

INTRODUCTION

This publication presents data on recipients of degrees from Israel's universities, as well as from the Open University and other institutions of higher education in 2002/2003. The data are based on processing of the files of those institutions. Data collection and processing were carried out by the Central Bureau of Statistics, and the survey was commissioned by the Planning and Budgeting Committee - the Council for Higher Education. We would like to thank the participating academic institutions for their cooperation.

1. Main Findings

1.1 Recipients of Academic Degrees

In 2002/2003, academic degrees were awarded to 45,263 students in Israel - 32,031 were first degrees, 9,530 were second degrees, and 999 were third degrees. Of the first degree recipients, 18,176 were from universities, 1,712 were from the Open University, and 13,855 were from other institutions of higher education. Of the second degree recipients, 9,328 were from universities, 16 were from the Open University, and 202 were from academic colleges. Third degrees were awarded only by the universities.

In 2002/2003, the number of first degree recipients from universities remained almost the same compared with the previous year. By contrast, there was a yearly change of 12% in other institutions of higher education. In 2002/2003, the yearly change in other institutions of higher education was lower than during the period from 1989/1990 to 1999/2000, when average yearly rate of change was 26%.

**Table A.- Recipients of Degrees from Institutions of Higher Education,
by Degree and Type of Institution**

Type of Institution	1989/ 1990	1999/ 2000	2001/ 2002	2002/ 2003	1989/ 1990	1999/ 2000	2001/ 2002	2002/ 2003	Percent annual change		
									<u>1999/00</u> ¹ 1989/90	<u>2002/03</u> ¹ 1999/00	<u>2002/03</u> 2001/02
Grand total	Absolute numbers				Percentages				9.8	5.3	7.0
First degree	15,251	38,762	42,285	45,263	100.0	100.0	100.0	100.0	9.8	5.3	7.0
Second degree	11,528	29,317	31,962	33,743	75.6	75.6	75.6	74.5	9.8	3.0	0.2
Third degree	2,790	7,528	8,408	9,546	18.3	19.4	19.9	21.1	10.4	8.2	13.3
Certificates	450	800	863	999	3.0	2.1	2.0	2.2	5.9	7.7	15.8
Universities - total	483	1,117	1,052	975	3.2	2.9	2.5	2.2	8.7	-4.4	-7.3
First degree	13,915	26,743	28,104	29,478	91.2	69.0	66.5	65.1	6.8	3.3	4.9
Second degree	10,192	17,298	18,019	18,176	66.8	44.6	42.6	40.2	5.4	1.7	0.9
Third degree	2,790	7,528	8,170	9,328	18.3	19.4	19.3	20.6	10.4	7.4	14.2
Certificates	450	800	863	999	3.0	2.1	2.0	2.2	5.9	7.7	15.8
The Open University - total	483	1,117	1,052	975	3.2	2.9	2.5	2.2	8.7	-4.4	-7.3
Thereof: First degree	281	1,408	1,585	1,728	1.8	3.6	3.7	3.8	17.5	7.1	9.0
Other institutions of higher education - total	281	1,408	1,575	1,712	1.8	3.6	3.7	3.8	17.5	6.7	8.7
Thereof: First degree	1,055	10,611	12,596	14,057	6.9	27.4	29.8	31.1	26.0	9.8	11.6
Thereof: First degree	1,055	10,611	12,368	13,855	6.9	27.4	29.2	30.6	26.0	9.3	12.0

¹ Geometric average.

There are differences between universities and colleges in the distribution of fields for which degrees were awarded. In 2002/2003, most of the first degrees in Education, Business and management sciences, and Law were awarded by colleges. In Education, 5,068 degrees were awarded by colleges, compared with 699 awarded by universities; in Business and management sciences, 1,820 degrees were awarded by colleges compared with 480 awarded by universities; and in Law, 1,448 degrees were awarded by colleges compared with 898 awarded by universities. By contrast, most recipients of first degrees in the Humanities, Social sciences, Paramedical studies, Biological sciences, and Agriculture, as well as in Engineering and Architecture were from universities. In Medicine and Physical sciences, degrees were awarded only by universities. Of all recipients of first degrees from universities, 88.6% received their degrees in fields for which most degrees were granted by universities (see also Tables 3, 14).

Table B.- Recipients of First Degrees¹, by Frameworks of Study and Fields of Study, 2002/2003

Field of study	Total		Universities		Colleges	
	Absolute numbers	Percentages	Absolute numbers	Percentages	Absolute numbers	Percentages
Total	32,031	100.0	18,176	56.7	13,855	43.3
Humanities	3,685	100.0	3,172	86.1	513	13.9
Education and teacher training	5,767	100.0	699	12.1	5,068	87.9
Social sciences	7,772	100.0	5,606	72.1	2,166	27.9
Business and management sciences	2,300	100.0	480	20.9	1,820	79.1
Law	2,346	100.0	898	38.3	1,448	61.7
Medicine	388	100.0	388	100.0	-	-
Paramedical studies	1,378	100.0	1,283	93.1	95	6.9
Mathematics, statistics and computer sciences	2,474	100.0	1,594	64.4	880	35.6
Physical sciences	492	100.0	492	100.0	-	-
Biological sciences and agriculture	1,137	100.0	1,044	91.8	93	8.2
Engineering and architecture	4,292	100.0	2,520	58.7	1,772	41.3

¹ In addition, 1,712 students received first degrees from the Open University. Of those, 1,538 were in Social sciences, and 174 were in Mathematics and Natural sciences.

1.2 Recipients of Academic Degrees from the Universities (Tables 1-9)

In 2002/2003, 18,176 students (61.7%) received first degrees; 9,328 (31.6%) received second degrees, of whom 400 students received medical degrees (M.D.) and 67 received degrees in dentistry (D.M.D.); 999 students (3.4%) received third degrees.

The percentages of recipients of degrees in Social sciences were 30.8% at the first degree level, 20.6% at the second degree level, and 11.1% at the third degree level. The percentages of recipients of degrees in Business and management sciences were 2.6% at the first degree level, 23.9% at the second degree level, and 1.6% at the third degree level. The percentages of recipients of degrees in Mathematics and sciences were 16.0% at the first degree level, 9.8% at the second degree level, and 47.7% at the third degree level (see Table C).

**Table C. - Recipients of Degrees from Universities, by Field of Study,
2002/2003**

Field of study	Total	First degree	Second degree		Third degree
			Total	Thereof: with thesis	
Total	27,528	18,176	8,861	2,856	999
			Percentages		
Total	100.0	100.0	100.0	32.2	100.0
Humanities	24.1	21.3	22.2	33.3	23.1
Social sciences	26.0	30.8	20.6	33.0	11.1
Business and management sciences	9.2	2.6	23.9	5.5	1.6
Law	5.8	4.9	8.6	2.9	1.0
Medicine	3.2	2.1	5.7	95.4	3.7
Paramedical studies	5.1	7.1	2.2	51.0	1.7
Mathematics and sciences	14.6	16.0	9.8	91.9	47.7
Agriculture	1.1	1.2	1.1	53.5	2.0
Engineering and architecture	10.7	13.9	5.9	59.3	8.0

Between 1999/2000 and 2002/2003, there was an average annual increase of 3.3% in the number of degree recipients from universities, and in 2002/2003, the rate of increase was 4.9%. The increase in second and third degree recipients in 2002/2003 was particularly salient (14.2% and 15.8%, respectively) compared with an increase of only 1.7% in the number of first degree recipients. At the first degree level, there was an increase in the number of degree recipients in Biological sciences, Paramedical sciences, Physical sciences, and Engineering and architecture. By contrast, there was a decline in the number of first degree recipients in the Humanities and Social sciences. At the second degree level in Law, the number of degree recipients doubled in comparison with 2001/2002, and there was a considerable increase in the number of degree recipients in Paramedical studies, Physical sciences, and Engineering and architecture. At the third degree level, there was a substantial increase in the number of degree recipients in Biological sciences, General humanities, and Engineering (see Tables 1, 3).

**Table D.- Percent Change in the Number of Recipients of Degrees from Universities,
by Field of Study and Degree**

Field of study	Percent annual change							
	Total		First degree		Second degree		Third degree	
	<u>2002/03</u> 1999/00	<u>2002/03</u> 2001/02	<u>2002/03</u> 1999/00	<u>2002/03</u> 2001/02	<u>2002/03</u> 1999/00	<u>2002/03</u> 2001/02	<u>2002/03</u> 1999/00	<u>2002/03</u> 2001/02
Total	3.3	4.9	4.9	1.7	7.4	14.2	7.7	15.8
Humanities	-1.3	-0.9	-5.3	-5.2	7.1	8.3	12.1	20.3
Social sciences	0.8	3.4	0.1	-1.1	7.9	14.9	(11.1)	1.8
Business and management sciences	1.4	-0.3	0.6	0.3	2.1	0.6	(21.1)	(0.0)
Law	11.8	41.9	10.0	2.0	29.5	109.6	(3.6)	(42.9)
Medicine	0.2	3.9	-3.2	0.7	0.0	10.6	(-2.6)	(-5.1)
Paramedical studies	12.2	19.1	14.1	11.9	13.5	58.5	(23.6)	(70.0)
Mathematics, statistics and computer sciences	4.5	-0.4	-3.2	3.5	13.7	17.1	(1.6)	(16.7)
Physical sciences	8.6	16.1	13.4	10.5	8.8	41.1	2.9	-0.7
Biological sciences	14.4	12.0	8.6	17.7	11.3	5.3	10.8	40.8
Agriculture	6.0	-13.4	-4.5	7.8	6.8	-15.1	(-9.5)	(-54.5)
Engineering and architecture	10.0	6.2	2.9	10.5	8.7	18.6	(4.6)	(45.5)

There has been a continuing decline in the percentage of second degree recipients with a thesis, out of all second degree recipients. The percentage of second degree recipients with a thesis was particularly low in Business and management sciences and in Law. Even though the number of second degree recipients in Law doubled, there was no change in the number of second degree recipients with a thesis in that field. Thus, the percentage of second degree recipients with a thesis declined from 6% in 2001/02 to less than 3% in 2002/03 (see Table 8).

Table E.- Percentage of Second Degree Recipients with Thesis, 1990/91-2002/2003

Field of study	1990/ 1991	1992/ 1993	1994/ 1995	1996/ 1997	1998/ 1999	1999/ 2000	2000/ 2001	2001/ 2002	2002/ 2003	Percent change <u>2002/03</u> 2001/02	
										Without thesis	With thesis
Total	72.6	65.1	55.6	47.5	34.3	31.5	32.8	32.6	32.2	14.6	13.2
Humanities	69.3	56.4	49.2	41.3	33.6	34.1	34.8	32.8	33.3	8.3	9.9
Social sciences	55.5	39.2	37.6	36.8	36.3	30.5	34.6	34.0	33.0	14.9	11.6
Business and management sciences	58.6	59.4	11.3	11.0	6.3	4.7	4.8	4.7	5.5	0.6	16.2
Law	78.6	45.5	45.2	28.6	7.9	8.1	6.9	6.0	2.9	109.6	(0.0)
Medicine	77.8	96.7	96.6	100.0	93.9	100.0	100.0	100.0	95.4	41.3	34.8
Paramedical studies	92.7	89.5	86.1	73.5	59.7	54.6	53.2	50.0	51.0	58.5	61.5
Mathematics and sciences	99.2	97.2	99.2	98.9	97.3	91.8	95.6	91.8	91.9	15.1	15.2
Agriculture	73.0	70.0	68.1	98.7	67.6	55.4	52.5	58.8	53.5	-15.1	(-22.9)
Engineering and architecture	76.6	70.7	86.1	63.3	74.6	63.4	67.7	62.2	59.3	18.6	13.1

Of the first and second degree recipients, 23.5% and 23.2%, respectively, were from Bar Ilan University, and 26.8% of the third degree recipients were from the Hebrew University (see Table F).

The number of first degree recipients from the Hebrew University, Haifa University, and Ben Gurion University declined, and in the other institutions the increase was negligible. At the second degree level, the main increase in recipients of degrees was at Bar Ilan University, and at the third degree level, the main increase was at Tel Aviv University (see Table 2).

Table F.- Recipients of Degrees from Universities, by Degree and Institution of Study

Institution of study	Total		First degree		Second degree		Third degree	
	2001/02	2002/03	2001/02	2002/03	2001/02	2002/03	2001/02	2002/03
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hebrew University	19.3	18.0	18.4	17.9	20.9	18.0	30.2	26.8
The Technion	9.2	9.2	10.1	10.1	7.8	7.8	12.4	12.7
Tel Aviv University	21.1	21.1	19.6	20.2	24.6	23.1	20.3	23.2
Bar-Ilan University	21.3	23.5	22.2	23.6	18.6	23.2	14.5	14.0
Haifa University	12.9	12.2	13.3	12.2	12.0	12.1	4.9	4.5
Ben Gurion University of the Negev	15.7	15.2	16.5	16.0	15.1	14.3	7.2	7.6
Weizmann Institute of Science	0.6	0.8	-	-	1.1	1.4	10.5	11.1

The proportion of women out of all degree recipients continued to increase in 2002/2003, and reached 58.3% of all degree recipients. Women constitute the majority of recipients of degrees at the first and second degree levels, and almost 50% of degree recipients at the third degree level. In 2002/03, the number of women who received a first degree increased by 1.9%, and reached 10,808, whereas the number of men who received a first degree declined by 0.5% and reached 7,368. In most fields, at least half of all degree recipients are women, with the exception of Engineering and architecture, Mathematics, statistics, and computer sciences, and Physical sciences. The upward trend in the proportion of women out of all first degree recipients in Engineering and architecture is continuing (see Table 5).

Table G.- Women among Recipients of Academic Degrees in the Universities, by Degree and Field of Study

Degree and field of study	Percentage of women				
	1979/1980	1989/1990	1999/2000	2001/2002	2002/2003
Total (Excl. academic diplomas)	42.7	49.6	57.6	58.1	58.3
First degree	45.3	51.7	59.3	58.9	59.5
Second degree	37.8	44.3	54.8	57.5	56.9
Third degree	27.2	34.9	47.3	47.4	49.5
Field of study (in descending order according to 2002/2003)	Thereof: First degree				
Education and teacher training	71.1	86.7	90.0	87.2	92.8
Languages, literature and regional studies	84.5	84.3	80.3	84.2	83.9
Paramedical studies	75.4	88.5	85.4	80.8	82.9
Art, crafts and applied arts	74.8	82.3	81.7	79.9	76.8
Social sciences	49.7	55.1	64.7	67.4	68.1
Biological sciences	76.1	69.0	71.9	70.0	66.4
General humanities	57.4	57.3	54.8	57.6	58.9
Agriculture	28.3	43.3	50.3	54.5	54.2
Business and management sciences	13.4	29.5	51.5	52.8	52.8
Law	34.4	42.9	55.3	52.2	52.1
Medicine	-	40.3	42.4	49.4	50.0
Physical sciences	33.6	42.4	35.3	41.0	38.0
Mathematics, statistics and computer sciences	44.0	39.3	37.7	37.4	36.2
Engineering and Architecture	7.0	14.4	21.9	23.9	25.2

1.3 Recipients of Academic Diplomas from the Universities (Table 10)

In 2002/03, 1,427 students received academic diplomas: 1,301 received teaching certificates and 126 received other diplomas; 861 of the recipients of teaching certificates received only this diploma, and the rest received this diploma in addition to an academic degree. 67% of the diplomas were awarded in Humanities, 17.5% were in Social Sciences, and less than 15% were awarded teaching certificates in Sciences, Mathematics, and Engineering. 83.5% of all recipients of teaching certificates were women.

1.4 Recipients of Degrees from the Open University (Table 11)

In 2002/03, there were 1,712 recipients of first degrees from the Open University, as well as 16 recipients of second degrees, 26 recipients of teaching certificates, and 10 recipients of diplomas in Computer Sciences. 90% of the first degree recipients from the Open University were in Humanities and Social Sciences, and the rest were in Sciences and Mathematics.

1.5 Other Institutions of Higher Education (Tables 12-14)

Other institutions of higher education awarded 14,057 academic degrees. Of those, 13,855 were first degrees, and the rest were second degrees. In those institutions, there was a sharp increase in the number of students who received degrees in Computer Sciences, Social Sciences, and Engineering and Architecture in 2002/03 compared with 2001/02, whereas the number of degree recipients in Paramedical Studies declined.

Table H.- Recipients of First Degrees from Academic Colleges and Teacher Colleges, by Field of Study

Field of study	1989/1990	1999/2000	2000/2001	2001/2002	2002/2003	Percent annual change: <u>2002/2003</u> <u>1999/2000</u>
Total	1,055	10,611	11,477	12,386	13,855	9.3
			Percentages			
Total	100.0	100.0	100.0	100.0	100.0	9.3
Education and teacher training	62.1	41.6	41.7	35.9	36.6	4.7
Thereof: teaching ¹	62.1	41.2	40.9	35.7	36.5	5.0
Art and design	15.4	4.1	4.4	3.9	3.7	6.0
Social sciences	-	10.3	11.8	13.2	15.6	25.7
Business and management sciences	9.3	13.1	13.6	11.6	13.1	9.7
Law	-	17.0	12.6	15.1	10.5	-6.9
Paramedical sciences	-	1.7	0.8	0.6	0.7	-18.9
Computer sciences	-	5.5	6.6	8.4	6.4	14.8
Biological sciences and agriculture	-	(0.5)	(0.6)	(0.7)	(0.7)	(17.0)
Engineering and architecture	13.3	6.5	7.9	10.6	12.8	37.3

¹ Degrees were awarded only at teacher colleges.

2. Source of the Data

The data on recipients of degrees from universities are based on processing of files from the institutions, which were prepared after the graduation ceremonies for the academic year under review. The files included some personal data, as well as data on the studies completed by all of the graduates. The data for years prior to 1979/80 are based on questionnaires or on lists of graduates published by the universities close to the time of the graduation ceremonies.

The data on the Open University are based on statistical reports that were received after the graduation ceremony for the academic year under review. As of 1997/98, the data are based on processing of files from the Open University, which were prepared after the graduation ceremonies for the academic year under review.

The data on recipients of degrees from other institutions of higher education are based on processing of files from the institutions, which were prepared following the graduation ceremonies for the academic year under review, and included personal data as well as data on the studies completed by the graduates.

3. The Population and the Period of Reference

The population of degree recipients for a given year includes all of those who received or were entitled to receive a degree at one of the graduation ceremonies held by the universities during the academic year under review.

4. Definitions

a. Universities and other institutions of higher education

University: the data in Tables 1-10 refer to the following institutions:

The Hebrew University of Jerusalem
The Technion - Israel Institute of Technology
Tel Aviv University
Bar-Ilan University
Haifa University
Ben Gurion University of the Negev
Weizmann Institute of Science

The Open University: Table 11 presents data on the Open University.

Other institutions of higher education: Tables 12-14 present data on first degree recipients who are graduates of an academic track in institutions that were recognized by the Council for Higher Education and authorized to grant a first degree. The list of institutions is as follows:

Bezalel - Academy of Arts and Design, Jerusalem
The Jerusalem Ruben Academy of Music and Dance
Jerusalem College of Technology - Machon Lev
Shenkar - College of Engineering and Design
Ruppin - The Academic Center
The College of Management - Academic Studies, Tel Aviv
"ORT" Braude College
The Academic College of Tel Aviv-Yaffo
The Hadassah Academic College, Jerusalem
Emek Yezreel College
Tel-Hai Academic College
Netanya Academic College
The Interdisciplinary Center Herzliyya
Tel Aviv Academic College of Engineering
The Academic College Judea and Samaria
Sapir College
Negev Academic College of Engineering
Sha'arei Mishpat College
The Holon Academic Institute of Technology
The Academic College of Law
The David Yellin Teachers College
Michlala, Jerusalem College
Beit-Berl Teachers College
Levinsky College of Education (including the Music Academy)

The Zinman College of Physical Education and Sport Sciences at the Wingate Institute
Hakibbutzim College of Education
ORT Academic College for Teachers in Technology
Oranim - School of Education of the Kibbutz Movement (B.Ed. track)
Gordon Teachers College
Talpiot State Religious Teachers Training College
The Arabic College for Education in Israel
The E.M. Liphshitz Religious Teachers College
Key College – Beer Sheba
Achva College
Orot Israel College
Religious College of Education for Judaical Disciplines “Moreshet Ya’akov”
“Hemdat Hadarom” College of Education

- b. **A recipient of a degree/diploma:** any person who received from any of the above-mentioned institutions a degree recognized by the Council for Higher Education, including any person who received a diploma conditional on having previously received an academic degree. Those who received both a diploma and a degree in the year under review were counted only once, as recipients of degrees.

As of 1997/98, an additional tabulation was carried out for **all recipients of teaching certificates**, according to the subject which they were qualified to teach (Table 10).

5. Classifications and Explanations

Academic Degree/Diploma:

A distinction has been made between academic degrees and other academic diplomas, as follows:

Academic Degree

The academic degrees were classified into three groups:

- **First degree**¹, such as B.A., B.Sc., B.Tech., B.Ed.
- **Second degree**, such as M.A., M.Sc., M.B.A., as well as M.D. and D.M.D. in medicine.
- **Third degree**, such as Ph.D., Dr.Sc.

Academic Diploma

Included are diplomas which require a **first academic degree as a prerequisite**, such as: a teaching certificate, a diploma in translation, a diploma in museum sciences, a diploma in library sciences, etc.

¹ As of 1981/82, a first degree in medicine has been granted.

Field of Study:

The subjects of study were grouped according to the scientific field to which they belong. A student who graduated in two subjects is presented according to the field of study appearing first in the institution's file.

The scientific fields are presented in the tables at two different levels of specification, as follows:

15 fields of studies

General humanities
Languages, literature and regional studies
Education and teacher training
Art, crafts and applied art¹
Special programs and miscellaneous

Social sciences²
Business and management sciences

Law

Medicine
Paramedical studies

Mathematics, statistics and computer sciences
Physical sciences
Biological sciences

Agriculture²

Engineering and architecture

7 fields of studies

Humanities

Social sciences²

Law

Medicine

Sciences and mathematics

Agriculture²

Engineering and architecture

Table 6 presents data according to subjects of study. Therefore, students who completed a first degree in two subjects are listed under both subjects.

The detailed classification of the subjects of study is updated regularly by the CBS.

Open University - students were classified into one of the two fields:

Humanities and Social Sciences
Sciences and Mathematics

¹ In academic colleges – Art and Design.

² As of 1984/85, agricultural economics is classified in social sciences instead of in agriculture.