# Higher Education in Hungary

## Heading for the Third Millennium

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The descriptions of the higher education institutions in the book are based on and edited from the materials sent by the institutions in 2000 and in the course of compiling the respective chapters for the new publication of 2002. Those institutions that have not sent the requested descriptions are present in the book in a reduced number of characters. In their case, Internet sites served as sources of information.

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The Hungarian names of persons and institutions mentioned in the book are used deliberately according to the Hungarian grammatical rules, therefore, the first names are preceded by the family names.

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# Preface

The Book the reader is now holding intends to give an overview of the structure of Hungarian Higher Education and of its present state.

The new challenge – a knowledge-based society – has fundamentally changed the requirements Hungarian higher education must face.

Throughout the 20th century, increasing globalisation and technological development reduced time and space and the need for focused and dynamic research and growing efficiency changed the conditions under which higher education functioned world-wide during the 20th century. All these facts have obviously influenced our educational system in Hungary.

The academic reform of Hungarian higher education is inseparable from the Bologna Process. The most important challenge of the following years is to integrate Hungarian higher education into the European space reserved for higher education. In 1999, 29 European countries joined the Bologna Declaration, the recommendations of which included a number of tasks set up for Hungary.

The aim of the Bologna Process is the innovative harmonisation of European higher education. The most important objectives of the Bologna Declaration include

- the adoption of a system of easily readable and comparable degrees;
- the adoption of a system essentially based on two main cycles in higher education, undergraduate and graduate;
- the establishment of a system of credits promoting intellectual and physical mobility;
- the promotion of free movement of teachers and students;
- the promotion of European co-operation in quality assurance, with a view to developing comparable criteria and methodologies and the representation of European interests and values in higher education.

Within the framework of the European harmonisation of Hungarian higher education, the most important objectives to attain are as follow:

- establishment of a higher education system based on two main cycles and the conditions of its introduction;
- building up a working system of quality assurance;
- increasing mobility;
- achieving compatibility of higher education degrees and
- the initiation of a system of credits.

Bearing in mind the results of the OECD surveys, it is also necessary to develop self-learning, reading, summarising and problem solving abilities. The conditions of developing the abilities mentioned above can be created by modifying both the requirements of the secondary school maturation examinations and the system of entrance examinations at higher education institutions.

Ensuring the economic autonomy of higher education institutions is one task, but another important duty is to further increase competitiveness in the coming years.

Our purpose is to establish a system of higher education answering to high quality requirements and ensuring open, modern and competitive degrees alongside the Bologna Process.

The academic year starting this September was the last one not to be largely influenced by the integration process of the European Union. The second semester of the academic year 2003/2004

will hopefully begin after Hungary's accession to the European Union. Today's students will have to learn how to navigate within the European Union and they will need to have an exploitable and competitive professional knowledge there.

To us, EU membership means having a higher education system in Hungary that is as competitive as those in Western Europe.

Higher education is undergoing a process of change all over Europe and the requirement of efficiency and the necessity of high-level knowledge transform traditional educational patterns. This transformation process gives us the opportunity not only to make up for our arrears but also to keep up with those European countries elaborating reforms in higher education. There is a lot at stake. The approaching date of Hungary's accession to the European Union obliges us morally and politically to ensure conditions in Hungarian higher education that enable young people to meet the requirements of global competition.

MAGYAR BÁLINT
*Minister of Education*

# Introduction

Recent historic events all over the world have radically transformed industry, technology as well as social and political life. As a consequence of these changes and due to the strengthening of social awareness of knowledge and the recognition of higher qualifications, higher education has increasingly come into the limelight. The need for fundamental changes in higher education systems has also become more apparent. Triggered by new social and economic challenges, reform processes in higher education with similar objectives have started all over the world.

In Hungary, the reform process has begun, too. In the past years, Hungarian higher education has undergone vast changes, in parallel with processes set off by the Bologna Declaration to mark the main direction of European changes. The greatest challenge of the coming years is organically embedding Hungary into the European Higher Education Area that is just taking shape. In accordance with the suggestions of the Bologna Declaration and taking Hungarian tradition into consideration, we shall be proceeding the academic reform of higher education, the reshaping of its financial system and further strengthening the relation of education and the economy.

The birth of this book, whose main aim is to introduce the institutions of Hungarian higher education, gives us great pleasure. It is intended to contain all data and information that helps the reader navigate within the network of colleges and universities, which often seems complex. We consider it important for people to learn about Hungarian higher education institutions, the programmes they offer, as well as academic and other opportunities they provide, even outside the Hungarian borders.

This book is evidence for the versatility of Hungarian higher education. We hope that all interested readers, university professors or students find useful and relevant information in our book, and it will help us contribute to the establishment of relations between Hungarian and foreign educational institutions, as well as develop already existing and fruitful co-operations further.

Dr. Mang Béla
*deputy state secretary for higher education*

Dr. Kiss Ádám
*head of the editing board*

# Chapter I

# 1. Hungary in Facts and Figures

**Geography:**

| | |
|---|---|
| Geographic co-ordinates: | 47 00 N, 20 00 E |
| Area total: | 93,030 sq km |
| land: | 92,340 sq km |
| water: | 690 sq km |
| Border countries: | Austria 366 km, Croatia 329 km, Romania 443 km, Yugoslavia 151 km, Slovakia 515 km, Slovenia 102 km, Ukraine 103 km |
| Climate: | temperate; cold, cloudy, humid winters; warm summers |
| Terrain: | mostly flat to rolling plains; hills and low mountains on the Slovakian border |
| Elevation extremes | |
| lowest point: | Tisza River 78 m |
| highest point: | Kékes 1,014 m |
| Natural resources: | bauxite, coal, natural gas, fertile soils, arable land |
| Land use: | arable land: 51% |
| permanent crops: | 3.6% |
| permanent pastures: | 12.4% |
| forests and woodland: | 19% |
| other: | 14% (1999) |

| | |
|---|---|
| **Population:** | 10,195,513 (1 February 2001 est. database on representative sample) |
| Age structure: | |
| | 0-14 years: 16.63% (male 862,468; female 818,052) |
| | 15-64 years: 68.66% (male 3,406,717; female 3,532,008) |
| | 65 years and over: 14.71% (male 546,992; female 939,780) (2001 est.) |
| Infant mortality rate: | 8.96 deaths/1,000 live births (2001 est.) |
| Life expectancy at birth: | total population: 71.63 years |
| male: | 67.28 years |
| female: | 76.3 years (2001 est.) |

| | |
|---|---|
| **Ethnic groups:** | Hungarian 89.9%, Romany 4%, German 2.6%, Serb 2%, Slovak 0.8%, Romanian 0.7% |
| Religions: | Roman Catholic 67.5%, Calvinist 20%, Lutheran 5%, other 7.5% |
| Languages: | Hungarian 98.2%, other 1.8% |
| | Literacy |
| definition: | age 15 and over can read and write |
| total population: | 99% |
| male: | 99% |
| female: | 98% (1980 est.) |

**Government:**

| | |
|---|---|
| Country name: | |
| conventional long form: | Republic of Hungary |
| conventional short form: | Hungary |
| local long form: | Magyar Köztársaság |
| local short form: | Magyarország |
| Government type: | parliamentary democracy |
| Capital: | Budapest |
| Independence: | 1001 (unification by King Stephen I) |
| National holiday: | St. Stephen's Day, 20 August |
| Legal system: | rule of law based on Western model |
| Suffrage: | 18 years of age; universal |
| Legislative branch: | unicameral National Assembly or Országgyűles (386 seats; members are elected by popular vote under a system of proportional and direct rep–resentation to serve four-year terms) |

**Consumer price index:** 106.2% (February 2002)
(CPI) (same period of previous year=100.0)

**Unemployment rate:** 5.7% (December 2001 – February 2002)

**GDP:** 103.8% (I-IV quarters 2001)
(same period of previous year=100.0)

*Sources:*
*Központi Statisztikai Hivatal (8 April 2002)*
*CIA The World Factbook (www.cia.gov/cia/publications/factbook)*

# 2. A Brief History of Hungarian Higher Education

The history of Hungarian universities runs back over several centuries. After foundation attempts in the 13th century, the first Hungarian university, with faculties of law and medicine, was established in the town of Pécs in 1367. Pope Orban V, in his Bull of Endorsement, ordained that this university shall last for ever , yet the political environment meant that it only survived for a decade. In 1435 another university was started in Óbuda with four faculties, which likewise, ran only for a quarter of a century, along with the University of Pozsony (today: Bratislava, Slovakia), founded in 1467 and surviving merely a few years. King Mathias (Mátyás) had also planned to constitute a university in Buda, though his plan was unsuccessful.

The next new foundation took place a century later in Transylvania where Prince Báthory István established a university. Besides universities, the operating colleges and academies also contributed to an increase in the number of scholars, as did the traditional habit of attending universities abroad. The foundation of the University in Nagyszombat (today: Trnava, Slovakia) on 12 May 1635, brought a change. It was Bishop Pázmány Péter who re-organised the Jesuit college into a university, starting with faculties of theology and philosophy, later extended by a faculty of law and in 1769 by a faculty of medicine. This university has operated continually since its foundation, its location was in Nagyszombat until 1777, when it was moved to Buda and again in 1784 to Pest.

In line with the demands of the era, an Engineering Institute was opened at the university in 1782, which later became a part of the Technical University. Similarly, the department of veterinary science established in 1878, can be looked upon as the forbear of today's Veterinary Department. The bourgeois-democratic revolution required an educated middle class, which promoted the development of Hungarian higher education, as did the fact that ministers of public education and religion were aware of the need of intellectuals and acted accordingly for the sake of the cause. A notably important figure was Eötvös József, who already during his first term (in 1848) dealt with the statutes of the university and defined the requirements of academic freedom. On 7 April 1870 during his second ministerial term, he introduced a bill to establish the József Nádor Technical University , the first technical institution in the world to be called University.

EÖTVÖS József
1813–1871

The foundation of the University of Kolozsvár (today: Cluj-Napoca, Romania) was proclaimed in Act XIX of 1872 under the ministry of Trefort Ágoston. Besides these universities, colleges of dramatic art, music, trade and of veterinary science were also established. In 1912 an act declared the foundation of the universities in Debrecen and Pozsony (Bratislava). The number of university students had significantly increased: in 1866 there had risen 4,955 students, by 1913 this number was raised to 18,899.

By reason of the enormous territorial losses due to the Peace Treaty of Trianon, the universities of Kolozsvár and Pozsony needed to be saved for Hungary. The one in Kolozsvár was moved to Szeged and the one in Pozsony to Pécs. At that time

the Hungarian market was in need of a faculty of economy, which in 1920 was incorporated into József Nádor Technical University.

This institution included the former Technical University, the College of Veterinary Science and the College of Mining and Forestry Engineering as well. In the period between the two world wars, the standard of university education was that of the general quality of Europe; however, participation in the various sciences was not proportionate. In the academic years of 1937 and 1938, almost half of the 11,747 students graduated in law and theology, with only 11% in medicine and 7.2% in engineering. After the end of World War II the principal aims were the restoration of the demolished university buildings, the replacement of ruined equipment and a painful tolerance of human losses, both of lecturers and students. Political interference, such as the placement of public servants and forced admittance of new lecturers, had every now and then caused harm to the autonomy of the universities, yet education re-commenced successfully. Referring to the social demands of society, evening and correspondent courses were initiated though many impugned these methods and women were admitted without limitations. The establishment of the University of Agriculture in the autumn of 1945 was to serve the improvement of agriculture.

After 1949 Hungarian universities had to witness series of reforms aiming to eliminate academic freedom. Soviet schoolbooks and curriculum were implemented, Marxism and Russian language were made obligatory subjects. The principals of admission were based on ideologies of the administration, therefore, several brilliant lecturers were dismissed by reason of either their noble birth or alternative ideology. The strict central governance eliminated the autonomy of the universities.

Due to the needs of the communist economy, new universities were founded: the University of Economy in 1948, the Heavy-Industry and Technical University of Miskolc in 1949, the University of Transport based in Szeged, (later in Szolnok) in 1951. In the same year, the medical universities were transformed into individual institutions. An executive order of 1950 declared the separation of theology faculties from the organisation of universities. The political changes in 1949 produced lack of tension and a decline of values at the universities. This also contributed to the fact that university students played an initiative and significant part in the revolution of 1956.

After the suppression of the revolution and the events of retaliation, gradual changes attempted to restore the status of university education. The major part in this restoration was played by university lecturers, often those independent of politics. A certain change was projected by the abolition of discrimination based on birth in 1963, and the reform of organisational statutes of the universities in 1968, providing more autonomy to university councils in which 1/3 of the representatives could be students.

The university network was extended by promoting art colleges in 1971, the Postgraduate Medical Institute in 1973 and the College of Physical Education in 1975, to university rank. The undeniable turning-point, as in other areas of life, was brought by the change of the political regime. Principles of the autonomous university and academic freedom have once again become acknowledged. New institutions were founded and the old ones were extended by new faculties. Of particular importance have been the establishments of Pázmány Péter Catholic University and Károli Gáspár University of the Reformed Church in 1993. Amid various concepts on how to improve Hungarian higher education, the rational unification of disintegrated institutions has been distinguished for years.

Finally, after debate, Act 52 of 1999 was concluded, which reflects the result of integration, outlines the structure of Hungarian higher education and leads academic training into the next millennium.

## Law on Higher Education

The Law on Higher Education (accepted by the Parliament in 1993) places practically all higher education institutions (with the exemption of the national University of Defence and the Police College) under the supervision of the Ministry of Education (previously the supervision of higher education institutions was divided among five ministries).

The law established two key intermediary institutions to provide professional advice on development and control of higher education: the Hungarian Accreditation Committee (HAC) and the Higher Education and Scientific Council (HESC). The HAC renders opinions on the establishment or recognition (by the state) of higher education institutions, establishment or ab-olition of fields of study (courses) by accepting the requirements for qualifications of a given course, on giving permission of starting a course (with already accepted requirements of qualification) at a given higher education institution (course accreditation). In addition, the Law specified that HAC must assess the standard of education and research for each higher education institution every eight years (institutional accreditation). The HESC should propose and advise on priorities in development programmes and research, establish or abolish courses, faculties and institutions, recognise non-state higher education institutions, recommend the distribution of budget support, recommend the size and allocation of student admissions.

The Law of 1993 established norm-based budgeting, defined four budget headings: student support (proportional to the number of students), training and maintenance (proportional to the number of students and financing norm determined for the course the student is enrolled in), programme development and research. The July 1996 Amendment of the Law on Higher Education integrated the post-secondary Accredited Higher Vocational Training into the system of higher education. The Amendment defined a four-level structure of higher education. The four levels of the system are two years for higher vocational training at its base, 3-4 years for college programmes (in our terms they are undergraduate courses), 4-6 years for university programmes (in our terms they are graduate programmes) and 3 years for doctoral programmes together with other specialised postgraduate programmes (2 years).

The amendment also initiated the integration of the universities. The amendment allowed the formation of higher education federations to become fully merged within two years. Until recently the number of higher education institutions was 89 (55 state, 28 church and 6 foundation institutions). The government taking office in the summer of 1998 decided to establish a new network of integrated higher education institutions from 1 January 2000. The target institutions of the integration process were the state universities and colleges. Now, there are 18 state universities, 12 state colleges (the number of state institutions was reduced from 55 to 30), 26 church-owned institutions and 9 foundation colleges. 1999 was the year of preparation for the integration (organisational and operational rules and rules of business operations were worked out, rectors and finance directors were appointed, the new senates were elected, etc.). The main goals of the integration are as follows:

· Offering a wider range of courses for the students and increasing the standards of education with an emphasis on the establishment of a flexible educational structure satisfy-ing the changing demands of the labour market,

· Unifying intellectual resources (initiating multi-, trans- and interdisciplinary activities),

· Higher educational institutions should become the intellectual centres of regional development taking into account the tasks related to the inevitable consequences of the accession of Hungary to the European Union,

· Improvement of the stability of institutions since due to the co-existence of various disciplines institutions will become less sensitive to swift changes in the market and economy,

· Performance and quality oriented financing will enable the institutions to elaborate long-term institutional policies (the institutions can be sure about that rationalising will not result in decreasing financial support provided from the state budget),
· Efficient use of intellectual and infrastructural capacities, eliminating redundant mul-tiple structures,
· More efficient income-generating activities of the institutions.

Parliament further amended the Law of 1993 in 1999. It passed Act LII of 1999 on the Transformation of the Network of Higher Educational Institutions and on the Amendment to Act LXXX of 1993 on Higher Education on 1 June 1999. Based on Section 5 and Section 6, subsection (1) Act LXXX of 1993 on Higher Education, Parliament created an Act on the transformation of the network of Hungarian higher educational institutions in the interest of the intellectual ascendancy of Hungary, the transformation of the Hungarian society, the strengthening of regional relationships, the unification of intellectual resources, the training of an internationally recognised and competitive labour force, the development of higher educational research and education and the expansion of the right to culture and education. On 15 June 1999 Parliament passed Act LXX which ratified the agreement between the Holy Apostolic See and the Republic of Hungary on the financing of the public and religious activities of the Catholic Church in Hungary.

As regards the proposals for amendment in 2000, the Ministry of Education among many others had the following significant issues on the agenda: quality assurance, reform of the system of admissions, distance learning, credit system and the role of the so-called Public Council in strengthening regional cohesion.

## The Higher Education Network

In order to understand the present situation there is a need for outlining the historical background of the transformation of higher education in Hungary.

As Klebelsberg Kunó put it in his article of 23 January 1929 regarding the institutional network of higher education, There is a great number of similar institutions for historical reasons There is a great number of small colleges We lose a lot of energy this way. We should make rational decisions not only in economics but in cultural politics, too. In one of his speeches he pointed out that institutions were becoming isolated instead of integrated. He aimed at setting up a sensible institutional network; however, his efforts were only partly successful. Hóman Bálint achieved better results when he established József Nádor University of Technical and Economic Studies in 1934 by merging four institutions, although the integration did not last long.

KLEBELSBERG Kunó
1875–1932

After World War II, based on the Soviet model, various institutions specialising in different fields were set up increasing the already great number of existing universities and colleges. At the end of the 60s and the early 70s the extensive network shrank by a certain extent due to restructuring. In the 90s the new governments set similar goals; however, real changes could take place only after 1996 when the legal conditions of the transformation were established and in the meantime the number of institutions increase. As

mentioned earlier, until recently the number of higher educational institutions was 89 (55 state, 28 church and 6 foundation institutions as well as 50-60 faculties, institutes, etc. functioning at locations different from those of the mother institutions).

Experts say that integrational efforts failed because the network of higher education was under the control of six ministries and so co-operation seemed to be impossible due to the conflict of interests. In 1993 an amendment to the Law on Higher Education established a unified control of institutions. Some say that this was the most important measure taken by the Antall government as far as education is concerned. The Horn government considered institutional transformation essential, however, due to the strict financial measures of the so-called Bokros Package only costs and the number of those working in higher education were reduced instead of integration.

The amendment to the Law on Higher Education of 1996 expected the institutions to accomplish integration on their own by introducing the legal background of a transitional form of the higher educational association and subsidies through tendering. The aforementioned amendment set deadlines and criteria for the institutions. The amendment modified the operational status of universities and colleges and abated the appendix listing the institutions as of 31 December 1998. As the above show integration is not a new concept at all, and many governments have shared the vision of integration.

On 1 June 1999 the Parliament passed Act LII of 1999 on Restructuring the Institutions of Higher Education and amended Act LXXX of 1993 on Higher Education. By passing the above law the number of state run universities and colleges significantly decreased. From 1 January 2000 the new network of higher education institutions consists of twelve state universities with various faculties, eleven colleges (under the control of the Ministry of Education), five art universities, one state university under the Ministry of Defence, one college controlled by the Ministry of Internal Affairs, twenty-six church universities and colleges and 6 universities run by various foundations.

It is a great achievement for Hungarian higher education as well as for politicians that the great majority of the MPs supported the bill on the establishment of a new network of institutions. This means that the bill incorporated the aims of higher education institutions (i.e. integration) and the intentions of society and so of the political parties representing social demands. The most fundamental goals of the restructuring of the institutional network were the following: extending educational opportunities by establishing multi-faculty, multidisciplinary institutions, improving facilities for research and development, setting up regional intellectual centres and strengthening the relationship between institutions and their environment.

The key words of the process of restructuring were continuity and renewal. Continuity should be maintained in education and research while new goals should be formed, which emerge as a result of the increased size of the institutions and the new tasks. The restructuring was the first step towards a comprehensive reform of higher education and long-term development. The evolvement of a new institutional network promotes the modernisation of higher education and the accomplishment of its tasks undertaken in the development of the society of a new century.

As mentioned before, 1999 was the year of preparation for the institutional reorganisation. The basic idea of the reorganisation was that university faculties and colleges involved in educational and scientific research should operate under the same controlling bodies during the reorganisation. This guaranteed continuity in restructuring. The bill described the provisional rules, which observed the right of institutions then independent. These provisions guarantee the seamless operation of the new institutions after 1 January 2000. The Ministry of Education and the institutions co-operated in resolving tasks related to the reorganisation and provided mutual help. The Ministry of Education informed the higher education institutions on various forums about their responsibilities regarding institutional restructuring. With the involvement of the representatives of higher education the

National Committee of Integration was set up, which actively supported the process of reorganisation by its analyses and decisions and aimed at presenting answers for questions formed by the institutions by continuously summarising their findings. The appointed representatives of the Higher Education Department of the Ministry of Education maintained and still maintain continuous communication with the institutions. They participated in meetings and promoted the Ministry's proposals supporting the integration of institutions. The Ministry of Education has provided HUF 70 million for the tasks related to the reorganisation. An additional HUF 50 million was allocated through invitation for tenders for guaranteeing the smooth operation of higher education institutions on the way to integration, the information technology facilities of data supply and administrative systems.

Based on the proposal of the preparatory bodies of the institutions to be integrated, the Ministry of Education called for applications for the positions of the institutions leaders and financial directors in August 1999. Nomination was successfully carried out in each institution. On the proposal of the committees the Minister of Education submitted a proponent on the nominations and so the conditions of operation were provided for the year 2000. The preparation of the booklet on the admission to higher education in Academic Year of 2000–2001 has been successfully accomplished.

Among the legal successors of the former institutions 8 requested the establishment of 23 new faculties, which was processed and sent for obtaining an opinion to the Hungarian Accreditation Committee and the Higher Education and Scientific Council after reconciling the general principles of opinion forming. Regarding this issue, the opinion of the Ministry of Education is clear: it wishes to support institutional changes, which contribute to the achievement of the goals of the reorganisation of the institutional network and are in harmony with the Higher Education Reform Programme.

With regards to the reorganisation of the institutional network, the most important general findings are the following: Higher education institutions accepted the idea of integration when Act LII of 1999 took effect and so the chaotic situation of the previous years ended. The integrating institutions fulfilled all legal requirements and in summer met all deadlines. Nevertheless, there was a strong demand for maintaining the organisational balance of the legal predecessor at the new universities. This is shown by the fact that the intention of setting up new faculties did not coincide in all cases with the general goals of the integration. Several applications aimed at dividing the former faculties, i.e. at separation on an even larger scale. Obviously, the institutions had a different approach; for them restructuring generated new tasks and problems. There were fears that the institutions would lose their former identity, market position and formerly gained reputation in an integrated institution. That is the reason why they wished to retain the original operational conditions as much as they could. In many cases there was no trust; there was a fear of new partners instead. This made the creation of common rules difficult for the establishment of internal security may have contradicted integrational interests and efficiency. Such adversities often led to uproars at meetings; there were severe disputes even over minor issues. But in a situation like this institutions had to understand that they were interdependent and could successfully solve problems only in mutual trust.

Another prerequisite of the effectiveness of the network of institutions is the gradual introduction of reforms in higher education. Among these the most important are improving the network of residences, grants received from local governments, introducing the credit system everywhere, improving support provided for talented students, financing research and libraries, increasing the number of students, introducing student loans, participating in EU research and regional development programmes and providing for the conditions of higher salaries for those working in higher education. The co-existence of the above conditions could guarantee the development of higher education in Hungary in the next millennium. The above show that higher education has recently gone through

a major transformation process. This complex process started years ago, in which an initiation taken by institutions of higher education coincided with a firm governmental goal. Through the co-operation of these two forces the goals and conditions of the reorganisation could be drafted. Today's decisions will be judged by a next generation. It is hoped that a stable institutional network has been estabhished for the next few decades which, based on international examples, may be affected by minor changes but the basic structure of which will accompany in the next millennium.

*Table* – **R&D expenditures in Hungary**

| Year | R&D expenditure, total[a) c)] (GERD) | R&D expenditure[b)] as percentage of GDP | Expenditure of R&D | of which capital expenditure | R&D expenditure[c)] of higher education units | of which capital expenditure |
|---|---|---|---|---|---|---|
| | billion HUF | | billion HUF | billion HUF | billion HUF | billion HUF |
| 1992 | 31,6 | 1,08 | 26,4 | 3,4 | 6,6 | 0,7 |
| 1993 | 35,3 | 1,00 | 28,6 | 3,6 | 7,8 | 1,1 |
| 1994 | 40,3 | 0,93 | 36,0 | 4,7 | 10,3 | 1,4 |
| 1995 | 42,3 | 0,75 | 39,7 | 4,7 | 10,2 | 1,4 |
| 1996 | 46,0 | 0,67 | 44,4 | 5,3 | 11,1 | 1,2 |
| 1997 | 63,6 | 0,74 | 57,2 | 8,1 | 14,2 | 1,1 |
| 1998 | 71,2 | 0,70 | 67,6 | 11,4 | 17,3 | 2,0 |
| 1999 | 78,2 | 0,68 | 74,2 | 12,7 | 17,5 | 1,6 |
| 2000 | 105,4 | 0,82 | 99,5 | 18,2 | 25,3 | 2,2 |
| 2001 | 140,6 | 0,94 | 128,9 | 23,7 | 36,2 | 3,9 |

*[a)]Excluding the expenditure on other activities (production, services). The amount of these was 4,7 billion HUF in 2000 and 5,6 billion HUF in 2001.*
*[b)]Including the amounts used outside the R&D units from Central Technological Development Fund /KMÜFA/ and from National Program for R & D /NKFP/, and the honorarium, salary complements of scientific degree, moreover, the amounts of state scientific scholarship, and other amount financed by Ministry of Education used for R&D.*
*[c)]Excluding the honorarium, salary complements of scientific degree; the amounts of state scientific scholarship and the costs on other activities and since 1999 excluding amortization*
*Source: Hungarian Central Statistical Office (HCSO)*

# 3. Nobel Prizewinner Hungarian Researchers

**LÉNÁRD FÜLÖP – Philipp E. A. von Lenard**
(Bratislava, 7 June 1862 – Messelhausen, 20 May 1947)
He received the Nobel Prize in Physics in 1905 for the atomic model based on cathode ray examinations. He lived in Germany and did not regard himself as Hungarian.

**BÁRÁNY RÓBERT – Robert Bárány**
(Vienna, 22 April 1876 – Uppsala, 8 April 1936)
He received the 1914 Nobel Prize in Physiology (or Medicine) in 1915 for his work on the physiology and pathology of the vestibular apparatus. He lived in Sweden.

**ZSIGMONDY RICHÁRD – Richard A. Zsigmondy**
(Vienna, 1 April 1865 – Göttingen, 23 September 1929)
He was awarded the 1925 Nobel Prize in Chemistry in 1926 for the demonstration of the heterogeneous nature of colloid solutions and for the methods he used, which have since then become fundamental in modern colloid chemistry. He lived in Germany.

**SZENT-GYÖRGYI ALBERT – Albert von Szent-Györgyi**
Budapest, 16 September 1893 – Woods Hole, 22 October 1986)
He was awarded the Nobel Prize in Medicine in 1937 for his discoveries in connection with the biological combustion processes, with special reference to vitamin C and the catalysis of fumaric acid. He was a professor at the Szeged University of Sciences between 1928 and 1945 and lived in the United States from 1947.

**HEVESY GYÖRGY – George de Hevesy**
(Budapest, 1 August 1885 – Freiburg im Breisgau, 5 July 1966)
He was awarded the 1943 Nobel Prize in Chemistry in 1994 for his work on the use of isotopes as tracers in the study of chemical processes. He lived in Germany, Denmark and Sweden.

**BÉKÉSY GYÖRGY – Georg von Békésy**
(Budapest, 3 June 1899 – Honolulu, 13 June 1972)
He received the Nobel Prize in or Medicine in 1961 for his discoveries concerning the physical mechanism of stimulation within the cochlea. He lived in the United States.

**WIGNER JENŐ – Eugene P. Wigner**
(Budapest, 17 November 1902 – Princeton, 1 January 1995)
He received the Nobel Prize in Physics in 1963 for his contribution to the theory of the atomic nucleus and elementary particles, particularly through the discovery and application of fundamental symmetry principles. He lived in the United States.

**GÁBOR DÉNES – Dennis Gabor**
(Budapest, 5 June 1900 – London, 9 February 1979)
He was awarded the Nobel Prize in Physics in 1971 for his invention and development of the holographic method. He lived in Great Britain.

**POLÁNYI JÁNOS – John C. Polanyi**
(Berlin, 23 January 1929 – )
The son of natural scientist Mihály Polányi. He was awarded the joint Nobel Prize in Chemistry in 1986 for his contribution to the development of a new field of research in chemical reaction dynamics. He lives in Canada.

**OLÁH GYÖRGY – George A. Olah**
(Budapest, 22 May 1927 – )
He received the Nobel Prize in Chemistry in 1994 for the results he achieved in the field of studying the chemistry of carbocations. He lives in the United States.

**HARSÁNYI JÁNOS – John C. Harsanyi**
(Budapest, 29 May 1920 – Berkeley, 9 August 2000)
He received the Nobel Prize in Economics in 1994 for his pioneering analysis of equilibrium in non-cooperative games. It was on the basis of the theoretical work of his peers that he showed how games with incomplete information can be analysed and thus created the basis for the research of information economics. He lived in the United States.

*Source: MTI. Rt. Sajtóadatbank from www.ekormanyzat.hu*

Polányi János

Oláh György

Békésy György

Wigner Jenő

# 4. Research Opportunities and Doctoral (Ph.D.) Education in Hungary

## Research in Higher Education

The previous year was a breakthrough for Hungarian research and development. Input into higher education started to grow in 2000, and began approaching the European level. As a joint impact of the increase of the earmarked resources under the Széchenyi Plan and the tax allowances introduced for the benefit of the business sector in January 2001, Hungarian research and development is expected to catch up with the leading European countries in the foreseeable future.

The participation of higher education in research and development expenditure was 23.6% in 1999, and 24.4% in 2000.

In 1999 58% of the total R&D work force worked in higher education, which corresponds to 34.9% of the full time equivalent work force. In 2000 these figures were 57.3% and 37.6%, respectively.

In 2000 63.8% of the total number of research development staff holding a degree worked in higher education, which corresponds to 40.7% of the full time equivalent work force. An important qualitative parameter is the number of research and development staff holding a Ph.D. or DLA. With respect to this group, the participation of higher education is 72.5%, according to the figures from 1999.

The participation of higher education in research and development projects was 12.6%, and the year 2000 figure was 12.1%. This is considerably lower than the participation of higher education shown by the indices in other fields. Therefore higher education produces the current R&D results by implementing a significantly lower proportion of projects than other R&D locations.

The following indices express the participation of higher education in terms of output instead of input.

The participation of higher education in scientific publications greatly exceeds the proportion of input it gets. According to the data of the Central Statistics Office (CSO), 73.7% of the books produced by Hungarian R&D locations and published in 1999 and 67.9% of scientific publications were written at an R&D unit in a higher education institution.

There is a specific index in the field of publications according to which Hungary is the best in the world: this is the number of publications per one million USD expenditure on higher education or research institution.

The participation of higher education is not so high in the field of inventions. Clearly, in this field corporate research and development units take the lead. The participation of higher education in the number of inventions reported from Hungarian research and development locations is 33.3%, whereas its participation is 47.3% with respect to inventions reported abroad. It must be noted though, that the problems of providing statistical data are salient in the case of patents. According to the factual data of the Hungarian Patent Office, the number of registered Hungarian patents was 727 in 1999, and 810 in 2000, whereas CSO only recorded 192 patents for 1999 registered by R&D locations, including corporate R&D units. It is improbable that only 26% of the registered patents come from R&D locations, including companies. Therefore, latency in this field appears to be a significant problem, and analysis has already been started to find the solution.

## Doctoral education: General Description with Innovations

Doctoral education in Hungary is provided by disciplinary accredited Doctoral Schools of universities for university degree (M. A.) holders. The applicants have to pass entrance exams. There are three basic forms of doctoral training:

*a)* full-time student with state scholarship (state-financed student),
*b)* full-time student without state scholarship,
*c)* part-time student.

There are two legally separated parts of the process providing a doctoral degree:

*a)* the training programme takes 3 years. Students take part in courses prescribed by the Doctoral School or by the tutor and collect credits on the courses and on their scientific work. They may take up teaching tasks as well, and if they do so, special reimbursement or credits are provided for teaching tasks;
*b)* the degree-awarding process: requirements of training completed, or at least the required level of knowledge accepted by the Doctoral School, medium-level proficiency in two foreign languages (verified by state-recognised exams), an original scientific work (Ph.D. Dissertation) supported by scientific publications and summarised in a written thesis. The applicants have to pass on two oral doctoral exams and defend the Dissertation in a public disputation.

### Doctoral Schools

Doctoral education may only be offered in the framework of Ph.D. Schools and DLA (Doctor of Liberal Arts; hereinafter referred to as 'DLA'; or both together 'Ph.D.') Schools. Doctoral Schools may function by disciplines and by multidisciplinary fields at a university. A Doctoral School may be established as a result of an application process. The application for the establishment of the Doctoral School is elaborated by the Ph.D. (or DLA) Council, approved by the University Council and submitted to the Hungarian Accreditation Committee (HAC) by the rector. The applications are classified by disciplines of sciences (or artistic fields), and assessed by the HAC, using a set of evaluation criteria developed for this purpose. The detailed rules of the authorisation, the quality assessment, the suspension and the abolition of the operation of Doctoral Schools are established by the HAC, and are published in the Hungarian Official Journal of Education and the Accreditation Bulletin of HAC. The teaching staff of a Doctoral School consists of scientific degree holders, recommended by the head of the School and accepted by the Ph.D. (or DLA) Council. The Ph.D. subject proposals of the tutors are approved by the Council of the Doctoral School. The courses are accepted and the tutors are nominated by the Council of the Doctoral School, annually. The tutor takes the responsibility for supervising during the training and the degree awarding procedure.

### Ph.D. Courses

Up to 1998, 750 Ph.D. students per year could start their studies or pursue teaching and research activities at universities under state-funded programmes. As of the academic year of 1998/99, the budget was increased to take on an additional 50 students per year. In 1998, the number of state-

funded students was one-third of the total number of Ph.D. students. In 2000/2001 nearly 2,400 of the 6,600 Ph.D. students had state grants. According to the National Ph.D. Register, the number of Ph.D. degrees awarded before September 2001 within the new system, i.e. on the basis of a dissertation, was 2097. Most Ph.D. schools are located at the large universities with regional level catchment areas (20 at the University of Debrecen, 16 at the University of Szeged, 15 at the University of Pécs) or at the two Budapest based universities, Eötvös Loránd University (17) and Budapest Technical University (16).

A major aspect of the new Ph.D. system is that the proportion of obtained degrees is the highest in the age group of 28–33. This is a very important way to guarantee the supply of teaching and researching staff and researchers. Therefore it is vitally important to ensure the necessary conditions to keep young people with a Ph.D. in the profession.

*Table*

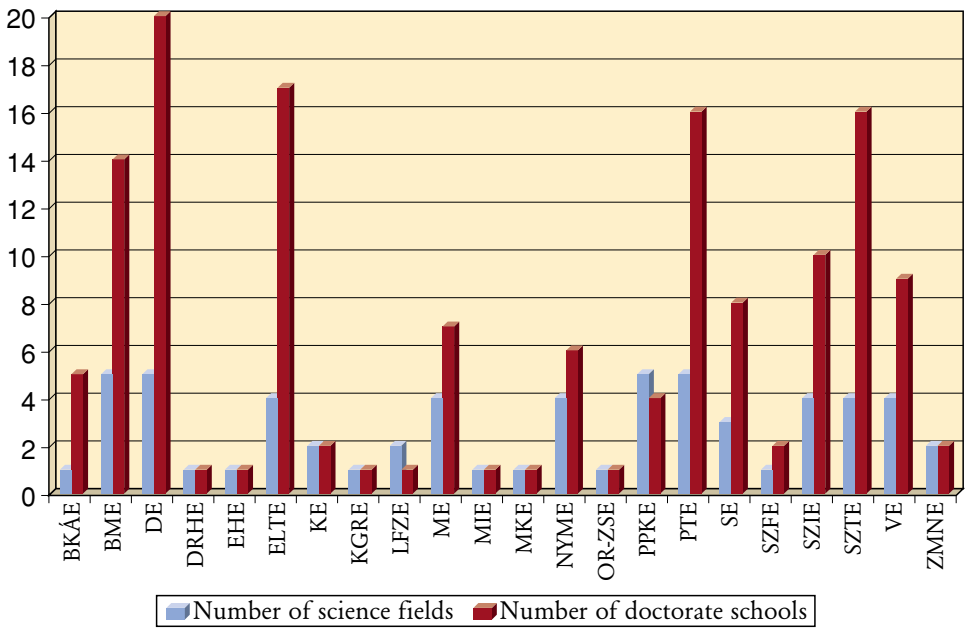
**Number of doctoral candidates and number of doctoral candidates having received degrees based on a dissertation**

| Academic year | First-year students | | Second-year students | | Third-year students | | Total | | Students receiving state scholarship of total | Student with Ph.D. degress |
|---|---|---|---|---|---|---|---|---|---|---|
| | full-time | correspondent | full-time | correspondent | full-time | correspondent | full-time | correspondent | | |
| 2000/2001 | 1772 | 1046 | 1506 | 628 | 1270 | 530 | 4548 | 2204 | 2480 | 721 |
| 2001/2002 | 1814 | 988 | 1597 | 698 | 1402 | 531 | 4813 | 2217 | 2587 | 939 |

*Source: Statistics of the Ministry of Education (ME), national doctorate records of the Hungarian Accreditation Committee (HAC)*

*Diagram*

**Number of accredited doctorate schools and their fields of science per institution**




*Source: Ministry of Education, November 2002*

## Representation of Ph.D. Students

DOSZ is the agency providing professional and social interest representation and oganising professional sphere of its own for students of Hungarian doctoral schools and programmes and for young researchers, since 1994.

## Association of Hungarian Ph.D. Students
## Doktoranduszok Országos Szövetsége (DOSZ)

The Association of Hungarian Ph.D. Students was founded in 1994 and is a corporate body of research students taking part in doctoral training. It represents the students professional and social interests and organises professional public life for them and other young researchers.

DOSZ is a corporate body of doctoral candidates who take part in Ph.D. training organised by Hungarian institutions of higher education. The Association is founded and operated on the bases of democracy, pluralism, professionalism and openness.

DOSZ is not related to any ideology, although it is committed to national, social and scientific development.

*Functions of DOSZ*

DOSZ performs the following functions, respectively:

– it represents the interests of doctoral candidates at international, national and regional levels, supports the interests of doctoral candidates on institutional level, and thus especially protects the value of the Ph.D. degree and takes a stand on important issues related to the candidates,

– it takes part in decision-making processes concerning higher education policy, development and research policy; consequently

– it delegates representatives to Hungarian and international bodies and organisations dealing with academic training,

– it takes part in decision-making concerning higher education and youth policy,

– it organises academic public life,

– it manages material and financial resources to be used for academic training, higher education and young people, accordingly, it arranges conferences and other events, issues professional publications and invites applications for competitions supporting youth spheres of interest,

– it maintains contact with national, international and foreign doctoral candidate, student, youth and professional organisations, and with Hungarian and Hungarian minority Ph.D. students who participate in training abroad.

## Political independence

The association does not have political functions, and being independent of political parties it does not provide financial support to any. It does not nominate candidates for parliamentary or municipality elections, and it does not support the activities and election of any candidates.

# 5. Credit System in Hungarian Higher Education

The credit system provides a tool for the evaluation of the quantity and quality of work carried out by students. This system is more flexible than its predecessor; students may choose from more subjects, and study the same subject at a different faculty, university or even abroad.

In Hungary education has been monitored successfully but in an inflexible way through rigid curricula. With the transformation of higher education this system also needs to be reformed. The Ministry of Education believes that the intellectual and physical mobility of students is highly valuable and the aim of the general introduction of the credit system is the establishment of flexibility within and among institutions both in Hungary and abroad.

Education based on a credit system is more flexible; students may have more opportunities, plan their studies tailored to their individual needs and study obligatory or optional subjects at a different faculty, university or abroad. Beside giving opportunities to study abroad the flexibility provided by the credit system has various other advantages. Achievement of a higher training level and career adjustment will become easier. Students will not be obliged to repeat semesters. The opportunity for studying according to an individual curriculum will increase students sense of responsibility and they may become more motivated due to the wider choice. Training structures of institutions will become clearer, the facility of studying abroad will strengthen the relations with foreign higher educational institutions and a healthy competition will emerge among teachers as well as institutions.

The role of the members of the National Credit Council, which was set up in March 1999, is to persuade the leaders (including the representatives of students) of 5-8 higher educational institutions allocated to them about the advantages of the credit system, to inform them about its philosophy and provide them with counselling during the preparatory phase of the introduction of the new system. In Hungary they should act upon the recommendation of the ECTS, i.e. a workload equivalent of 30 credits should be allocated to one semester and 1 credit should be in equivalent of 30 work hours of the student (including contact hours and individual learning). If students wish to change careers (within the institutions from one faculty to another, from one institution to another, from a college to a university or vice versa) or study a subject at an institution different from the mother institution the transfer of credits should be guaranteed.

In a flexible educational scheme based on a credit system students may plan the pace of their studies; however, the aim is not to lengthen students studies (obviously they may opt for a faster pace and thus shorten their studies) but to encourage them to finish their studies within the shortest possible time and with the best possible results.

## Ensuring student mobility: the introduction of a credit system

In 2000 the Government issued a Decree on the introduction of the credit system. Pursuant to this Decree, as of 1 September 2002 at the latest, all higher education institutions must offer graduate courses in line with the credit system. The deadline for introducing the credit system in Ph.D. and DLA courses is 1 September 2004.

The main objective of the credit system is to facilitate physical and intellectual mobility. Therefore the system to be introduced is in line with the European Credit Transfer System (ECTS). The Decree requires institutions to prepare an Information Package based on uniform principles which helps students plan their studies in Hungary and abroad in a flexible way and to be able to resume studies in Hungary after studies abroad without loss of time.

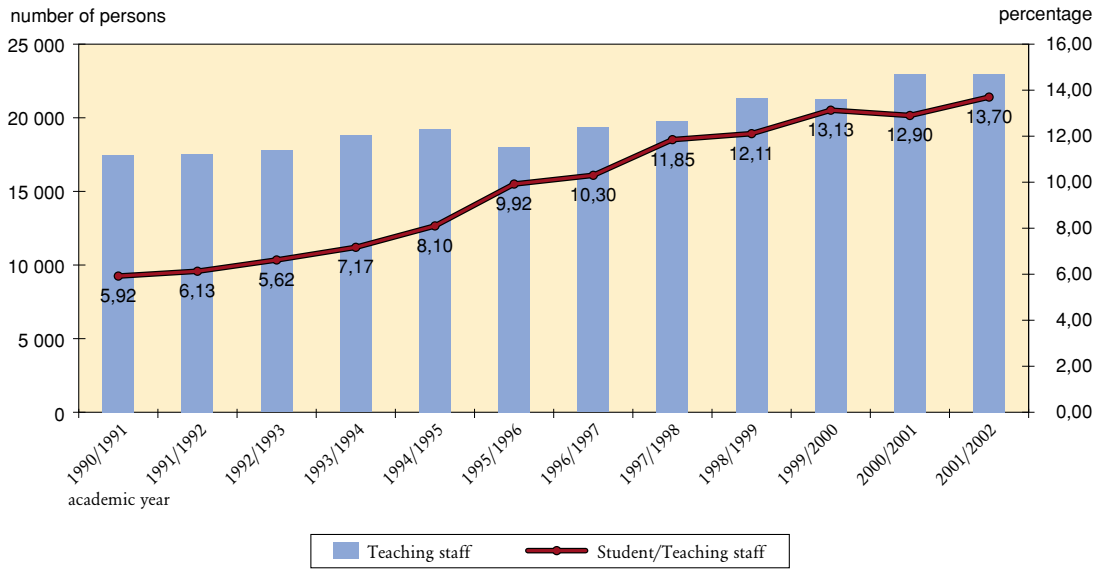
*Table*

**Participants of Hungarian higher education in 2001**

| | |
|---|---|
| **Number of students in pursuit of higher education degrees** | 298 500 |
| Number of participants in further higher education | 22 000 |
| Number of doctorate candidates | 6 800 |
| Number of teaching staff | 21 200 |
| Number of other staff | 32 200 |
| *Total of those directly involved in higher education* | 380 800 |

*Diagram*

**Ratio of number of teaching staff members and students/number of teaching staff**



# 6. Admission to Hungarian Higher Education Institutions

Admission to Hungarian higher education institutions is regulated by the Law on Higher Education of 1993. All necessary information regarding admissions is available to applicants in a publication entitled the Higher Education Admissions Guide, which is published along with the necessary application forms on 15 December of each year. The deadline for the majority of applications is 1 March. Two additional but less significant application periods exist, but these involve only a small number of majors and institutions (e.g., two programmes with irregular start times and special summer-time applications for empty seats or for newly accredited majors).

Applications to standard programmes at Hungarian higher education institutions can be submitted by anyone with a valid high school final examination or equivalent high school degree (a few exceptions exist at institutions that maintain special requirements). Non-Hungarian citizens can also apply to institutions, though their educational certificates must be approved by the Ministry of Education.

The National Office of Higher Education Admissions (NOHEA) co-ordinates admission procedures, organises exams including exam preparation and production of test materials, and provides information to applicants about admissions through its publications, Worldwide Web page (www.felvi.hu) and information service office. It also ensures that all requirements and procedures comply with the Law on Higher Education. NOHEA, in co-operation with the higher education institutions, processes all submitted admission application forms.

The current admission procedures and requirements are strongly influenced by individual requirements of the higher education institutions themselves. Consequently, there are multiple methods that are utilised when measuring the quality of applicants. A rather complex scoring system is used for calculating an overall score for each applicant. One common method for calculating an admission score involves the so-called accumulated score. This is calculated based on high school achievement (final examination grades, grade point averages etc.) Another method is by considering both the accumulated score and the achievement score. This latter method refers to the score obtained on the entrance exam by the applicant. Admission is also possible based solely on the achievement score". In addition to these methods, higher education institutions can award partial or full exemption from the entrance examinations. This is generally granted as a result of a top performance on one of the national study competitions. Extra points can be also given for language exams and certain professional training certificates, etc. Additional conditions or skills may be expected by certain institutions for admission (e.g. health, artistic abilities). A final score for each applicant is ultimately generated by the institutions. These are then used to rank order the applicants.

Applicants may apply to multiple majors and institutions but will ultimately be accepted by not more than one. For this reason, each applicant has to set up a hierarchy when filling out the application form. The necessary score for admissions to each major is determined during the second half of July each year. These scores are published by NOHEA (daily newspapers, www.felvi.hu). If an applicant achieves the necessary score that fulfils the requirements of a particular place on the ranked list, he/she is accepted to that place and the lower ranked applications become invalid. No applicant can be accepted to an institution if their final score (without extra points) is less than 50% of the maximum score.

The Ministry of Education is currently developing a long-term plan for the reform of the admissions process to higher education. The establishment of a more standardised system is the goal. This system should allow for a more thorough and fair evaluation of the applicants abilities, promote a more comprehensive measurement of the overall secondary school curricula and place greater emphasis on performance on the secondary school final examination. As opposed to the very specific admission requirements for particular subjects, the entrance examination of the future will focus on certain subject areas based on the students interests. While such fundamental change obviously takes a considerable amount of time, the introduction of more standardised entrance examinations is expected by 2003, and the reform of secondary school final examinations is by 2005.

## Changes in the conditions of entering higher education
## The reformed admission procedure

The aim of changing the admission procedure was to restructure the fundamentals of the system of resource distribution in higher education through the introduction of a normative funding system based on performance indicators, and by creating a competition among applicants, institutions and faculties. The new procedure makes it possible to compare students' performance. The distribution of admissible state-funded students among the various institutions is determined by the prevalent social and economic needs, which will lead to the review and eventual transformation of the training structure of higher education institutions.

In order to be able to compare applicants' suitability for higher education, a standard, centrally approved entrance examination will be introduced as of 2003, which will ensure the acquisition of general education and will be based on the results of secondary education. The further development of this entrance examination will become possible after 2005, considering the results of advanced level secondary school leaving examination, as soon as this new type of examination has been introduced.

www.ofi.hu
www.felvi.hu

# 7. Qualifications

The Hungarian higher education has a dual system; there are colleges and universities, some colleges are associated with universities as college faculties of the universities. A university can offer college-level courses, too. The tenure of training at college level (corresponding to B.Sc. level) is minimum 3 years, maximum 4 years; the tenure of education at university level (corresponding to M.Sc. level) is minimum 4 years, maximum 5 years (with the exemption of medical universities where the tenure of education is 6 years). The higher education institutions can organise short-cycled post-secondary courses called Accredited Higher Vocational Training (AHVT) courses. The AHVT training is even more practice-oriented than the college-level education and gives qualification in a narrower field; it is not a degree course, the graduates do not receive a diploma, but a certificate. The 2-year AHVT programmes are offered mainly by colleges (sometimes by universities) and in many cases in co-operation with secondary vocational schools.

According to the Law on Higher Education, the definition of the universities (conditions of an institution to be recognised as university): They are higher education institutions able to organise training courses in more than one field of science (fields of science: social sciences, natural and technical sciences, life sciences and theology), and inside a field of science in more than one branch of sciences; carry out scientific research activity; have accredited Ph.D. courses; are empowered for habilitation process; their university professors should have Ph.D. degree and habilitation.

A college according to the law can operate if it is able to organise more than one training course in a branch of science; it carries out research and development activity, the college professors should have Ph.D. degree. The universities organise 3-year Ph.D. courses, specialised accredited further education courses (with a normal duration of 2 years), various continuing education courses.

Following a binary pattern, Hungarian universities and colleges grant főiskolai oklevél (college graduate degree) and egyetemi oklevél (university graduate degree). In order to facilitate international comparison, the higher education law makes it possible for graduate students of Hungarian higher education institutions to use the name Bachelor if they have completed a college graduate education, and the name Master if they have completed a university graduate education, with an indication of the area of study.

The Hungarian doctoral degree (Ph.D.) – in the case of arts universities, the Doctor of Liberal Arts degree (DLA) – corresponds in every respect to what is known and recognised internationally as a Ph.D. degree. The name of the final qualification received at medical universities, at veterinary university and at faculties of law is doctor (medicine/dentistry/veterinary medicine/law). The official abbreviation is: dr. jur., dr. med., dr. med. dent, dr. vet.

Before 1993, there were three levels of advanced (scientific) degrees in Hungary:

- doctor universitatis (university doctor) abbreviated as: dr.univ
- candidatus scientiarum (candidate of sciences) abbreviated as: C.Sc.
- doctor scientiarum (doctor of sciences) abbreviated as D.Sc.

To receive any of these degrees it was necessary to present and defend a dissertation. The dissertation requirements for each of the advanced degrees were different. The degree of university doctor was awarded by universities, and the other degrees were awarded by the Committee of Scientific Qualifications (the ones that belonged to the Hungarian Academy of Sciences).

Degree from the College of Theatre and Drama, 1944

# 8. Financing Higher Education

The expansion of higher education all over the world has induced cost-explosion in past decades. The operation of universities can be put into practice by various alternative ways. According to a certain concept, financial resources to be spent on higher education could be cut, tuition could be introduced, and thus, higher education could be completely commercialised . The outlines of the objectives of the Development Programme of Higher Education observe this concept as one, that leads astray in the present situation in Hungary, one that cannot be accomplished and being socially harmful.

The approach of the Ministry of Education has abandoned the illusion of total commercialisation . It has been acknowledged that budgetary resources to be used on higher education considering the economic capacity of the country, shall converge with those of the European Union member states. In addition, both the allocation of budgetary resources and the transformation of institution management are needed. Running and financing the system of higher education shall be carried out by realising effectiveness and the obligation of accounting for expenses, so that the students, the tax payers, the employers and the entire society have a clear, controllable and easily modifiable system. Effectiveness shall be improved by reasonable uses of the available resources.

The allocation process of available budgetary resources shall promote the realisation of the objectives of improvement. The funds shall be distributed for clear objectives of improvement, in order to create a balance among the funds to be used for public duties, the various types of standard support and the supplementary system of tied subsidies. The aim is to create a system of state support which assists the accomplishment of socially defined objectives, promotes educational policies and social values, and furthermore, provides the institutions with opportunities to define their own strategies within the system.

· The system, when determining the amount of state support, shall be predictable for the institutions, while the supporter and maintaining options for improvement.

· The allocation of state support shall be distinctly planned.

· The allocation of limited state support shall be realised in a way that motivates effective and economic use.

· The new allocation system shall promote the real transformation of the present, in many respects malformed, educational structure, according to prevailing social and economic needs.

· The new system shall facilitate recognition of the user s demands and meeting these demands.

· The system shall support the maintenance and improvement of the quality of education.

To realise the above mentioned objectives, the institutions of higher education can receive budgetary support in three ways within the altered framework of the institution financing system:

· normative support, based on the factual data of the institution,

· tied competitive subsidies: the subjects of which are set by those responsible for defining educational policy, whereas the grantees are selected according to the rules of professional democracy,

· investment and non-investment resources: their allocation is determined according to improvement priorities, settled in the Institution Development Plan (IDP) and approved by the Ministry of Education.

The Higher Education Act provided for the legal framework and perspectives of modernising the system of financing higher education. The normative support provided for institutions is the basis of a new, transparent, performance-oriented and predictable method of distributing the existing resources. The objective was to introduce a system of normative support based on defined parameters, where each parameter is conducive to the implementation of educational policy aims. The system is to encourage institutions to take on higher numbers of students, improve their research and development activities, promote talents and rationalise the use of resources. It also encourages the involvement of non-public resources into the financing of higher education.

Following 1998, the structure of the supported objectives changed. Thus, the nominal amount given to institutions in support will be nearly doubled by 2002, and at the same time other subsidy has decreased. In 2001, higher education was allocated funds amounting to HUF 141.6 billion. In addition to subsidies, higher education has considerable income, which grew dynamically in the period between 1998 and 2001, and in 2001 exceeded HUF 105.6 billion, which is 43% of the total expenditure.

Higher education in Hungary must work in a cost-effective way, in line with the interests of Hungarian society. In order to achieve these goals, higher education institutions may obtain the following three types of budgetary funds within the framework of financing institutions:

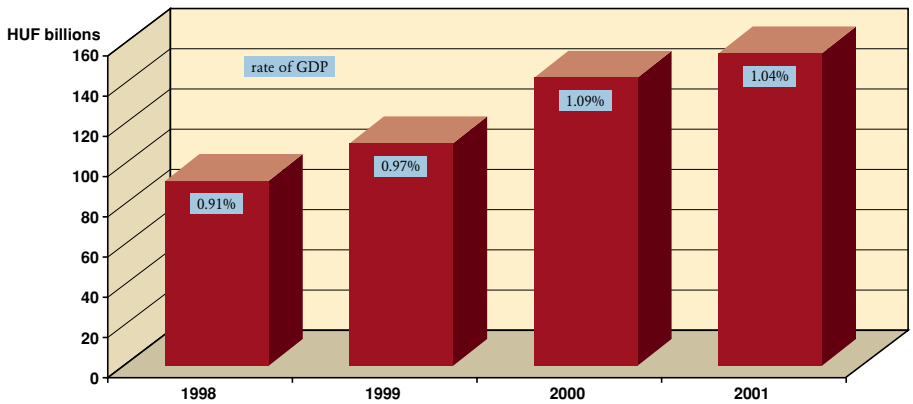
· normative support under the system expressing policy aims, based on the parameters of the institution;

· funds for a specific purpose in the system of applications;

· development funds for investment or for a purpose other than investment, based on the IDP approved by the Ministry of Education.

*Diagram*

**Statistics of budgetary support in the period of 1998–2001 (factual data)**




*Source: Statistics of the Ministry of Education 2001/2002*