ARTICLE 46
The fees to be paid each year per student to the institutions of higher education are fixed and announced by the Council of Higher Education, taking into consideration the character and duration of the period of study in various disciplines and also the nature of the individual higher education institutions. The portion of these fees to be paid by the State is determined each year by the Council of Ministers and allocated to the budget of the institution concerned on a per-student basis. The remaining portion of the fees is paid by the student. The portion paid by the State is to be a minimum of 50%.

By the month of July of each year, at the latest, the Council of Ministers decides upon the amount to be paid by the State and by the students themselves, taking into consideration different geographical regions, as well as the fees to be charged to foreign students, and determines provisions concerning payment of such fees.

Loans may be granted by the Higher Education Loan and Dormitory Board to students who have financial difficulties to cover the student-paid portion of the tuition fees.

With the exception of preparatory and foreign language development programs, state support continues to be paid to students who are unable to complete pre-baccalaureate programs in two years, or bachelor's level programs in the time stipulated, be it 4, 5, or 6 years. For the first such additional year the student portion is increased by 50%, for subsequent years, by 100%. Those students enrolled in a second bachelor's level program pay twice the normal student portion.

Registration procedures are not completed or renewed for those who do not pay the student portion of fees.

Funds collected from student-paid fees, student facilities and activities as well as income from textbooks and educational materials produced by the institutions of higher education are to be deposited in an account opened in a national bank. The Budgetary Office and the Ministry of Finance are to be advised of this income. Funds collected in this manner are to be used primarily for subsidizing student meals, health, sports, cultural and other social services, as well as for the operating expenses of the university, investments related to development plans and programs, currency transfers, and payment to students employed on a temporary, part-time basis. Provisions governing the use and expenditure of such funds are determined by the Council of Higher Education, taking into consideration the recommendations of the Ministry of Finance.

The expenditure of such funds, as well as accounting and supervisory activities thereto related, are subject to revolving fund regulations and carried out by an accountant appointed by the university. Funds not spent in a given year are transferred to the budget of the subsequent year.
Debts resulting from loans not repaid when due are collected in accordance with the provisions of Law No. 6183 on Money Owed to the State, and paid to the Higher Education Loan and Dormitory Board.

Social Services
ARTICLE 47
The Organization of Activities
a. The institutions of higher education, in accordance with the plans and programs of the Council of Higher Education, are to take necessary measures for the mental and physical well-being of students; to provide their social needs regarding nutrition, studies, relaxation, use of leisure time and the like; and with this aim in mind and within the limits of the budget, to open reading rooms, health centers with in-patient facilities, medico-social centers, student canteens and restaurants; to provide cinema and theatre halls, outdoor camping sites, gymnasiums and sports grounds.
b. Higher education institutions, with the cooperation of public and private organizations, are to assist their graduates in finding jobs.
c. The universities are to establish centers for guidance and psychological counseling and try to solve the personal and family problems of the students.

d. The number and distribution among disciplines of the students who shall study in the universities, sponsored by public institutions and receiving scholarships from them shall be determined taking into consideration manpower requirements and the need to train teaching faculty member. The fees of the scholarship students and also their laboratory, examination and diploma fees are all included in the scholarships.

The Printing of Textbooks and other Educational Materials
ARTICLE 48
In universities, textbooks and educational materials are printed by the universities themselves and sold to the students at a price not to exceed the printing costs. The teaching staff may not print textbooks and educational materials on their own initiative. In the event of their being informed in writing by the institution's Administrative Board that the books accepted for printing cannot be printed by the university within that academic year, then they have the right to have them printed themselves.

The regulations to be implemented and the royalties to be paid for the publication of textbooks and educational materials are determined by the Council of Higher Education.

Foreign Language Preparatory Instruction
ARTICLE 49
Those higher education institutions which carry out education, partially or totally, in a foreign language, administer a proficiency examination in the medium of instruction. Students found inadequate in the foreign language examination are given preparatory courses of up to one year's duration, according to principles to be established by the Council of Higher Education. Students unsuccessful in this language course are dismissed.

During the normal course of education, every effort will be made to ensure that the students continue to improve their knowledge of the foreign language.

Post-Graduate Education
ARTICLE 50
Procedures and Requirements
a. Higher education institutions shall conduct examinations to select those university graduates who wish to study for a master's or PhD degree, or specialization in a field of medicine, according to principles determined by the Inter-university Board.
b. The institutions of higher education prepare the necessary plans and take the necessary measures in order to meet demands concerning post-graduate study.
c. Students in post-graduate education may receive scholarships, they may also be appointed for a period of one year at a time to an ancillary staff position.
d. In the determination of salaries or remunerations to be given to those engaged in specialization in medicine, the salaries and remunerations of personnel of the same status, at the Ministry of Health, will be taken into consideration.

PART EIGHT
ADMINISTRATIVE STAFF AND OTHER EMPLOYEES

Administrative Organizations
ARTICLE 51
a. A Secretary General is appointed to be in charge of central administration and (s)he is responsible, in governing bodies of higher education, to the President and in

universities to the Rector. In addition, there will be the necessary number of office heads, directors, consultants, legal advisors, experts, clerical staff and service personnel who are subject to Law No. 657 on Civil Servants.

Departmental directorates and directorates are established in compliance with general provisions, by the decision of the Board in governing bodies of higher education and by the Administrative Board in universities.

b. In each Faculty, there is to be a Faculty Secretary, the head of the faculty administration, responsible to the Dean. Similarly, in Graduate Schools and Schools of Higher Education there are to be a Graduate School and a School of Higher Education Secretary responsible to the Graduate School or School of Higher Education Director. The necessary number of administrative and office staff will also be employed. Division of labor among them is to be made by the Secretary, upon the approval of the Dean or the Director.

c. The Secretary General and Secretaries act ex officio in the capacity of rapporteurs.

Appointment Procedures
ARTICLE 52

a. The Director of the Student Selection and Placement Center, the Secretary- General, section heads, directors, legal advisors and experts are appointed by the President of the Council of Higher Education, upon the recommendation of the relevant board of the governing bodies of higher education; in universities the appointment is made by the Rector on the recommendation of the University Administrative Board. Similarly, the appointment of Faculty, Graduate School and School of Higher Education secretaries is made upon the recommendation of the relevant Dean and Director by the Rector.

b. Secretary-Generals of governing bodies and universities must be university graduates and the Faculty, Graduate School and School of Higher Education secretaries must have a higher education diploma.

c. The appointment of office staff is made by the Dean in faculties and their related units, by the directors in institutions directly attached to the office of the Rector, and by the President or the Rector in governing bodies of higher education and in the university central administration upon the recommendation of the Secretary- General and with attention to suitable vacancies.

d. The appointment of service personnel in governing bodies of higher education, in the office of the Rector, and in the units attached to the Rector, is made by the President or by the Rector, upon the recommendation of the Secretary-General; in faculties and in their attached units, by the Dean upon the recommendation of the Faculty Secretary; and in Graduate Schools and in Schools of Higher Education, by the Director upon the recommendation of the Secretary.

e. The posts, whether permanent or temporary, for the administrative personnel of governing bodies of higher education and of universities are determined by the President in governing bodies of higher education and by the Rector in universities, and are then proposed to the relevant authorities.

f. The administrative and other staff, in governing bodies of higher education and in universities, can be appointed or transferred by the President of the Council of Higher Education to other public organizations, or to other units of the governing bodies of higher education and to the higher education institutions, upon the recommendation of the Secretaries-General in governing bodies of higher education and of Rectors in universities.

PART NINE
DISCIPLINARY AND PENAL PROCEDURES

General Principles
ARTICLE 53
a. The President of the Council of Higher Education is the disciplinary superintendent of the Council of Higher Education and of university rectors; similarly rectors, of universities; deans, of faculties; graduate school and school of higher education directors, of graduate schools and schools of higher education; secretaries-general or secretaries, of the office of the relevant units. The administrative boards of the universities as well as of their attached units function, at the same time, as disciplinary committees. Associate and assistant professors are not admitted to the meetings of disciplinary committees when the case of a professor is in question; nor are assistant professors admitted when the case of an associate professor is under discussion.
b. Disciplinary procedures, concerning teaching faculty members and the administrative and other personnel and also responsibilities of the disciplinary superintendents, are determined by the Council of Higher Education in accordance with the procedures and principles applied to civil servants.
c. Penal Investigation Procedures
In the case of the allegation of criminal behavior on the part of the President or members of governing bodies of higher education, the administrators of higher education institutions, full-time or part-time faculty members and personnel subject to Law No. 657 on Civil Servants, alleged to have been committed as a consequence of their duties, or while carrying out their duties, the following provisions shall apply:

1. Preliminary Investigation
The investigation is carried out by a commission composed of at least three members of the Council of Higher Education at a meeting chaired by the Minister of National Education and not attended by the President of the Council of Higher Education, when (s)he himself/herself is the subject of the said investigation. In the case of others, the investigation is carried out by the President of the Council of Higher Education or other disciplinary superiors, either directly or by delegation to investigators whose number is to be determined by them.

Faculty members appointed to investigate the case of another faculty member must be equal in rank to, or of higher rank than, the subject under investigation.

2. The decision as to whether a final investigation is to be conducted, is made:
i. by the 2nd Bureau of the Council of State, in the case of the President or members of the Council of Higher Education, or members of the Higher Education Supervisory Board,
ii. by a three-member commission composed of members of the Council of Higher Education, in the case of university rectors, vice-rectors, or secretaries-general of governing bodies,
iii. by a three-member commission composed of vice-rectors, chaired and appointed by the Rector, in the case of administrative board members of a university, faculty, graduate school or school of higher education, as well as in the case of deans and assistant deans of faculties, directors and assistant directors of graduate schools or schools of higher education, or university secretaries-general,
iv. by a three-member commission composed of members of the University Administrative Board, in the case of teaching faculty members, and of faculty, graduate school, or school of higher education secretaries,

v. by the local, provincial administrative board, in the case of other staff subject to the provisions of Law No. 657 on Civil Servants.

vi. Regular and alternate members of investigatory commissions established by the Council of Higher Education or university administrative boards are appointed for a period of one year. Appointments are renewable.

3. Presence of full membership of the body which is to decide upon the opening of a final investigation is necessary for a meeting to take place. Members concerning whom a preliminary investigation has been conducted or concerning whom a decision is to be reached do not participate in such meetings. Missing members are replaced by alternates. The provisions of Article 61 of this law apply with regard to other matters.

4. With regard to members of the Council of Higher Education and the Higher Education Supervisory Board, objections to a decision by the 2nd Bureau of the Council of State authorizing the commencement of a criminal action as well as decision concerning dismissal of charges are automatically reviewed by the Administrative Affairs Board of the Council of State and decided upon. Objections by those concerned to decisions by other bodies authorizing the commencement of a criminal action as well as decisions concerning dismissal of charges are automatically reviewed and decided upon by the 2nd Bureau of the Council of State. In the event that the decision to initiate a criminal action is upheld, the trial is to be conducted by the relevant criminal division of the Supreme Court and appeal proceedings to be dealt with by the General Penal Board, in the case of the President and members of the Council of Higher Education and the Higher Education Supervisory Board. For all others, the trial is to be conducted by the local courts in the place where the crime was committed.

5. In the case of a crime jointly committed by those of different status, the investigatory procedures as well as authority conducting the trial are to be determined with respect to the suspect occupying the highest status.

6. In the case of penal investigations concerning the President of the Council of Higher Education and rectors, with regard to crimes covered by Law No. 1609 on Procedures Governing Prosecution and Trial of Civil Servants and their Co-Defendants with Regard to Certain Felonies, the penal investigation is to be carried out in accordance with the procedures indicated above. All others shall be dealt with in according with the afore-mentioned Law No. 1609.

Permission for legal proceedings to be initiated concerning members of the Council of Higher Education and the President and members of the Higher Education Supervisory Board and administrative personnel of these institutions (including those of the Inter-university Board) is granted by the President of the Council of Higher Education, while that concerning university administrators, teaching faculty members, and civil servants is granted by university rectors.

7. In the event of the following, the procedures stated above are not to be applied, but the investigation is to be carried out by the Public Prosecutor:

Ideologically-motivated crimes aimed at abolishing basic rights and freedoms stated in the Constitution, abolishing the indivisible unity of the state with its country and people, abolishing the Republic, whose characteristics are indicated in the Constitution, for reasons based on discrimination according to language, race, class, religion, or sect, as well as related crimes; crimes directly or indirectly involving restriction of the freedom of learning and teaching; crimes interfering with the peace and order of institutions; boycotts, occupation, obstruction, as well as

encouragement or provocation of the same; as well as being caught in flagrante delicto with regard to major crimes requiring severe penalties.

8. Matters not covered by this law shall be dealt with in accordance with the Law on the Trial of Civil Servants, dated 4 February 1923.

Student Disciplinary Procedures
ARTICLE 54
Investigation, Powers and Penalties
a. To those students whose behavior on the premises or otherwise is incompatible with the character and dignity of higher education students; who directly or indirectly restrict the freedom of learning and teaching; who violate the peace and order of institutions; who participate in actions such as boycotts, occupations and obstructions; who encourage and provoke such actions; who assault the person, the honor and the dignity of the personnel of higher education institutions; who behave disrespectfully; and who participate in anarchic or ideological actions or encourage and provoke such actions, penalties will be given including warning, reprimand, suspension for a period between one week and one month, or for one or two semesters or expulsion from higher education institutions, even though such conduct involves another offence.
b. The Faculty Dean, the Graduate School or School of Higher Education Director is authorized to investigate disciplinary violations by students on or off the premises of a Faculty, or of a Graduate School, or of a School of Higher Education, and directly to mete out the appropriate punishment or to refer the case to the disciplinary committee.
c. The procedure for disciplinary investigation is to be commenced as soon as the incident is made known, and the investigation is to be concluded within fifteen days at most.
d. A student who is under investigation has the right of oral or written defense. A student who does not make his/her defense within the allocated period is assumed to have renounced this right.
e. A student is notified of disciplinary action in writing. The case is reported both to the organization from which (s)he receives a scholarship or grant and also to the Council of Higher Education. The student has the right to appeal to the University Administrative Board within 15 days for reconsideration of the decision concerning expulsion from a higher education institution. Penalties are entered into a student's official records.
f. During the procedures to be carried out in accordance with this Article, notification can, if deemed necessary, be made to the student by public notice at his/her own higher education institution.
g. A decision to expel a student from a higher education institution is reported to all higher education institutions, to the Council of Higher Education, to Security Authorities and to the relevant draft office. Students who have been expelled from a higher education institution for disciplinary reasons are not eligible for admission to any higher education institution.

PART TEN
FINANCIAL PROVISIONS

Sources of Income
ARTICLE 55
Sources of income of governing bodies of higher education, higher education institutions and the units attached to them are:
a. Annual budgetary allocations,
b. Aids from institutions,

c. Fees and payments received,
d. Income from publications and sales,
e. Income from movable and immovable property,
f. Profits from the enterprises of the revolving fund,
g. Donations, bequests and sundry.

Financial Facilities
ARTICLE 56
Procedures and Methods
a. All donations and bequests, which are made to governing bodies of higher education, to higher education institutions and to the units attached to them, are exempt from taxation, duties, stamp duties and fees. Donations and bequests shall be utilized in full conformity with the conditions and the restrictions laid down by the donors and general legal provisions shall be observed.
b. Universities and higher institutes of technology benefit from the same exemptions, exceptions and other financial facilities granted to other public institutions subject to the general budget.

The donations made in cash by real or juristic persons liable for income taxes and corporate taxes to the institutions of higher education shall be deducted from their respective proceeds.
c. Machines, tools and instruments, equipment, pharmaceuticals, materials and publications which are imported for educational and research purposes by governing bodies of higher education, higher education institutions and the units attached to them are exempt from stamps, customs duty and excise on the condition that these goods are not available or manufactured within the country; similarly, goods of the same kind which are given as donations are also exempt from the same taxes and duties.
d. The Rector in the university and the President in the governing bodies, is entitled to waive claims on the part of the respective institution up to and including one million Turkish Liras, if, according to his/her judgment, prosecution would not be in the best interests of the institution; for amounts above one million Turkish Liras, authorization has to be obtained from the Ministry of Finance, upon the application of the President, in the case of governing bodies, or the Rector in the case of universities, taking into consideration the advice of the Government Accounting Bureau.
e. Expenditures necessitated by scholarly, scientific, technical research and publication conducted by universities, faculties, graduate schools, schools of higher education, conservatories, vocational schools of higher education and institutions and units thereto related are not subject to Law No. 2490 on Auctions, Bids, and Award of Contracts.
f. The universities shall not be liable to the provisions of the Public Law No. 1050 Article 135 governing Public Accounting as well as Public Law No. 2490 on Auction, Bids, and Award of Contracts with regard to the construction of buildings, purchase of machinery as well as all kinds of equipment and their maintenance.
g. Allocations in the budget of a given university may be transferred to the budget of another university by the Ministry of Finance, based upon the advice of the Rector and the proposal of the Council of Higher Education.

Financial Supervision of the Official Authority
ARTICLE 57
The budgets of governing bodies of higher education and higher education institutions are prepared, put into effect and supervised in accordance with the provisions which apply to general and subsidiary budgets.

Presidents in governing bodies of higher education and rectors in universities are the Official Authority. This authority can, when deemed necessary and appropriate, be delegated to Vice-Presidents, Deans, Directors of Graduate Schools and Schools of Higher Education, Chairperson of the units attached to governing bodies, and to Secretaries-General of governing bodies and universities.

Revolving Fund and Research Fund
ARTICLE 58
a. Revolving Fund
Revolving fund enterprises can be set up in governing bodies upon the proposal of boards concerned and with the approval of the Council of Higher Education; in universities and in their attached faculties, graduate schools, schools of higher education, conservatories, research centers, upon the proposal of administrative boards concerned and the recommendation of the Rector and with the approval of the Council of Higher Education. The amount of the initial fund is indicated in the budget. This amount can be increased by the addition of its own incomes and also by the decision of the Council of Higher Education in governing bodies of higher education. In universities this is to be done with the approval of the Rector upon the proposal of the relevant administrative board.

Fields of activities for revolving fund enterprises, their capital limits, the principles governing the administrative procedures related to management, and accounting procedures are set down in the revolving fund regulations, in accordance with principles established by the Council of Higher Education and the recommendation of the Ministry of Finance.

Enterprises of a revolving fund are not subject to the provisions of Law No. 1050 on General Accounting and Auditing of the State, or of Law No. 2490 on Auction, Bids and Award of Contracts. The revenues acquired from the revolving fund and also each year's unspent funds are added to the revolving fund of the following fiscal year. The balance sheets and their supplements together with all income-expenditure documents, prepared within four months from the end of the fiscal year, are submitted to the Government Accounting Bureau, and copies sent to the Ministry of Finance within the same period.

At least 30% of the income accruing to the revolving fund, which is established by the contributions of the teaching faculty members of all the individual units (teaching, research, practice), is allocated to the provision of the various needs of that particular unit, including materials, equipment, research projects, etc. The remaining portion is divided among the relevant teaching faculty members and administrative personnel subject to Law No. 657 on Civil Servants in accordance with proportions established by the University Administrative Board. Teaching staff members and faculty members in units proposed by the Inter-university Board and approved by the Council of Higher Education may, in one year, receive a total payment from the revolving fund not to exceed twice the total income they receive from the university including their salary (including supplementary coefficient and all other supplementary payments). Other faculty members' total payment from the revolving fund shall not exceed an amount equal to the total income they receive from the university (all-inclusive). This is not to exceed 50% in the case of administrative personnel subject to Law No. 657 on Civil Servants. However, the share that teaching staff members receive for contributions to the revolving fund outside of regular working hours shall not be taken into account with regard to the limit of a maximum payment of double their all-inclusive income.

b. Research Fund

Upon the decision of the Council of Higher Education, research funds attached to the office of the Rector can be established in universities, making use of the income of all revolving funds in the university concerned. The income of such funds consists of:

1. Sums allocated from the revolving fund, in accordance with the provisions stated above,
2. The entirety of revolving fund income acquired without the direct or indirect contribution of the teaching staff members,
3. Research allocations in the university budget,
4. Sums remaining from the previous year's research fund,
5. Donations, assistance, and other income.

Provisions regarding the use and administration of the fund are determined by the Council of Higher Education. With regard to accounting procedures and other financial matters, the procedures and principles of the Student Selection and Placement Fund of the Council of Higher Education shall apply.

PART FOUR
INSTITUTIONS OF HIGHER EDUCATION

Duties of the Institutions of Higher Education
ARTICLE 12

PART ELEVEN
MISCELLANEOUS PROVISIONS

Membership and Office-holding in Political Parties
ARTICLE 59

Teaching faculty members in higher education institutions may be members of political parties. On condition that they carry out their responsibilities at their institution, and that they notify the institution within one month, they may hold office in the central organs of political parties and their research and advisory units. However, such teaching faculty members cannot serve as members of the Council of Higher Education or of the Higher Education Supervisory Board, as rectors, deans, graduate school and school of higher education directors, or as department heads, or as their deputies.

Students in institutions of higher education may be members of political parties.

Teaching faculty members and students who are members of political parties shall not engage in party activities or party propaganda within institutions of higher education.

Re-Appointment to Institutions of Higher Education
ARTICLE 60

a. Those teaching staff members who have left institutions of higher education upon their being appointed to the Council of Ministers or elected to the Legislature, may, in accordance with the provisions of this law, be re-appointed to institutions of higher education. The period thus spent shall be considered to have been spent at the university, with regard to salary and promotion, and their re-appointment shall not require a vacant staff position.

b. Those teaching members who have, with their own consent, left higher education institutions, can, unless they have been expelled by court order or on disciplinary

procedure, be re-appointed in accordance with the provisions of this law and not requiring a vacant staff position.

c. Those selected as President or members of the Council of Higher Education, as well as those selected as Rector or Dean while employed in an institution of higher education or a public institution may, upon completion of their term of appointment, and not being re-appointed, be re-appointed to their institution. The period thus spent shall be considered to have been spent at their institution with regard to salary and promotion, and their re-appointment shall not require a vacant staff position.

Voting
ARTICLE 61
In all juries and boards referred to in this law, each member will vote either for or against the motion; no one may abstain. For meetings of any boards, excluding the Council of Higher Education, the quorum is an absolute majority.

All decisions are made by the absolute majority of votes of the participants.

When the absolute majority cannot be obtained by the third round, the principle of the majority of votes is put into practice in the fourth round.

Personal Rights
ARTICLE 62
As regards the personal rights of teaching faculty members in universities and also of administrative and other staff in governing bodies as well as in universities, the provisions of this law are applied. For matters not defined in this law, the University Personnel Law is applicable; if that law does not cover the matter either, general provisions are applied.

Personnel Records
ARTICLE 63
The personnel records of teaching faculty members, administrative and other personnel working in higher education institutions and in governing bodies, and also records of students, are kept in accordance with general provisions and with statutory provisions to be drawn up by the Council of Higher Education. With regard to appointments, promotions, academic titles and other personnel matters, these records are considered valid.

Leave of Absence
ARTICLE 64
Teaching faculty members usually take their annual leave when the higher education institution is not in session. Other leaves of absence for teaching faculty members and also for the personnel in governing bodies and administrative staff in higher education institutions are subject to the provisions of the Law No. 657 on Civil Servants.

Rectors take their leaves of absence from the President of the Council of Higher Education, and other administrators from the authority they are immediately responsible to.

All the personnel working in higher education institutions and governing bodies may absent themselves with the permission of their immediate disciplinary superior.

Regulations
ARTICLE 65

a. The following matters shall be determined in the regulations to be prepared by the Council of Higher Education:

1. Matters concerning the organization, and the working procedures of the Council of Higher Education, and the selection of its members and procedures regarding elections and appointments within its jurisdiction,

2. Matters concerning the formation, functioning, supervision procedures and principles of the Higher Education Supervisory Board,

3. Principles relating to the organization, functioning and duties, of the Student Selection and Placement Center to procedures of student selection and placement, and to the registration and examination fees to be received from the candidates and the utilization of the fund thus resulting,

4. Procedures regarding promotion and appointment of Assistant Professors, Associate Professors, and Professors in higher education institutions covered by this law,

5. Principles concerning the training of teaching faculty members,

6. Principles regarding the weekly teaching load,

7. Principles of procedure as regards tuition fees, including those of foreign students,

8. Principles governing printing of textbooks and educational materials, and also royalties,

9. Principles governing disciplinary procedures regarding teaching faculty members, administrative and other personnel, and students, as well as principles concerning the powers of disciplinary superiors and the formation and functioning of disciplinary committees,

10. Principles and procedures concerning all types of expenditure arising from scientific and technical studies; research and publications to be carried out by higher education institutions and their attached units; and also concerning construction, machinery and equipment, and their maintenance and repair,

11. Matters concerning the official records of teaching faculty members, administrative and other personnel, and students,

12. Taking into account the educational fields dealt with by institutions of higher education to be established by foundations, matters related to buildings, facilities, equipment, education, administrators, and other academic matters,

13. Principles related to appointment, transfer, and other matters related to the implementation of this law.

b. The following matters are determined in the regulations to be drafted by the Inter-university Board:

1. Principles of post-graduate education,

2. Other academic matters related to the implementation of this law.

APPENDIX

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APPENDIX 15
APPOINTMENT AND PROMOTION AT METU

Appointment to Assistant Professorship

Assistant Professorship is defined by Law 2547 as the first stage of being a professional faculty member who has received a PhD, the duration of which is limited to 12 years. Assistant Professors are expected to carry out all the duties consistent with being a professional faculty member: teaching autonomously and with full authority as well as conducting academic research.

Procedure of Appointment

The procedure for promoting or appointing an individual as an Assistant Professor is defined in detail in the relevant University Bylaw as well as in Law 2547. In addition to these legal and administrative requirements, METU's criteria and procedures are given below:

For a candidate to be appointed as an Assistant Professor, (s)he has to:
- perform well in the presentation of an English-language seminar, demonstrating a satisfactory level in English as officially defined by the University Administrative Board,
- carry out academic studies at an internationally recognized educational institution outside of Turkey for at least two semesters,
- meet the requirements for "activity" and accrue the minimum number of points pertaining to the initial appointment of an Assistant Professor, as stated in the tables for academic evaluation criteria and points that have been approved by the University Administrative Board.

Any additional requirements will be determined by the Faculty Administrative Board. Position announcements specify that the candidate will be required to give a presentation completely in English, thereby demonstrating his/her competence to teach and do research in English. Applications are reviewed by a jury, formed at the behest of the Department Head and with the approval of the Dean, consisting of three judges: one METU professional faculty member, the Department Chairperson, and a professional faculty member from another University.

The assessment prepared by the Department Chairperson and the individual assessments of the jury members are studied by the Faculty Administrative Board, approved by the Dean and submitted to the Rector's Office. Appointments, initially for a three-year period, are made by the Rector's Office, consistent with Law 2547.

Extension of Employment

A jury formed according to the principles of appointment juries as outlined in Law 2547, decides the extension of employment for Assistant Professors. The decision is based on the evaluation of documents and the candidate's teaching and research activities during the initial period of duty. During the current period of appointment (two or three years), a candidate should have obtained the points, as determined by the University Administrative Board. In case such requirements are not met, arrangements may be made to extend the period of duty for two years for the purpose of earning the necessary points, but this extension can be granted only once and is only possible when both the Faculty Administrative Committee and the Dean have endorsed the candidate.

Appointment to Associate Professorship and Full Professorship

Associate Professorship Examinations

The faculty tenure track includes the assistant professors, associate professors and full professors. Any academician who wants to follow the tenure track must take an examination organized by HEC. Interuniversity Board appoints a jury of three or five members accordance with the regulations concerning the Promotion and Appointment of Academic Staff, taking into consideration their major area. The examination is composed of two parts: the review of technical publications and an oral examination. If the candidate is successful, the jury awards the successful candidate the title of Associate Professorship in the relevant subject.

Receiving the title, however, does not guarantee the appointment of the candidate as an Associate Professor in a university. The Middle East Technical University has its own set of criteria for promotion, which is decided on by the University Administrative Board. A faculty obtains his/her tenure, when (s)he is appointed as an Associate or Full Professor in the University.

Promotion Criteria

At the level of individual faculty members, quality monitoring and assessment are carried out at three different points in time. First, when (s)he is recruited; secondly when (s)he is promoted to an Associate Professor position; and thirdly when (s)he is up for promotion to be a Full Professor. There are different sets of criteria to be used at each step that are required by the University Administrative Board. Although, each Faculty has its own criteria, the common minimum requirements to be considered for an associate and full professor position are as follows:

- The number of full papers published in journals indexed in SCI, SSCI or AHCI core list must be above the department average (at the time of appointment),
- The candidate has to meet the requirements for "activity" and accrue the minimum number of points pertaining to the appointment, as stated in the tables for academic evaluation criteria and points that have been approved by the University Administrative Board,
- The candidate has to perform well in the surveys filled by the students at the end of each semester, and has to be within the upper 80% in the Faculty.

Procedure of Appointment

When there is a vacancy for an Associate Professorship and/or Full Professorship in the University, this is advertised by the Rector's office, with details of the areas of study and the special qualifications that are required.

Requirements for appointment to Associate Professorship:

- To have received the title of Associate Professor,
- To meet METU's promotion criteria.
- Requirements for promotion to full Professorship:
- To have worked in the relevant field of study for five years after receiving the title of Associate Professor,.

The Rector assigns three Professors, at least one of them from another University, as the jury for the Appointment to Associate Professorship; and five professors, at least

three from outside the University, for Full Professorship to evaluate applicants. These Professors and the Department Chairperson relay their views to the Rector on each candidate separately. Based on these views and those of the University Administrative Board, the Rector makes the appointment.

**APPENDIX 16
RESEARCH & RESEARCH CENTERS AT METU**

RESEARCH

METU, as a research university, places high priority on research and consulting as vital parts of its academic activity. The total number of applied and theoretical research projects underway in a single year is over 700. More than half of these are contract research projects sponsored by industries in public and private sectors. The remaining mainly consist of research grants awarded by national and international organizations and by the University Research Fund. The total budget for active projects runs over $30 million with expenditures, mostly for equipment and supplies, amounting to $14 million.

Research, consulting and educational projects are administered by Centers that are attached to departments, graduate schools, faculties or directly to the Rector's Office. Research Coordination and Industrial Liaison Office (RCILO) is responsible for developing and coordinating METU's international research projects.

RESEARCH CENTERS ATTACHED TO THE RECTOR'S OFFICE:

Audio-Visual Research and Production Center (GİSAM)
Established in 1993, its aim is to carry METU's pioneering role in science and technology to the media and to come up with innovations rather than following what is already available. GİSAM brings technology, aesthetics and knowledge together, to create alternatives that are key to the scientific and artistic productivity. Artists, media professionals, and scientists carry out educational activities and create high quality productions simultaneously in GİSAM's high-tech studios.

Research Center for Science and Technology Policy (TEKPOL)
TEKPOL was founded to conduct interdisciplinary and scientific research in the field of science and technology policies and economic development. Giving research-based consultancy services to private and public establishments and companies and building a data bank including the numerical and statistical developments are among the main achievements of the Center. In addition, TEKPOL contributes to the diffusion of technological culture, assimilation of technology in our society and development of technological efficiency.

Black Sea and Central Asian Countries Research Center (KORA)
The main objective of this Center is to collect reliable and systematic information about the region and develop technical cooperation with the countries of the region through various projects and research oriented activities particularly in the process of social and economic transformation these countries have been undergoing.

CAD/CAM/Robotics Application and Research Center (BİLTİR)
This center was established in 1992 for the purpose of developing and applying advanced technologies for the Turkish industry, as well as designing, manufacturing and doing robotics related research at METU. The Center facilities include a 9,000 m^2 area with an extensive CAD/CAM facility, which supports state-of-the-art design and manufacturing tools and equipment used for both research and teaching.

Center for Research and Assessment of Historical Environment (TAÇDAM)
In 1966, scholars from various universities and scientific institutions of Turkey joined together under the leadership of the former Rector of Middle East Technical University, Mr. Kemal Kurdaş, to establish a research institute to undertake the Keban Archeological Project. It was a co-operative effort towards salvaging the historical monuments and sites of a region that had to be flooded during the construction of

Keban Dam in 1970s. After 1975, the project extended its study area to include the Lower Euphrates Region. In addition, to display the artifacts recovered during the excavations carried out in the archaeological sites of the METU Campus, with the initiation of this group, the University Museum was established. The museum also serves to disseminate the information revealed by excavations.

This institute, re-structured in 1995 as a Center of Research and Assessment of Historical Environment (TAÇDAM) continued its original mission: to motivate undertakings of salvage archaeology and documentation of historical environment by means of the most advanced methods and techniques for those areas under risk. Now, among advanced institutions of archaeology in Turkey, TAÇDAM stands as one of the leading research units concerning historical environmental matters with a multi-disciplinary vision. Directed on research matters by a managing committee formed by representatives from several academic units at Middle East Technical University - archaeometry, geology, restoration of historical monuments, city and regional planning-TAÇDAM serves as an interdisciplinary research center to survey and excavate archaeological sites in threatened areas of Turkey, publish their results and display the recovered artifacts at METU Museum.

Continuing Education Center (SEM)
Complex and high-tech systems of modern industry require not only educated but also expert human resource. Continuing Education Center (SEM) was established in 1991, with the aim of meeting the education and expertise needs of both industry and business. The Center is a member of IACEE (International Association for Continuing Engineering Education) and EUCEN (European Universities Continuing Education Network).

Disaster Management Implementation and Research Center (AFET)
AFET provides consultancy and project support to domestic and international institutions with a multidisciplinary approach for mitigation of natural and manmade disasters. AFET organizes seminars, training courses and in-service training programs to officials or to community within the framework of disaster management. In accordance with its aim, the Center also conducts research about disaster management.

METU-Southeast Anatolia Project Research Center (GAP)
Southeast Anatolia Project of Turkey is an integrated regional development project of the Southeastern Anatolian Region, which is relatively underdeveloped. The project is not only limited to the construction of dams, hydro-electric power plants or irrigation systems but also contains development of socio-economic sectors such as agricultural industry, urban and rural infrastructure, communication, education, health, culture, tourism and other social services. The main aim of METU-GAP Center is to use and transfer METU's research and technological potential to the use of different projects of Southeastern Anatolia.

Modeling and Simulation Research Center (MODSİM)
MODSIM was founded in 2001 with the collaborations of Turkish Armed Forces, Ministry of Defense Undersecretariat for Defense Industries and Chief of Staff to meet the modeling and simulation demands of the Turkish Armed Forces. To achieve this goal and also conduct R&D projects, the Center closely follows the latest developments in the area of modeling and simulation.

Petroleum Research Center (PAL)

The center was established in 1991 with the collaboration of Middle East Technical University, Ministry of Energy and Natural Resources and General Directorate of Petroleum Affairs. The main aim of PAL is to conduct research and development and offer solutions to the petroleum sector's needs. PAL has the liquid fuel quality analysis laboratory. PAL constitutes the general framework for the search and analysis of petroleum and natural gas and their products in Turkey.

Welding Technology and Non-Destructive Testing Research Center (KAYNAK)

WT and NDT Center has its own quality assurance system which is based on the requirements of EN 45001 "General Criteria for the Operation of Testing Laboratories". The aims of the Center are to provide the realization of all kinds of scientific, technological and industrial research on the subject of improving production quality; train and certify personnel working in the field of welding and non-destructive testing in keeping with the related European and International standards.

Welding Technology Research Center is one of the divisions of KAYNAK. The division was established by Turkish-German cooperation in 1988, on the METU campus. The aim of the center is to give education, certification, consultancy and research services to the industry where welding is a developing technology.

RESEARCH CENTERS REPORTING TO FACULTIES, GRADUATE SCHOOLS OR DEPARTMENTS:

- Center for European Studies
- Housing Research Center
- Software Research and Development Center (SRDC)
- Distance Learning Research Center
- Coastal Harbor Engineering Research Center
- Earthquake Engineering Research Center
- Economic Research Center
- Geology-Geophysics Research Center
- Ground Mechanics Research Center
- International Relations-Region Research Center
- Machine Design and Manufacturing Research Center
- Management and Administration Research Center
- Public Politics and Urban Research Center
- Special Structures and Tall Buildings Research Center
- Transportation Research Center
- Water Resources Research Center

RESEARCH CENTERS IN COORDINATION WITH OTHER ORGANIZATIONS:

- Turkish Air Force - METU Coordination Center for R&D and Advanced Studies
- ODTU-KOSGEB (METU-SMIDO) Technology Development Center
- International Center for Heat and Mass Transfer
- TÜBİTAK Units
  - Information Technologies & Electronics Research Institute (BİLTEN)
  - High Energy Astrophysics Research Unit
  - SAGE Defense Industry Control Laboratory

AREA COMMITTEES

- Biotechnology Area Committee
- Defense Industry Area Committee
- Energy Area Committee
- Environment Area Committee
- Ethics Area Committee

OTHER

- METU-MET Microelectronic Technologies

Figure 1: METU Research Centers
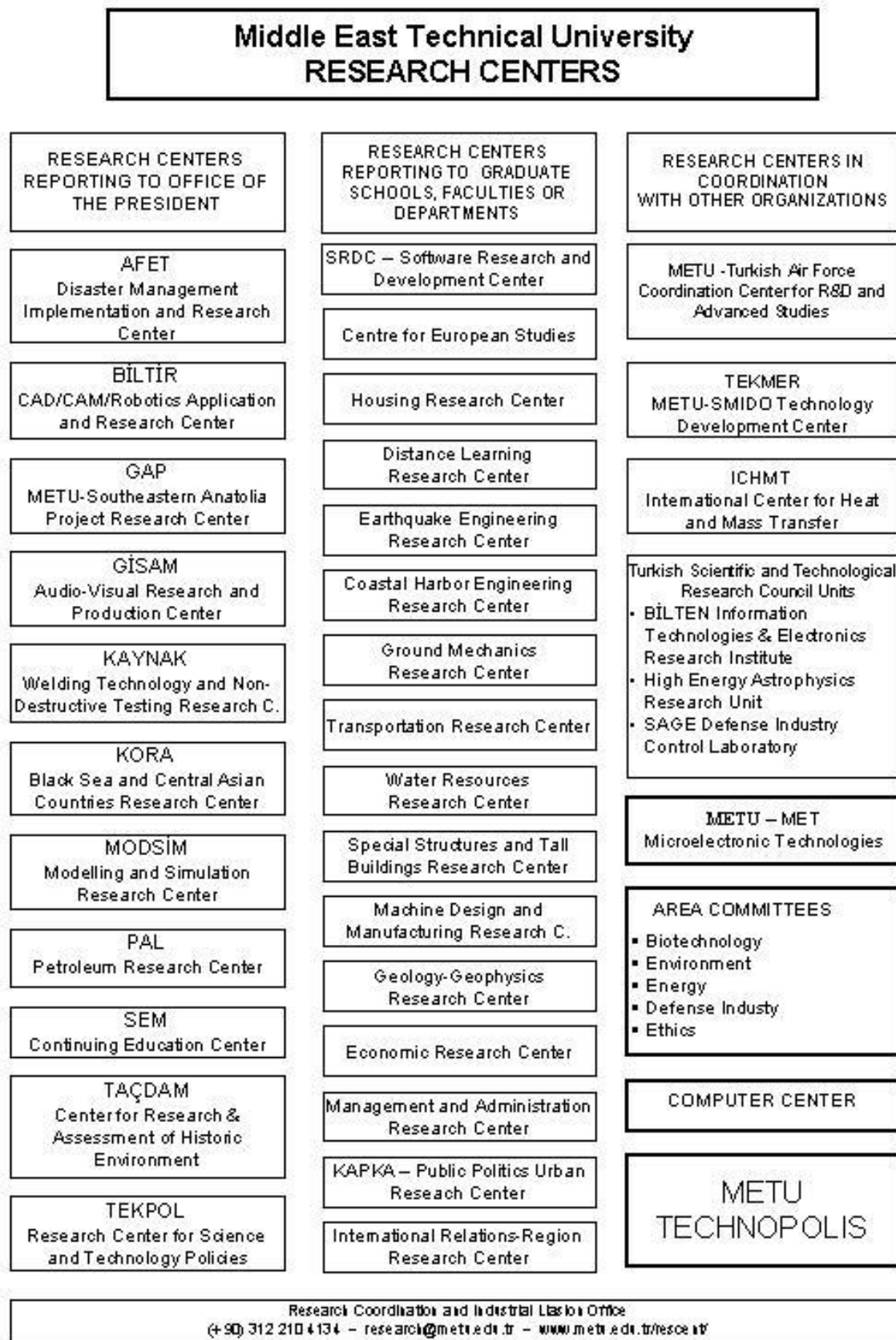
APPENDIX

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APPENDIX 17
ORGANIZATION CHART OF METU

ORGANIZATION CHART OF METU

**APPENDIX 18
SWOT CONFRONTATION MATRIX**

ESTABLISHMENT OF A NEW LEGAL FRAMEWORK CONTRIBUTING TO METU'S RAPID DEVELOPMENT

S/W \ O/T	DEMAND FOR ACADEMIC STAFF IN TURKISH UNIVERSITIES	NORTHERN CYPRUS CAMPUS	METU-TECHNOPOLIS	METU GRADUATES IN STATE AGENCIES	STATE POLICIES FOR HIGHER EDUCATION	OTHER UNIVERSITIES	POSSIBILITY OF POLITICAL INSTABILITY
RECTOR'S COMMITMENT	++	+	+	+	-		-
METU IMAGE	+	+	+	+		-	
LANGUAGE OF INSTRUCTION					-		-
ACCREDITATION		+			+	+	
INTERNATIONAL ACTIVITIES	+	+	+			-	-
RESISTANCE TO CHANGE	+				-		
LACK OF MOTIVATION	+	+	+		--	-	-

RESEARCH UNIVERSITY

S/W \ O/T	FACULTY SHORTAGE IN TURKEY	RECENT INTERNATIONAL EVENTS	INCREASING DEMAND FOR PHDs AND RESEARCH IN PUBLIC AND PRIVATE SECTOR	METU-TECHNOPOLIS	AVAILABILITY OF INTERNATIONAL RESEARCH FUNDS	GLOBAL EXPANSION OF RESEARCH NETWORKS	LACK OF STATE SUPPORT AND GUIDANCE FOR RESEARCH	AGING METU FACULTY	METU-NORTHERN CYPRUS CAMPUS
QUALITY OF METU FACULTY	+	+	+	++	+	+		-	+/-
LANGUAGE OF INSTRUCTION		+							
EXPERIENCE IN INTERNATIONAL RESEARCH	+	+		+	++	++		-	- -
METU IMAGE AS A RESEARCH UNIVERSITY	+	+	+	+	+	+		-	-
RESEARCH CENTERS			++	-	+	+	-	-	
INADEQUATE RESEARCH CULTURE AND ENVIRONMENT	+		++	++	++	++	-		
HIGH PRIORITY TO UNDERGRADUTE EDUCATION	++		+	+	+				-
INSUFFICIENT FINANCIAL RESOURCES	++	++	+	+	+		- -		+
INSUFFICIENT TECHNICAL SUPPORT STAFF	-	-	+		+		- -		
INSUFFICIENT LABORATORY INFRASTRUCTURE IN CERTAIN AREAS	+		+		+		- -		
INFLEXIBLE STRUCTURE FOR POST DOC AND GRADUATE STUDIES							-		
LOW NUMBER OF INTERNATIONAL GRADUATE STUDENTS		++					-		
LONG DURATION OF PhD STUDIES	+								
LACK OF A CLEAR AND COMPREHENSIVE RESEARCH POLICY	+		+	+	+	+	- -		
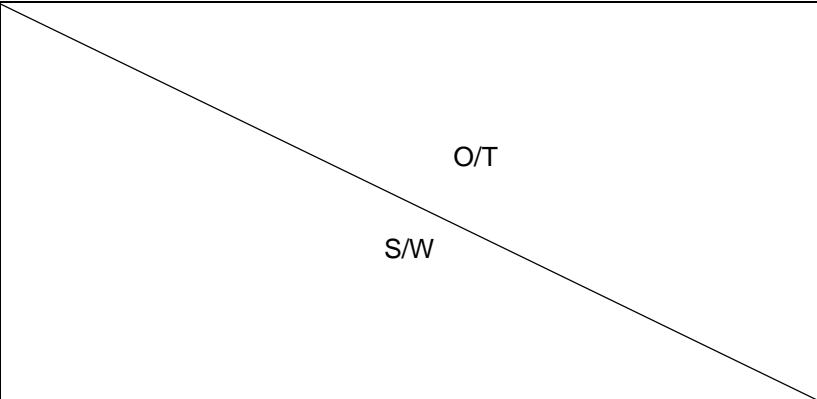
ACADEMIC HUMAN RESOURCES DEVELOPMENT

S/W \ O/T	FACULTY SHORTAGE IN TURKISH UNIVERSITIES	INCREASING GOVERNMENT SUPPORT	INCREASING DEMAND FOR STAFF WITH PhDs AND RESEARCH IN PUBLIC AND PRIVATE (DEFENSE) SECTOR.	ECONOMIC CRISIS	METU-TECHNOPOLIS	DISTANCE EDUCATION	AGING FACULTY	LOW SALARIES	ATTRACTIVENESS OF OVERSEAS UNIVERSITIES	NORTHERN CYPRUS CAMPUS
METU IMAGE		+			+	+				
QUALIFIED FACULTY	+	+	+	-	+			- -	-	
GOOD RELATIONS WITH STATE, HEC., OTHER UNIVERSITIES	+	++	+							+
STRONG IT, LAB., LIBRARY, HOUSING	++	+	++	- -	+	+				+
STRONG INTERNATIONAL RELATIONS	+	+	+		+	+			+	+
HIGH PRIORITY TO UNDERGRADUATE EDUCATION	+	+	+	+						- -
INSUFFICIENT NUMBER OF ACADEMIC STAFF	-	+	-	-			-	- -	-	-
INFLEXIBLE STRUCTURE OF GRADUATE EDUCATION		+								
INSUFFICIENT RESOURCES TO MOTIVATE AND SUPPORT FACULTY	+	+	+	-	+	+		- -		
LONG DURATION OF PhD STUDIES	+									
INSUFFICIENT RESEARCH ENVIRONMENT	+	+	+		++			-	-	-

INTERNATIONAL UNIVERSITY

S/W \ O/T	EU PARTICIPATION OF TURKEY	RECENT INTERNATIONAL EVENTS	NORTHERN CYPRUS CAMPUS	INTERNATIONAL ACTIVITIES OF STUDENT CLUBS	DISTANCE LEARNING	INTERNATIONAL DEMAND FOR METU GRADUATES	GLOBALIZATION TRENDS IN THE WORLD AND GEOPOLITICAL POSITION OF TURKEY	RELUCTANCE IN SOME EU MEMBERS FOR TURKEY'S MEMBERSHIP	PRIVATE UNIVERSITIES	ISOLATIONIST POLICIES OF SOME POLITICIANS
LANGUAGE OF INSTRUCTION	+		+		++		+		+	- -
METU ALUMNI ABROAD	+		++			+	++	- -		
METU IMAGE AS AN INTERNATIONAL UNIVERSITY	+		+	+	++	+	+			- -
QUALIFIED FACULTY AND STUDENTS	+	+	+	+			+	-	- -	- -
ACTIVATION OF INTERUNIVERSITY PROTOCOLS	++			+	+	+	+	-		- -
INTERNATIONAL STUDENTS	++	++	+	+	+		+		-	- -
INTERNATIONAL PROJECTS	++					+	+	- -	-	
EU OFFICE	++						+	-		-
INTERNATIONAL STUDENT AND STUDY ABROAD OFFICE	++	++	++				+	-		-
METU ACCREDITATION									+	
LANGUAGE DEFICIENCY IN ADMINISTRATIVE STAFF	+	+					+		-	
LACK OF SECOND LANGUAGE REQUIREMENT	+					+	+			
LOW RATE OF INTERNATIONAL PUBLICATIONS	+						+			
LIMITED NUMBER OF INTERNATIONAL FACULTY AND STUDENTS	+	+	+		+		+	-	-	- -
LIMITED RESOURCES AND ALLOCATION	+	+	++		+		+	-		- -

METU-TECHNOPOLIS

S/W \ O/T	FIRST MOVER ADVANTAGE	SUPPORTING LEGISLATION	LARGE NUMBER OF SMEs IN ANKARA	LOW RESEARCH DEMAND IN TURKEY	COMPETITION FROM OTHER TECHNOPARKS	UNCERTAINTIES IN IMPLEMENTATION
SUCCESSFUL EXPERIENCE WITH THE INCUBATOR				-		
METU IMAGE	+				-	-
EXPERIENCE WITH CONTRACT RESEARCH		+	+	-	- -	-
LAND AND LOCATION	+		+			
ICT + LIBRARY + LABORATORY INFRASTRUCTURE		+		-		
METU DEVELOPMENT FOUNDATION	+	+	+		-	-
LOW FACULTY INTEREST IN INDUSTRIAL APPLICATIONS	++	+	+	-	-	
LACK OF ENTREPRENEURIAL CULTURE	++	+	+	-	-	- -
INSUFFICIENT FINANCIAL FUNDS	+	+	+	-	-	

DISTANCE EDUCATION

S/W \ O/T	IC TECHNOLOGIES	HIGH DEMAND FOR DEGREE AND TRAINING PROGRAMS	NORTHERN CYPRUS CAMPUS	INTERNATIONAL COLLABORATION IN DISTANCE EDUCATION	INTERNATIONAL COMPETITION IN DISTANCE EDUCATION	INSUFFICIENT INTERNET INFRASTRUCTURE IN TURKEY	LOWER RECOGNITION COMPARED TO CONVENTIONAL EDUCATION
EXPERIENCE IN DISTANCE EDUCATION	+	+	+	+			-
ICT INFRASTRUCTURE	+		+	+		-	
METU IMAGE	+		+	+	-		
INSUFFICIENT NUMBER OF FACULTY	-	-	-		-		
INSUFFICIENT FINANCIAL RESOURCES	-	+	+	+	-	-	-
LACK OF UNIVERSITY-WIDE COORDINATING UNIT		-		-			

S/W \ O/T	RECENT INTERNATIONAL EVENTS	GOVERNMENT SUPPORT	FLEXIBILITY OF SPECIAL LAW	DEMAND FOR METU-QUALITY EDUCATION	REPROACHEMENT BETWEEN GOVERNMENTS OF NORTHERN AND SOUTHERN CYPRUS	POSITIVE APPROACH OF PARTICULAR EU MEMBERS FOR TURKEY'S MEMBERSHIP	POSSIBILITY OF POLITICAL INSTABILITY IN TURKEY	REDUCED DEMAND FOR EDUCATION IN CYPRUS	ECONOMIC CRISIS	PRIVATE UNIVESITIES
METU IMAGE AND ALUMNI	+	+		+	+			-	-	-
QUALIFIED STAFF		+	+		+	+	-	-	-	-
SPECIAL LAW		++		+			-			
EXPERIENCE IN DISTANCE EDUCATION				+		+		-	-	
ENGLISH EDUCATION	+	+	+	+	+	+	-			+
ACCREDITATION	++		+	+	++	++				+
INSUFFICIENT NUMBER OF STAFF (UNEVEN DISTRIBUTION)		+	+	+		+	-		-	-
PHYSICAL, CULTURAL, AND LEGAL DISTANCE			+			+		-	-	

APPENDIX

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APPENDIX 19
STUDENT CLUBS

STUDENT CLUBS

Student Clubs at METU are organized under the Directorate of Health, Culture and Sports in accordance with the framework regulation "Principles of Establishing and Managing Student Clubs". Student Clubs aim to develop solidarity among students and to provide an opportunity to be productive not only in scientific areas, but also in social, cultural and sports activities. Art festivals, concerts, exhibitions and conferences organized throughout the year illustrate some of these activities. The activities of the Student Clubs are carried out under the guidance of an academic advisor and supervised by the executive board, consisting of member students. The Rector's Office has the authority in matters like the approval of the establishment of the Clubs and the budgetary support, which it exercises via the Directorate of Health, Culture and Sports.

Students who would like to establish a Club submit an application to the Directorate of Health, Culture and Sports for the approval of the Rector's Office. This application includes the academic advisor, the members of the temporary executive board, a list of at least 20 members and the Club's regulations.

The regulations should include provisions under the headings of:
- Establishment objectives
- Activities
- Membership
- General assembly and its responsibilities
- Executive board and its responsibilities
- Supervisory committee and its responsibilities

The incomes of the Student Clubs come from the budget allocated by the University, donations and revenues generated from various activities. The incomes and expenditures of Student Clubs are controlled by the Directorate of Health, Culture and Sports and are subject to the ratification of the Rector's Office.

Currently, 77 Student Clubs are active at METU. The most highlighted yearly events are:
- International Spring Festival
- Interuniversity Theater Festival
- Interuniversity Folk Dances Festival
- International Dance Days
- Science Fiction and Fantasy Club, Role Playing Games Tournament
- Astronomy Club, Yuri's Night
- Nature Week

Table 1: List of Current Student Clubs

STUDENT CLUB	WEB ADDRESS
AEGEE-Ankara	http://www.aegee.metu.edu.tr/aegee-ankara/history.phtml
Aeronnautica Club	http://www.metu.edu.tr/clife/studgroups.php
Affection Club	http://www.metu.edu.tr/home/wwwsevgi/
Amateur Astronomy Club	http://newton.physics.metu.edu.tr/%7Eaat/
Amateur Photography Club	http://www.metu.edu.tr/home/wwwaft/
Archeological Club	http://www.metu.edu.tr/home/wwwart/
Archery Club	http://www.archery.metu.edu.tr/index.htm
Ataturk's Thought Club	http://www.metu.edu.tr/home/wwwadt/index.html
Aviation Club	http://www.metu.edu.tr/home/wwwhavat/turkce/index.htm
Eurasia Club	http://www.metu.edu.tr/home/wwweuas/
Bicycle and Triathlon Team	http://www.metu.edu.tr/home/wwwtri/
Biology Club	
Bird Watching Club	http://www.metu.edu.tr/home/wwwokgt/
Bridge Club	http://www.metu.edu.tr/home/wwwbric/
Business Ethics Club	
Chemistry Club	
Chess Club	http://www.metu.edu.tr/home/wwwsatrn/
Cinema Club	
Classical Guitar Club	
Computer Club	http://www.cclub.metu.edu.tr/
Communication Club	http://www.metu.edu.tr/home/wwwilt/
Construction Club	
Contemporary Dance Group	http://www.metu.edu.tr/home/wwwcdt/
Couple Dances Club	http://www.metu.edu.tr/home/wwwcdc/
Contemporary Life Club	http://www.metu.edu.tr/home/wwwcyt/
Dance Theater Club	http://www.metu.edu.tr/home/wwwdance/
Economy Club	
Education Club	
Electric Electronics Club	
Environmental Club	
Fencing Club	http://www.metu.edu.tr/home/wwwfc/
Foreign Policy and International Relations Club	http://www.metu.edu.tr/home/wwwfpirs/
Geology Club	
Go Club	http://www.metu.edu.tr/home/wwwgo/
Humor Club	http://www.metu.edu.tr/home/wwwgul/
International Free Thought Club	http://www.metu.edu.tr/home/wwwusdt/
FFI METU (Friendship Force International)	http://www.metu.edu.tr/home/wwwffc/
International Youth Club	http://www.metu.edu.tr/home/wwwugt/
Lifesaving and First Aid Club	http://www.metu.edu.tr/home/wwwocit/
Literature Club	
Marine Sciences Club	
Management Club	http://www.man.metu.edu.tr/%7Emanclub/index1.htm
Materials Science Club	http://www.metu.edu.tr/home/wwwmbt/
Mathematics Club	http://www.metu.edu.tr/home/wwwmathc/
Book Club	http://www.metu.edu.tr/home/wwwmbc/
METU Falcons	http://www.metu.edu.tr/home/wwwflcon/
METU IEEE Student Branch	http://www.ieee.metu.edu.tr/
METU Internet Club	http://www.msis.metu.edu.tr/
METU Orienteering Team	http://orienteering.metu.edu.tr/
METU Outdoor Sports Club	
METU Players	http://www.metu.edu.tr/home/wwwoyun/
METU Scouts	http://izci.metu.edu.tr/
Motorsports and Traffic Club	http://www.most.metu.edu.tr/
Music Club	http://www.metu.edu.tr/home/wwwmuzik/

STUDENT CLUB	WEB ADDRESS
Mountaineering and Winter Sports Club	http://dksk.metu.edu.tr/
Nature Club	http://www.metu.edu.tr/home/wwwdoga/
Petroleum Club	
Philosophy Club	http://www.metu.edu.tr/home/wwwphil/
Physics Club	http://newton.physics.metu.edu.tr/~fizikt/
Political Sciences Club	http://www.metu.edu.tr/home/wwwsbt/
Productivity Club	http://www.odtuvt.org/
Psychology Club	http://www.metu.edu.tr/~wwwpsycl/program.htm
Puzzles and Games Club	http://www.metu.edu.tr/home/wwwzeka/
Radio Club	http://www.radyotoplulugu.org/
Robot Club	http://www.robot.metu.edu.tr/
Rowing Club	http://www.metu.edu.tr/home/wwwmrow/index.htm
Science Fiction and Fantasy Club	http://www.metu.edu.tr/home/wwwsffs/
Sociology Club	
Softball Club	http://www.metu.edu.tr/home/wwwsball/
Statistics Club	
Strategic Research Club	http://www.metu.edu.tr/home/wwwstrat/
Scuba Club	http://www.metu.edu.tr/home/wwwsat/
Taekwon-Do Club	http://www.metu.edu.tr/home/wwwtaekw/
"The Company" METU Musical Club	http://www.metu.edu.tr/home/wwwtcms/tcms/main.html
Turkish – Japanese Communication Club	http://www.metu.edu.tr/home/wwwtjit/
Turkish Classical Music Club	http://www.metu.edu.tr/home/wwwktmt/
Turkish Folklore Club	http://www.metu.edu.tr/home/wwwthbt/

APPENDIX

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**APPENDIX 20
REALIZATION OF QUANTITATIVE TARGETS IN 2001**

REALIZATION OF QUANTITATIVE TARGETS IN 2001

EDUCATION

YEAR / NUMBER	2000	2001 target	2001 actual	2002	2003	2004
Undergraduate Students	2,345	2,400	**2,568**	2,400	2,400	2,400
International Undergraduate Students	960	1,000	**886**	1,200	1,300	1,400
International Master's and PhD Students	93	120	**111**	150	180	220
Distance Education	1,100	1,200	**3,000**	1,400	1,600	1,800
Evening Graduate Programs	89	100	**153**	200	300	400

GRADUATE SCHOOLS (Excluding International Students)

YEAR / NUMBER		2000	2001 target	2001 actual	2002	2003	2004
Master's	New Enrollment	981	1,267	1,257	1,356	1,440	1,529
	Total	3,157	2,904	3,190	3,167	3,429	3,691
	Number of Graduates	502	736	648	818	902	996
PhD	New Enrollment	155	286	253	309	332	355
	Total	989	1,004	1,095	1,119	1,244	1,384
	Number of Graduates	74	90	67	102	114	126
Appointment in the Framework of Article 35 of Higher Education Law		170	175	238	200	230	260

RESEARCH

YEAR / RESOURCES ($ 1000)	2000	2001 target	2001 actual*	2002	2003	2004
National R&D Projects	13,337	14,000	**8,560**	18,000	21,000	22,000
International R&D Projects	734	4,000	**608**	8,000	12,000	16,000
TOTAL	14,071	18,000	**9,168**	26,000	33,000	38,000

*The severe economic crisis and a high rate of inflation have resulted in a drastic decrease concerning the number of national and international projects realized in 2001.

ACADEMIC STAFF

YEAR / NUMBER	2000	2001 target	**2001 actual**	2002	2003	2004
Academic Staff (Profs., Assoc. Profs., Asst. Profs.)	689	700	**692**	725	750	775
Academic Staff (Instructors, Lecturers)	426	420	**422**	430	440	450
Research Assistants	998	1,000	**1,050**	1,050	1,100	1,150
International Academic Staff	48	60	**42**	70	80	90

PUBLICATIONS

YEAR / NUMBER	2000	2001 target	**2001 actual**	2002	2003	2004
Publications in International Journals	563	600	**654**	650	700	750
International Conference Proceedings	626	650	**713**	750	850	900

METU-TECHNOPOLIS

YEAR / NUMBER	2000	2001 target	**2001 actual**	2002	2003	2004
Tenant Companies	7	18	**34**	25	40	60
Projects Supported	-	5	**10**	8	12	20
Theses Supported	-	1	**-**	3	5	10

APPENDIX

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APPENDIX 21
AGE STATISTICS OF FACULTY MEMBERS

AGE STATISTICS OF FACULTY MEMBERS (August 2001)

- Number of Faculty Members: 968
  (Professors., Associate Professors., Assistant Professors., Instructors)

- Average Age: 46.7

Table 1 Age Distribution of Faculty Members

AGE	NUMBER	PERCENTAGE
60+	71	7.3
55-59	151	15.6
50-54	170	17.6
45-49	164	16.9
40-44	179	18.5
35-39	144	14.9
30-34	80	8.3
-29	9	0.9

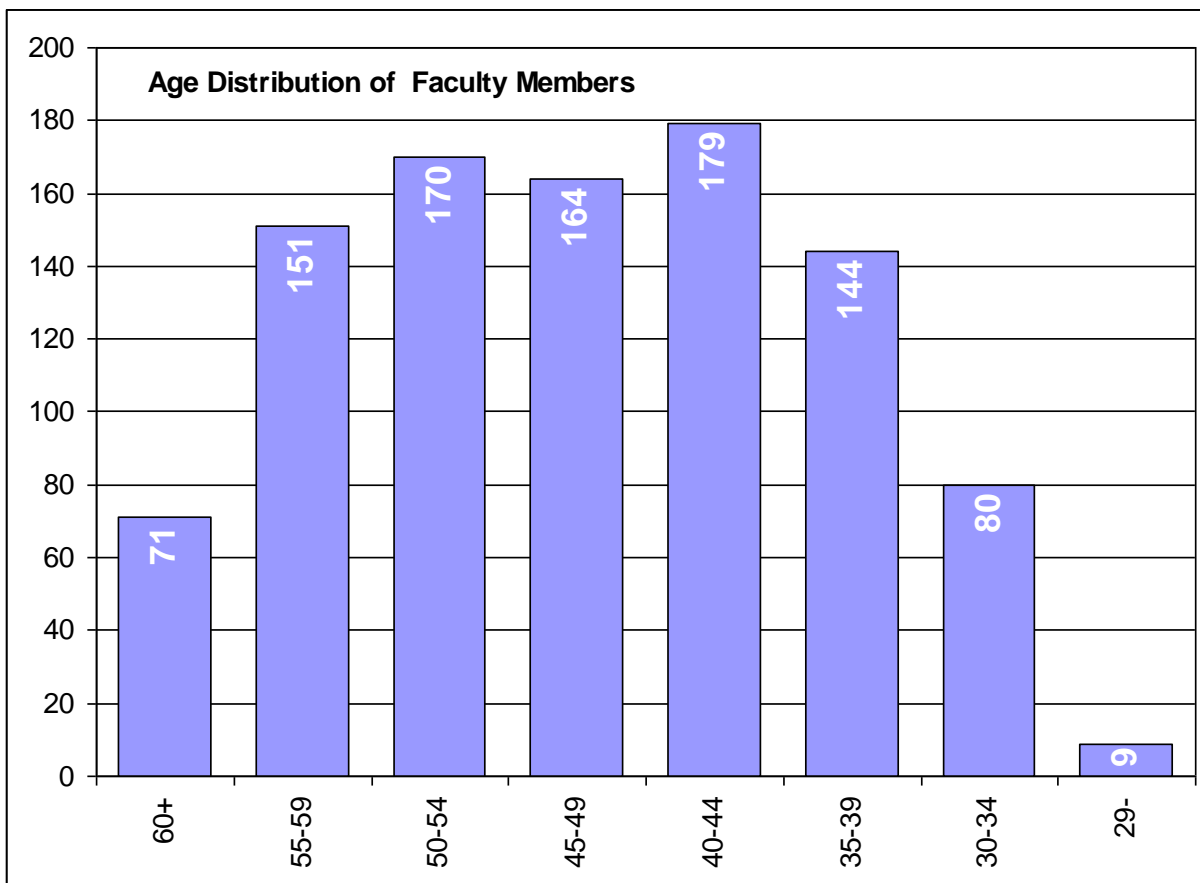**Figure 1** Age Distribution of Faculty Members

Table 2 below shows the numbers, cumulative total numbers and percentages of the current faculty members expected to retire between 2002 and 2036. The calculations are based on the assumption that faculty members will not retire before the age of 67, which is the compulsory retirement age by law.

Table 2: Statistics for the ages of faculty members

Year	Number of Faculty Members to Retire	Cumulative Total Number	Cumulative %
2002	4	4	0.4
2003	4	8	0.8
2004	10	18	1.9
2005	11	29	3.0
2006	18	47	4.9
2007	14	61	6.3
2008	10	71	7.3
2009	17	88	9.1
2010	23	111	11.5
2011	25	136	14.0
2012	40	176	18.2
2013	46	222	22.9
2014	36	258	26.7
2015	33	291	30.1
2016	40	331	34.2
2017	29	360	37.2
2018	32	392	40.5
2019	36	428	44.2
2020	26	454	46.9
2021	24	478	49.4
2022	41	519	53.6
2023	37	556	57.4
2024	41	597	61.7
2025	22	619	63.9
2026	42	661	68.3
2027	36	697	72.0
2028	38	735	75.9
2029	33	768	79.3
2030	37	805	83.2
2031	30	835	86.3
2032	25	860	88.8
2033	19	879	90.8
2034	21	900	93.0
2035	19	919	94.9
2036	19	938	96.9
2037	11	949	98.0
2038	10	959	99.1
2039	5	964	99.6
2040	1	965	99.7
2041	2	967	99.9
2042	1	968	100.0

The table indicates that by 2022, at least half of the current faculty will have changed.

Within the five-year period between 2002 and 2006, 47 faculty members are engaged to retire. An average recruitment of 10 new faculty members each year is necessary to balance this deficit. Within the next five-year period between 2007 and 2011, 89 faculty members are expected to retire. To balance the deficit during this period, 20 faculty members on the average will have to be recruited annually. Within the following five-year period of 2012 and 2016, 195 faculty members, corresponding to 20% of the current faculty, will have retired. Annual recruitment of 40 new faculty members on the average will be required to balance the deficit at the time.

Figure 2: Number of Faculty Expected to Retire