

**Biró Zsuzsanna – Hrubos Ildikó –
Lovász Gabriella – Pásztor Adél**

**AZ OKLEVÉLMELLÉKLET RENDSZERE
NÉHÁNY EURÓPAI EGYETEMEN**

II.

Oklevélmelléklet minták

The system of the Diploma Supplement at
some European universities

II.

Samples of Diploma Supplement

No. 258

**Biró Zsuzsanna – Hrubos Ildikó –
Lovász Gabriella – Pásztor Adél**

**Az oklevélmelléklet rendszere néhány
európai egyetemen**

II.

Oklevélmelléklet minták

**The system of the Diploma Supplement
at some European universities**

II.

Samples of Diploma Supplement

**FELSŐOKTATÁSI KUTATÓINTÉZET
BUDAPEST, 2004.**

KUTATÁS KÖZBEN 258
(219–228-ig Educatio Füzetek címen)

SOROZATSZERKESZTŐ: Czeizer Zoltán
Szerkesztőbizottsági tagok: Györgyi Zoltán, Híves Tamás

© Bíró Zsuzsanna – Hrubos Ildikó – Lovász Gabriella – Pásztor Adél,
Felsőoktatási Kutatóintézet 2004.

Felsőoktatási Kutatóintézet
HU ISSN 1588-3094
ISBN 963 404 389 5

Felelős kiadó: Liskó Ilona, a Felsőoktatási Kutatóintézet igazgatója
Műszaki vezető: Orosz Józsefné
Műszaki szerkesztő: Híves Tamás
Terjedelem: 4,0 A/5 ív
Készült a Felsőoktatási Kutatóintézet sokszorosítójában

TARTALOM

1. Oklevélmelléklet a Tamperei Egyetemen	5
2. Oklevélmelléklet a Leideni Egyetemen (tervezet)	17
3. Oklevélmelléklet az Amszterdami Főiskolán	27
4. Oklevélmelléklet a Müncheneri Műszaki Egyetemen	37
5. Oklevélmelléklet a Pilseni Nyugat-Csehországi Egyetemen	55

1.
Oklevélmelléklet a Tamperei Egyetemen

DIPLOMA SUPPLEMENT

This Diploma Supplement follows the model developed by the European Commission Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international transparency and fair academic and professional recognition of qualifications (diplomas, degrees, certificates etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It is free from any value judgements, equivalence statement or suggestions about recognition.

1 INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

- 1.1 Family name(s): KAUMANEN
- 1.2 Given name(s): HELMIINA KATARIINA
- 1.3 Date of birth (day/month/year): 16/6/1977
- 1.4 Student identification number or code: 160677-0986

2 INFORMATION IDENTIFYING THE QUALIFICATION

- 2.1 Name of qualification and title conferred (in original language):
Filosofian maisterin tutkinto
- 2.2 Main field of study for the qualification:
Teatterin ja draaman tutkimus/Theatre and Drama Research
- 2.3 Name (in original language) and status of awarding institution:
Tampereen yliopisto, University
- 2.4 Name (in original language) and status of institution (if different from 2.3) administering studies: -
- 2.5 Language(s) of instruction/examination: Finnish

3 INFORMATION ON THE LEVEL OF THE QUALIFICATION

- 3.1 Level of qualification: Higher academic (Master's) degree
- 3.2 Official length of programme: 160 Finnish credits (minimum)
- 3.3 Access requirement(s): 9-year compulsory school + 3-year general school/education ending with matriculation examination and numerus clausus/entrance examination.

4 INFORMATION ON THE CONTENTS AND RESULTS GAINED

- 4.1 Mode of study: full-time
- 4.2 Programme requirements: 160 Finnish credits (minimum), language studies, thesis (graded), major subject extent ca. 80 Finnish credits.
- 4.3 Programme details (e.g. modules or units studied), and the individual grades/marks/credits obtained: All instruction is planned and arranged in study modules, and all courses taken by a student belong to some study module. One study module may contain several types of work: lectures, exercises, examinations based on compulsory reading, seminars, and so on.

The study modules are classified, with respect to their contents and their position in the curriculum, into three different types: basic studies, intermediate studies and advanced studies, which include language studies as well as practical training.

In basic studies the students will be given an overall picture of the disciplines which form the basic of the degree programme, as well as multidisciplinary theoretical and methodological guidance.

In the intermediate studies students concentrate on the acquisition of the basic skills required to fulfil the aims of the programme. They learn the concepts, theories, methods, results and problems of the chosen disciplines.

The advanced studies concentrate on some central, scientifically relevant

problem within the degree programme. The main aim of the advanced studies is to develop the student's ability to find and apply scientific knowledge.

Students should be able to use their skills in both theoretical and practical application requiring extensive knowledge of the field. A large part of the advanced studies is taken up by research work, and the writing of the thesis is usually the most extensive single study module.

For details see enclosed transcript.

4.4 Grading scheme and, if available, grade distribution guidance:
See enclosed transcript.

4.5 Overall classification of the qualification (in original language):
Not applicable.

5 INFORMATION ON THE FUNCTION OF QUALIFICATION

- 5.1 Access to further study: Eligible to pursue doctoral studies in Finland.
5.2 Professional status: Under the Finnish legislation a person who has taken a master's degree (maisterin tutkinto) is in principle fully qualified for official/regulated posts in the public sector for which the qualification stipulated is a higher academic degree. However, in some fields, it is a requirement that a specific branch or branches of science has/have been the individual's major or minor subject in that degree.

6 ADDITIONAL INFORMATION

- 6.1 Additional information: <http://www.uta.fi> or registrar@uta.fi
6.2 Further information source: <http://www.minedu.fi>

7 INFORMATION ON THE FINNISH HIGHER EDUCATION SYSTEM

The Finnish education system consists of comprehensive school, general and vocational upper secondary education, higher education and adult education. The comprehensive school is a nine-year compulsory school for all children from 7 to 16 years of age.

Post-comprehensive education is given by general upper secondary schools and vocational institutions. The general upper secondary school offer a three-year general education curriculum, at the end of which the pupil takes the national matriculation examination (ylioppilastutkinto/studentexamen). Vocational institutions award upper secondary vocational qualifications (ammattillinen perustutkinto/yrkesinriktad grundexamen). From 2001 onwards all vocational qualifications will be three-year programmes.

General eligibility for higher education is given by the matriculation examination and the upper secondary vocational qualification. These qualifications need at least twelve years of schooling. Equivalent foreign qualifications also give general eligibility for higher education.

The Finnish higher education system comprises 20 universities (yliopisto/universitet) and 29 polytechnics (ammattikorkeakoulu, AMK/yrkeshögskola, YH). Ten of the universities are multi-faculty universities and ten are specialised institutions. All universities engage in both education and research and have the right to award doctorates.

The polytechnics are multi-field institutions of professional higher education with a practical orientation. The aim of studies is to provide the necessary knowledge and skills needed in expert functions and to meet workplace requirements and development needs.

There is national decree which defines the objectives, extent and overall structure of polytechnic degrees. The Ministry of Education confirms the degree programmes of the polytechnics, and within the framework of these regulations, the polytechnics decide on the contents and structure of their degrees in more

detail. They also decide on their annual curricula and forms of instruction.

The polytechnic degree is a Bachelor-level degree, the extent of which is 140-180 credits depending on the study field (One credit corresponds approximately 40 hours of student work to attain the required objectives). The degrees take 3,5 to 4,5 years of full-time study to complete. In all fields the curriculum comprises basic and professional studies, optional studies, a practical training period and a diploma project.

There are field-specific national decrees on university degrees which define the objectives, extent and overall structure of degrees. Universities decide on the detailed contents and structure of the degrees they award. They also decide on their curricula and forms of instruction.

The extent of the lower academic degree (usually called kandidaatti/kandidat) is 120 credits at a minimum, and it takes three years of full-time study to complete the degree. The degree consists of basic and intermediate studies in the major subject, including a thesis; studies in one or more minor subjects and language studies.

The higher academic degree (usually called maisteri/magister, in the field of technology the degree is called diplomi-insinööri/diplom ingenjör) usually consists of a total of 160 to 180 credits, or a kandidaatti/kandidat's syllabus plus 40 - 60 credits. It takes five years of full-time studies to complete the maisteri/magister degree or a further two years following the kandidaatti/kandidat degree. For the degree students complete an advanced study module and prepare a thesis.

In medicine and in veterinary medicine, the degrees take six years of full-time study to complete. The degree in these fields and in dentistry is called lisensiaatti/licentiat.

Students may apply for doctoral studies after the completion of maisteri/magister. In most fields a pre-doctoral degree lisensiaatti/licentiat may be taken before the Doctor's degree. In general, it takes approximately two years of full-time studies after maisteri/magister. The full-time studies for Doctor's degree take approximately four years after the maisteri/magister.

8 CERTIFICATION OF THE SUPPLEMENT

8.1 Date: 15-Oct-2003

8.2 Signature:

Anita Äijälä

8.3 Capacity: Assistant Registrar

8.4 Official stamp or seal:

TAMPEREEN YLIOPISTO - UNIVERSITY OF TAMPERE

15-Oct-2003

KAUHANEN, HELMIINA KATARIINA

Born on 16-Jun-1977

Student number 60943

8-Oct-2003 granted

No. of degree 42586

700 (71798)

Degree: Master of Arts

Higher academic (Master's) degree

Year of statute governing degree: 1994

Faculty: Faculty of Humanities

Subject: Theatre and Drama Research

Department: Department of Literature and the Arts

Field: Humanities

Subjects	Cr.	Grade(verbal)
Theatre and Drama Research	96.0	Excellent
Speech Communication and Voice Research	54.0	Excellent

Other Studies	15.0	credits
Credits total	165.0	

Language	Written/Oral skills	grade	cr.
Swedish			ht
English			
French			

Language of the Maturity Test: Finnish

Grade for thesis (verbal): Cum laude approbatur

Enrolled at university and
began this programme 1997, after which 13 terms present.

Dated 9-Oct-2003 /Sirkka Nurmala

Surname KAUHANEN
 Fore names HELMIINA KATARIINA, Ms
 Date of Birth 16-JUN-1977 Enrolled at the University 1997

Degrees awarded at the University of Tampere:

08-OCT-2003 Master of Arts

Registrations: 97 98 99 00 01 02 03 04

P PP PP PP PP PP PP P

(P = present, A = absent, I = temporary interruption)

		Credits	Grades (1-3)	Date
Department of Literature and the Arts				
===== == ===== === =====				
Theatre and Drama Research				

TETU	BASIC COURSE ON MOVEMENT ON STAGE	1.00	A	HYV 23-OCT-1997
TETU	ACADEMIC WRITING COURSE	1.00	A	2+ 01-DEC-1997
TETU	INTRODUCTION TO LITERATURE AS LANGUAGE AND			
	NARRATION	2.00	A	2- 16-DEC-1997
TETUP5	MAIN STAGES IN THE HISTORY OF THEATRE	2.00	A	2 18-DEC-1997
TETU	INTRODUCTION TO LITERARY GENRE THEORY	1.00	A	2.5 29-JAN-1998
TETU	BASIC COURSE IN IMPROVISATION	1.00	A	HYV 25-FEB-1998
TETU	PRACTICUM IN DRAMA	1.00	A	HYV 21-APR-1998
TETU	THEATRE TECHNOLOGY	1.00	A	HYV 27-APR-1998
TETU	INTRODUCTION TO THEORY OF THEATRE RESEARCH			
	AND HISTORY OF THEATRE	2.00	A	2.5 28-APR-1998
TETU	THEATRE IN PRACTICE	1.00	A	HYV 26-MAY-1998
TETU	SOURCES OF INFORMATION AND THEIR USE	1.00	A	HYV 26-MAY-1998
TETU	HISTORY OF WORLD LITERATURE 1	2.00	A	1.5 19-SEP-1998
TETU	BASIC COURSE ON DRAMATURGE'S WORK	2.00	A	2+ 30-SEP-1998
TETU	FAMILIARIZATION WITH A RESEARCH TOPIC 1.	1.00	A	HYV 17-DEC-1998
TETUA4	A DIRECTING I	1.00	A	HYV 18-MAY-1999
TETUP6	DRAMATIC LITERATURE I	1.00	A	1+ 18-MAY-1999
TETUP7	INTRODUCTION TO THEATRE AS AN ART-FORM	4.00	A	HYV 18-MAY-1999
TETUA6	PROSEMINAR IN THEATRE RESEARCH	4.00	A	ET 21-MAY-1999
TETUA1	THEORY OF LITERATURE II	1.00	A	3 16-OCT-1999
TETUA4	D ACTING	4.00	A	HYV 30-NOV-1999
TETUA4	A DIRECTING II	2.00	A	HT 25-MAY-2000
TETUA4	B DRAMATURGE'S WORK	2.00	A	2- 19-JUN-2000
TETUA2	METHODICS OF THEATRE RESEARCH I	2.00	A	3- 13-DEC-2000
TETUA4	FAMILIARIZATION WITH A RESEARCH TOPIC	6.00	A	HT 15-DEC-2000
TETUA4E	THE BASIS OF STAGE SPEECH OR ORAL			
	INTERPRETATION	1.00	A	HYV 07-FEB-2001
TETUA4	C CREATIVE WRITING	2.00	A	3 22-MAY-2001
TETUA3	DRAMATIC LITERATURE II	3.00	A	3 12-AUG-2003
TETUS3	PRACTICUM	5.00	S	HYV 27-APR-1998
TETU	THEORY OF SCENOGRAPHY I	1.00	S	3 28-APR-1998
TETUS1	METHODICS OF THEATRE ADMINISTRATION AND			
	PRODUCTION	1.00	S	2 23-FEB-2000
TETUS3	PRACTICUM	6.00	S	HYV 09-DEC-2000
TETUS1	METHODICS OF THEATRE RESEARCH II	3.00	S	3- 21-AUG-2001
TETUS4	SEMINAR	4.00	S	3- 19-DEC-2001
TETU	MATURITY TEST	0.00	S	HYV 17-JUN-2003
TETUS5	MASTER'S THESIS	20.00	S	C 09-SEP-2003

KAUHANEN, HELMIINA KATARIINA

BORN 16-JUN-1977

TETUS2	DRAMATIC LITERATURE III	4.00	S	3	30-SEP-2003
TETU	BASIC STUDIES IN THEATRE AND DRAMA RESEARCH	17.00	O	HT	18-MAY-1999
TETU	INTERMEDIATE STUDIES IN THEATRE AND DRAMA RESEARCH	23.00	O	ET	12-AUG-2003
TETU	ADVANCED STUDIES IN THEATRE AND DRAMA RESEARCH	23.00	O	ET	30-SEP-2003
Credit Total: Theatre and Drama Research		96.00			
Credit Total: Department of Literature and the Arts		96.00			

Department of Psychology

=====

Psychology

PSYKAP1	BASIC COURSE IN PSYCHOLOGY	5.00	A	2	14-MAY-1999
Credit Total: Psychology		5.00			
Credit Total: Department of Psychology		5.00			

Faculty of Humanities

=====

Other Studies

MUUH	ORIENTATION COURSE	1.00	Y	HYV	05-SEP-1997
Credit Total: Other Studies		1.00			
Credit Total: Faculty of Humanities		1.00			

Institute of Speech Communication and Voice Research

=====

Speech Communication and Voice Research

PUHEP3	SMALL GROUP DISCUSSION	1.00	P	HYV	27-OCT-1998
PUHEP8A	BASIC COURSE IN VOICE RESEARCH/LECTURES	1.00	P	3	05-NOV-1998
PUHEP16	INTRODUCTION TO THEORY AND RESEARCH IN SPEECH COMMUNICATION AND VOICE RESEARCH	2.00	P	2+	30-NOV-1998
PUHEP2	BASIC COURSE IN NEGOTIATION SKILLS	1.00	P	HYV	08-DEC-1998
PUHEP8B	VOICE TRAINING	1.00	P	HYV	15-APR-1999
PUHEP13	BASIC COURSE IN RECITATION	1.00	P	HYV	15-DEC-1999
PUHEP19F	EDUCATIONAL COMMUNICATION/TEXTBOOKS	3.00	P	2.5	13-NOV-2001
PUHEP5	TEACHING SPEECH COMMUNICATION	2.00	P	3	21-FEB-2002
PUHEP19O	SPEECH COMMUNICATION/TEXTBOOKS	1.00	P	3	19-MAR-2002
PUHEP19J	INTERCULTURAL COMMUNICATION/TEXTBOOKS	1.00	P	2+	07-MAY-2002
PUHEA7	AUDIO & VIDEO TECHNIQUE AND EDITING IN TEACHING AND RESEARCH	1.00	A	HYV	07-DEC-1999
PUHEA2	DYADS AND SMALL GROUPS I	1.00	A	3	15-DEC-1999
PUHEA1	THEORY OF SPEECH COMMUNICATION	2.00	A	2-	16-DEC-1999
PUHEA5A	INTRODUCTION TO ACOUSTIC SPEECH RESEARCH/LECTURE	1.00	A	2+	21-FEB-2000
PUHEA5B	INTRODUCTION TO ACOUSTIC SPEECH RESEARCH/TEXTBOOKS	1.00	A	2.5	21-FEB-2000
PUHEA9	DYADS AND SMALL GROUPS II	1.00	A	3	17-APR-2000
PUHEA3	PUBLIC SPEAKING I	2.00	A	2.5	26-APR-2000
PUHEA11	TEACHING METHODS IN SPEECH COMMUNICATION	2.00	A	HYV	03-MAY-2000
PUHEA16	METHODS OF MEASURING VOCAL CAPACITY	1.00	A	2.5	11-MAY-2000
PUHEA18	LISTENING ANALYSIS OF SPEAKING VOICES	1.00	A	HYV	11-MAY-2000
PUHEA6A	QUANTITATIVE METHODS	1.00	A	3-	07-JUN-2000
PUHEA6B	QUALITATIVE RESEARCH METHODS	1.00	A	2+	07-JUN-2000

KAUHANEN, HELMIINA KATARIINA

BORN 16-JUN-1977

PUHEA10	RHETORIC	1.00	A	3-	02-NOV-2000
PUHEA12	TEACHING PRACTICE IN SPEECH COMMUNICATION	2.00	A	HYV	07-DEC-2000
PUHEA14	SEMINAR ON LITERATURE/SPEECH COMMUNICATION	2.00	A	2.5	16-DEC-2000
PUHEA19	RESEARCH PRACTICUM IN VOICE RESEARCH	2.00	A	HYV	24-JAN-2001
PUHEA8	INTERCULTURAL COMMUNICATION	1.00	A	2.5	08-MAY-2001
PUHEA15	PROSEMINAR/SPEECH COMMUNICATION	3.00	A	HYV	17-MAY-2001
PUHEA22	RESEARCH SEMINAR/VOICE RESEARCH	1.00	A	HYV	07-JUN-2001
PUHEA21	TEACHING PRACTISE IN VOICE RESEARCH	2.00	A	HYV	07-JUN-2001
PUHEA23	PROSEMINAR/VOICE RESEARCH	3.00	A	HYV	07-JUN-2001
PUHEA20	METHODS IN VOICE TRAINING	2.00	A	3-	11-APR-2002
PUHEA17	TEXTBOOKS ON SPEECH RESEARCH	2.00	A	1.5	07-MAY-2002
PUHEA4	PRACTICUM IN VOICE TRAINING	1.00	A	HYV	09-JUN-2003
PUHEA13	TEXTBOOKS ON RESEARCH INTO SPEECH COMMUNICATION	2.00	A	2+	18-JUN-2003
PUHEP1A	BASIC COURSE IN SPEECH COMMUNICATION				
	LECTURE (ORAL COMMUNICATION)	0.50	K	HYV	13-NOV-1997
PUHEP1B	BASIC COURSE OF SPEECH COMMUNICATION, EXERCISES	0.50	K	HYV	06-MAY-1998
PUHE	SPECIAL COURSES IN VOICE RESEARCH I	14.00	O	HT	07-MAY-2002
PUHE	BASIC STUDIES IN SPEECH COMMUNICATION AND VOICE RESEARCH	15.00	O	ET	07-MAY-2002
PUHE	INTERMEDIATE STUDIES IN SPEECH COMMUNICATION AND VOICE RESEARCH/SPEECH COMMUNICATION	25.00	O	ET	18-JUN-2003
Credit Total: Speech Communication and Voice Research					54.00
Credit Total: Institute of Speech Communication and Voice Research					54.00

Language Centre

=====

English

KKEN4	TEXT COMPREHENSION	2.00	K	2.5	13-DEC-2001
KKEN38	COMMUNICATIVE SKILLS	1.00	K	2	17-DEC-2001
Credit Total: English					3.00

Finnish

KKSU33	WRITTEN COMMUNICATION	2.00	K	HYV	26-NOV-2001
Credit Total: Finnish					2.00

French

KKRA3	TEXT COMPREHENSION	2.00	K	2-	22-APR-2002
Credit Total: French					2.00

Swedish

KKRU3K	WRITTEN PART	0.00	K	2+	10-DEC-2001
KKRU3S	ORAL PART	0.00	K	2+	19-DEC-2001
KKRU3	ORAL AND WRITTEN SKILLS	2.00	K	2	19-DEC-2001
Credit Total: Swedish					2.00
Credit Total: Language Centre					9.00

General Studies	:	1.00
Basic Studies	:	14.00
Intermediate Studies	:	96.00
Advanced Studies	:	44.00
Language Studies	:	10.00
Credit Total	:	165.00

ABBREVIATIONS. All courses taken by a student belong to a study block, which is the basic structural and thematic unit of the degree programme. The study blocks are classified with respect to their contents and position in the curriculum into the following and marked with their Finnish initials on the transcript:

Y General Studies	P Basic Studies	A Intermediate Studies
S Advanced Studies	K Language Studies	H Practical Training
V Preparatory Studies	J Postgraduate Studies	O Completed Study Blocks

GRADING OF COURSES AND THESES IN THE DESCENDING ORDER:

3, 3-, 2.5 or ET	excellent	L	Laudatur
2+, 2, 2- or HT	good	E	Eximia cum laude approbatur
1.5, 1+, 1, 1- or TT	satisfactory	M	Magna cum laude approbatur
		C	Cum laude approbatur
		N	Non sine laude approbatur
		B	Lubenter approbatur
		A	Approbatur

Furthermore the dichotomy pass/fail (HYV/HYL) is used in the course evaluation as such without grading to indicate that the student has fulfilled/not fulfilled the requirements set in the curriculum for the course.

Credits marked with 'transfer' or with 'K' after the study block initial are accredited to the degree from other institutions in Finland or abroad.

ECTS TRANSCRIPT SUPPLEMENT

TYPE OF EDUCATIONAL ESTABLISHMENT AND DEGREE PROGRAMMES

The University of Tampere is a multifaculty university with 5 faculties which award degrees in Economics and Business Administration, Education, Health Care, the Humanities, Medicine, Psychology, Sciences, Social Sciences, and Theatre and Drama. The Finnish university degrees correspond to Bachelor's, Master's and Doctor's degrees. In most fields, students can also take a voluntary Licentiate degree before the Doctor's degree.

WORKLOAD

The extent of a degree is given in credits. One credit corresponds to an average input of ca. 40 hours of work by the student in the form of lectures, seminars, exercises, independent study, written examinations, and research. The minimum requirement for the Bachelor's degree is 120 credits. In most cases the Master's degree requires 160 credits. One Finnish credit usually corresponds to 2.0 ECTS credits. However, in the faculty of medicine, in the department of mathematics, statistics and philosophy and departments of computer science, public law, and administrative sciences, as well as in the school of business administration one Finnish credit corresponds to 1.5 ECTS credits. At the University of Tampere the average annual workload is 25 Finnish credits. If in ECTS 60 credits represent the workload of an academic year, the average ratio between ECTS credits and Finnish credits is 2.5.

ABBREVIATIONS

All courses taken by a student belong to a study block, which is the basic structural and thematic unit of the degree programme. The study blocks are classified with respect to their contents and position in the curriculum into the following and marked with their Finnish initials on the transcript:

Y General Studies	P Basic Studies	A Intermediate Studies
S Advanced Studies	K Language Studies	H Practical Training
V Preparatory Studies	J Postgraduate Studies	O Completed Study Blocks

GRADING OF COURSES AND THESES IN THE DESCENDING ORDER:

Courses		Thesis
A = 3 or ET	excellent	A = L Laudatur
B = 3-, 2.5	very good	A = E Eximia cum laude approbatur
C = 2+, 2 or HT	good	B = M Magna cum laude approbatur
D = 2-, 1.5,	satisfactory	C = C Cum laude approbatur
E = 1 or 1- or TT	sufficient	D = N Non sine laude approbatur
		E = B Lubenter approbatur
		E = A Approbatur

Furthermore dichotomy pass / fail (HYV / HYL) is used in course evaluation. Credits marked with 'transfer' or with 'K' after the study block initial are accredited to the degree from other institutions in Finland or abroad.

LANGUAGE OF INSTRUCTION

The language of instruction is mainly Finnish. It can however vary according to the nature of the subject and the department. The courses in the International School of Social Sciences (ISSS) are taught solely in English, which is the most widely used foreign language of instruction.

2.
Oklevélmelléklet a Leideni Egyetemen (tervezet)

SUPPLEMENT BACHELORDIPLOMA

Preface

The purpose of this supplement is to provide sufficient independent data to improve the international transparency and fair academic and professional recognition of qualifications (diplomas, degrees, certificates etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. For those who are not familiar with the system of higher education in the Netherlands or Leiden University, an appendix with additional information has been added.

The holder of the qualification

Family name(s)

Given name(s)

Date of Birth

Place of Birth

Student ID number

Qualification-related information

<i>Qualification</i>	Bachelor
<i>Institution</i>	Universteit Leiden (Leiden University)
<i>Name study</i>	<Naam van de opleidingen (Name of the studie) >
<i>Accreditation</i>	<Name of the study> has been accredited by the Dutch National Accreditation Organisation (NAO) for the period of Januari 2002 to Januari 2008. After this period the accreditation will be renewed.
<i>Language</i>	<Language of instruction>
<i>Duration</i>	The official length of the programme is 180 ECTS credits in total (60 ECTS credits per academic year).
<i>Requirements</i>	The access requirements as described in the Education and Exam Regulation.
<i>Objectives</i>	The objectives as described in the Education and Exam Regulation.
<i>Further study</i>	Access to further studies
<i>Job market</i>	Access to job market
<i>Information</i>	Further information regarding the programme in question
<i>Address</i>	Further information can be obtained at the department in question: Witte Singel 25 Building 1173 2311 BG Leiden, The Netherlands Phone +31 71 527 2253

Student-related information

Main fields of study

<Main fields of studie>

Individual programme details and results

The following index lists the courses of the programme the student has attended, the number of ects-credits attributed to each course, the final mark the student has acquired for the course, and the level of the course, per academic year of study.

Year 1	Course	Ects	Mark	Level
Year 2	Course	Ects	Mark	Level
Year 3	Course	Ects	Mark	Level

Remarks

Courses from other universities

If relevant, the section below will list which of the courses were attended at other universities, as well as the name of these universities and the country they reside in.

Not applicable.

Elective courses and credits

The index below lists, if relevant, extra-curricular courses the student has attended, the number of ects-credits attributed to each course, the final mark the student has acquired for the course, and the level of the course. If any of the courses were attended at another university, they are listed in the index above.

Not applicable.

Certification of the supplement

Date

Signatures

Capacity

Chairman

Secretary

4

Naam van de student

Leiden University has almost fifteen thousand students and employs about five thousand people. It consists of nine Faculties, which offer a large number of programmes on both bachelor and master level in the fields of medicine, natural sciences, arts, humanities, philosophy, theology, archeology and social and behavioural sciences. Furthermore, Leiden University is a member of the League of European Research Universities (LERU), a small network of twelve top-ranking European universities advocating the interest of fundamental research and the role of research-intensive universities therein.

Course level structure specific to education at Leiden University

At Leiden University every course is categorised according to a level indication system. This system ensures objective course level requirements for each year of studies, in order to safeguard the high level of Leiden University's study programmes. The levels run from 100 to 600. Bachelor's programmes consist of courses on levels 100 - 200 - 300 - 400 and master's programmes consist of courses on levels 400 - 500 - 600.

100: didactically structured introductory course, no specific course requirements

200: introductory course, independent studying required

300: advanced course, course requirements: level 100 or 200

400: specialist course, course requirements: level 200 or 300

500: research-based course, course requirements: bachelor degree

600: academic specialist course, course requirements: level 400 or 500

The course level structure is also incorporated in the academic record of each student (paragraph 3.2).

Cum Laude at Leiden University

A student is awarded the classification 'Cum Laude' by the examining committee if the programme is completed with a high degree of excellence. If such is the case, the classification is added to the degree certificate. A further specified account of the calculation of this classification can be obtained from the examining committee in question.

The Education System in The Netherlands

The higher education system in the Netherlands is currently in a state of transition as a result of a European initiative known as the Bologna Process. Institutions involved in higher education in the Netherlands have been occupied with the implementation of necessary changes since the adoption of the Bologna Declaration. The Dutch Higher Education Act of 1993 has been revised to accommodate a degree structure including bachelor's and master's degrees, and higher education institutions have organised study programmes around a bachelor's or undergraduate phase and a master's or graduate phase. The bachelor/master system was officially introduced in the Netherlands at the beginning of the academic year 2002-2003. Students who enrolled while the 'old' system was in force will continue to study in the system in which they started however, meaning that both old and new systems will exist simultaneously for several more years. For this reason, both the old and new systems will be described here.

Primary and secondary education

Children are allowed to begin school at the age of four, but are not legally required to do so until the age of five. Primary education lasts eight years (of which seven are compulsory), in the last year of which pupils are advised as to the type of secondary education they should pursue.

Secondary education begins at the age of 12 and is compulsory until the age of 16. The system of secondary education consists of vocational and general programmes, or a combination of both. VMBO programmes (four years) combine general and vocational education, after which pupils can continue in senior secondary vocational education (MBO), lasting one-four years. The two general education programmes that grant admission to higher education are HAVO (five years) and VWO (six years). The VWO curriculum is a university preparatory programme, very selective in nature, and the only diploma granting direct admission to research universities. The last two years of HAVO and the last three years of VWO are referred to as the *tweede fase* (literally, second phase), or upper secondary education. During these years, pupils focus on one of four subject clusters (*profielen*) each of which emphasizes a certain field of study in addition to satisfying general education requirements. Each profile is designed to prepare pupils for related programmes of study at the tertiary level. A pupil enrolled in VWO or HAVO can choose from the following profiles:

- Nature and Technology (Natuur en Techniek)
- Nature and Health (Natuur en Gezondheid)
- Economics and Society (Economie en Maatschappij)
- Culture and Society (Cultuur en Maatschappij)

Pupils complete the requirements for at least one profile. This involves instruction in an average of 15 subjects, some of which are examined internally by the school, some of which (between 5-7 for HAVO, 6-8 for VWO) are examined both internally and during a final national examination.

Higher education

The Netherlands has a binary system of higher education, which includes academic education (*wetenschappelijk onderwijs*, WO), traditionally offered by research universities, and professional higher education (*hoger beroepsonderwijs* HBO), traditionally offered by *hogescholen*, or universities of professional education. The distinction between the two types of higher education will remain in the new bachelor/master

structure, but only to characterize the type of programme completed. As of 2002, both WO and HBO may be offered by both research universities and hogescholen. There are 14 research universities in the Netherlands, including one agricultural university, one open university and three universities offering programmes in engineering and natural sciences. The remaining nine universities offer programmes in general university disciplines. There are approximately 50 universities of professional education, which prepare students for particular professions and tend to be more practically oriented than research universities. The higher education system also includes a third branch with a relatively small number of students known as internationaal onderwijs (IO), or international education. IO offers advanced training courses primarily to foreign students, the emphasis of which may be either on research or the practical application of knowledge.

University Education up until 2002

Dutch universities provide education and conduct research in a wide range of disciplines including language and culture, behaviour and society, economics, law, medical and health sciences, natural sciences, engineering, and agriculture. Up until 2002, initial study programmes have lasted four years in most fields, but five years in agriculture, engineering, mathematics and most natural sciences, at the end of which the doctorale getuigschrift or doctoraal degree is awarded. Integrated study programmes in medical and health sciences, last either five years (dentistry), or six years (medicine, pharmacy, veterinary medicine). The first year of every programme is referred to as the propedeuse, which provides students with introductory courses fundamental to the discipline in question. After the propedeuse, a required component of every doctoraal programme is training in research methodology and the completion of a thesis.

Graduates of doctoraal programmes are permitted by law to use a particular title, depending on the discipline. Graduates in engineering and technology and agriculture and the natural environment receive the title of ingenieur, abbreviated to ir. Graduates in law obtain the title of meester, abbreviated to mr. Graduates in all other disciplines obtain the title of doctorandus, abbreviated to drs., and all graduates can opt to use the title Master (M.) Graduates are eligible for admission to the doctorate.

All universities in the Netherlands award the country's highest academic degree, the doctoraat, successful completion of which entitles use of the title doctor, abbreviated to dr. The process by which a doctorate is obtained is referred to as the promotie. The doctorate is primarily a research degree, for which a dissertation must be researched, written and publicly defended. The minimum amount of time required to complete a doctorate is 4 years.

HBO Education up until 2002

Dutch universities of professional education (in Dutch: hogeschool (singular) hogescholen (plural)) prepare students for a wide variety of careers in seven sectors: agriculture, engineering and technology, economics and business administration, health care, fine and performing arts, education/teacher training and social welfare. Initial study programmes last four years, at the end of which the Getuigschrift Hoger Beroepsonderwijs or HBO degree is awarded. The first year of every programme is referred to as the propedeuse, which provides students with introductory courses fundamental to the discipline in question. In addition to lectures, seminars, and independent study, students are required to complete an internship or work placement (stage) which normally takes up part of the third year of study, as well as a final project or a thesis, in the fourth year. Graduates of an HBO programme in engineering and technology and agriculture and the natural environment receive the title of ingenieur, abbreviated to ing. Graduates in all other disciplines obtain the title of baccalaureus, abbreviated to bc., and all graduates can opt to use the title Bachelor (B.) HBO graduates are

fully qualified to practise their profession without further study, licensing or registration with a professional association.

After 2002

Beginning with the academic year 2002-2003, degree programmes offered by research universities and universities of professional education are organized around a bachelor's or undergraduate phase and a master's or graduate phase. Degree programmes in medicine and veterinary medicine will continue to be offered as six-year integrated programmes until approximately 2007-2008. Programmes in pharmacy will continue to be six years, divided into a bachelor's and a master's phase (3+3 years). Although research universities primarily offer programmes with an academic emphasis, and universities of professional education with a more applied emphasis, the new legislation no longer restricts the provision of a certain type of programme to a particular type of institution. In other words, research universities may offer programmes in the applied arts and sciences, at both undergraduate and graduate levels, and universities of professional education may offer more academic programmes at the undergraduate and graduate levels. At present, it's impossible to predict the extent to which institutions will make use of this possibility and all programmes must be accredited by the Netherlands Accreditation Organisation (see section on Accreditation and Quality Assurance, further on). The doctor's degree will only be awarded by research universities in the way described above.

The focus of degree programmes determines the length of the programme and the degree obtained. A bachelor's programme in an academic discipline requires the completion of 180 ECTS credits (3 years) and graduates obtain the degree Bachelor of Arts/Bachelor of Science (BA/BSc), depending on the discipline. A bachelor's programme in a professional discipline requires the completion of 240 credits (4 years) and graduates obtain a degree indicating the field of study completed (Bachelor of Engineering, B Eng, Bachelor of Nursing, B Nursing). The title appropriate to the discipline in question (bc., ing.) may still be used.

A master's programme in an academic discipline requires the completion of 120 credits (two years) in the fields of engineering, math/natural sciences and agriculture and 60 credits (one year) in all other disciplines. Graduates obtain the degree of Master of Arts/Master of Science (MA/MSc). The title appropriate to the discipline in question (drs., mr., ir.) may still be used. A master's programme with a professional emphasis requires the completion of 60 credits (one year) and graduates obtain a degree indicating the field of study completed (Master of Social Work, MSW).

International Education

International Education is a special branch of Dutch higher education, originally designed for people from developing countries whose jobs require highly specialised knowledge. Problem-oriented courses and programmes of various types, including master's programmes, are offered in a wide range of specific fields. Courses are given in English, lasting from a few weeks to two years. With one exception (the Institute of Social Studies in The Hague), the institutes of international education do not offer PhD programmes themselves but have concluded agreements with Dutch universities about the admission of their students to the doctorate. Admission requirements vary according to the course in question, but in most cases a bachelor's degree or its equivalent is required for admission to a master's degree and a master's for admission to a Ph.D. An additional requirement is work experience. International education is subsidised by the government, which finances the costs of the institutes and provides scholarships for students.

Admissions Requirements to Higher Education

For admission to bachelor's programmes with an academic emphasis, students are required to have a VWO diploma or a HBO propedeuse diploma. The minimum admissions requirement to HBO is either a HAVO diploma or a specified type of MBO diploma, although approximately 40% of applicants have a VWO diploma. For admission to both types of higher education, pupils are required to have completed at least one of the profiles that fulfills the requirements for higher education programme in question. A *numerus fixus* applies for admission to certain programmes, primarily in the medical sciences, based on a weighted lottery. The only admissions requirement to the Open University is that applicants be at least 18 years of age.

For admission to all master's programmes, a bachelor's degree in one or more specified disciplines is required. Graduates with a bachelor's degree obtained in a professional discipline may have to complete additional requirements for admission to an MA/MSc degree programme with an academic focus.

Credit System and Grading

The workload is measured in credits (*studiepunten*), which includes both contact hours and hours spent studying and preparing assignments. Up until 2002, one credit represented one week of full-time study (40 hours). Study programmes offered by research universities and universities of professional education lasting four years require completion of a total of 168 credits, or 42 credits per year. The academic year is 42 weeks long.

Since 2002, the workload is measured in *ects-credits* (European Credit Transfer System), whereby 1 credit represents 28 hours of full-time study and 60 credits represents one year. The grading system has been the same for several decades and the scale is from 1 (very poor) to 10 (outstanding). The lowest passing grade is 6; 9's are seldom given and 10's are extremely rare.

Accreditation and Quality Assurance

Maintaining a guaranteed standard of higher education is achieved through a national system of legal regulation and quality control. The Ministry of Education, Culture and Science is responsible for legislation pertaining to education. The agriculture and public health ministries play an important role in monitoring the content of study programmes in their respective fields, and up until 2002, the VSNU, the Association of Universities in the Netherlands, and the HBO-raad, the Netherlands Association of Universities of Professional Education have been responsible for carrying out the system of quality assurance. This system has been recently converted into a system of accreditation, that aims to guarantee a high standard of quality of programmes offered in higher education. As of 2002, the responsibilities for accreditation have been allocated to the Netherlands Accreditation Organization (NAO). According to the section of the Dutch Higher Education Act dealing with the accreditation of higher education (2002), all degree programmes offered by research universities and universities of professional education will be evaluated according to established criteria, and programmes that meet those criteria will be accredited, i.e. recognised for a period of six years. Only accredited programmes will be eligible for government funding and students receive financial aid and will graduate with a recognised degree only when taking or after completing an accredited degree programme. Accredited programmes will be listed in the Central Register of Higher Education Study Programmes (CROHO) and the information will of course be available to the public. The NAO plans to review all study programmes by 2006. Before this time, all programmes that are registered in CROHO are recognised by law.

3. Oklevélmelléklet az Amszterdami Főiskolán

International Diploma Supplement

Name

Johanna C. van de Student

Date of birth

31 December 1978

1 |

Educational institution

Hogeschool van Amsterdam, Instituut voor Media en Informatie Management

Name of document

Getuigschrift Hoger Beroepsonderwijs

Study programme

Publishing, Media and Bookselling

Specialization

Editing / Production

Type of programme

professional degree programme

Length of programme

four years

Type of study

full-time

Duration of internship

six months

Date of completion

31 October 2002

Title conferred

Bachelor of Communication & Media Management

Academic status

eligible to pursue further studies, including Master degree programmes

Professional status

qualified for a profession related to the field of study

Amsterdam, 18 December 2002

the Board of Examiners,

International Diploma Supplement

Name

Johanna C. van de Student

Date of birth

31 December 1978

2 | The programme consisted of the following components.

<i>Subject</i>	<i>Credits</i>	<i>Grade</i>
First Year		
Projects		
Project Magazines	10	7
Project Book Club	10	7
Project CD-ROM for Media Advisers	10	7
Project Educational Publication	10	7
Editorial Skills		
Dutch Language	2.9	v
Reporting Skills	2.9	v
Editorial Skills 1	1.4	v
Editorial Skills 2	1.4	v
Business Administration		
Statistics	2.9	8
Law and Copyright	2.9	6
Automation		
Word Processing	1.4	v
Automation	1.4	6
Topics of General Interest	1.4	v
Introduction Programme	1.4	v
 Second, Third and Fourth Years		
Projects		
Project Scientific Journal on the Internet	8.6	6
Project Publishing Plan	8.6	7
Project Promotion Plan	8.6	7
Project Management Information	8.6	6
Project Producing a List of Translated Fiction	8.6	7
Case Study Multimedia Publishing	7.2	6
Editorial Skills		
Editorial Skills 3	2.9	v
Editorial Skills 4	2.9	v
Editorial Skills 5	1.4	v
Editorial Skills 6	2.9	v
Differentiation Subjects		
Market Research	4.3	8
Strategic Marketing	5.7	8
Culture		
Media and Culture	2.9	7

International Diploma Supplement

Name

Johanna C. van de Student

Date of birth

31 December 1978

3	Subject	Credits	Grade
	Production and Automation		
	Practice Report Lay-out	2.9	v
	Production Management	2.9	v
	Design	2.9	v
	Communication Skills		
	Individual Presentation	4.3	v
	English Language 1	1.4	7
	English Language 2	1.4	v
	English Language 3	5.7	6
	Optional Subjects		
	Advertiser Marketing	2.9	v
	Media Planning	2.9	v
	Optional Subject	5.7	v
	Traineeship		
	Retail Traineeship 2nd year	14.3	v
	Traineeship 3rd, 4th year	30	v
	Thesis		
	Thesis	28.6	8
	Oral Examination Thesis	1.4	8
	End of transcript		

Supplementary Information

4 |

Higher professional education in the Netherlands

There are two types of higher education in the Netherlands: *wetenschappelijk onderwijs* (WO), offered by research universities, and *hoger beroepsonderwijs* (HBO), offered by universities of professional education (*hogescholen*). The universities of professional education prepare students for particular professions and tend to be more practically oriented than research universities, where the emphasis is on theory and the generation of knowledge through research.

HBO education and WO education are regulated by the Higher Education and Research Act of 1993. Universities of professional education prepare students for a wide variety of careers in seven sectors: agriculture; engineering and technology; economics and business administration; health care; fine and performing arts; education/teacher training; and social welfare. HBO curricula combine theoretical education of a high academic standard with mandatory practical work outside the institution.

HBO graduates earn a *Bachelor* degree. HBO graduates in general fields are allowed to use the title *baccalaureus* (bc.), in technical fields the title *ingenieur* (ing.) instead of the *Bachelor* degree. Dutch degrees and titles are protected by law and may be conferred only by recognized institutions.

In most cases, HBO graduates are fully qualified to practice their profession without further study, licensing or registration with a professional association. In addition, their diploma qualifies them for several types of further study. Post-HBO courses varying in length from several days to two years are available. HBO graduates may also enrol in *Master* degree programmes.

HBO programmes require four years of full-time study. At the end of the first year (*propedeuse*), students are advised as to whether they can continue their studies before proceeding to the main phase of the programme, which takes three years. In addition to course work and practicals, the main phase consists of an internship or work placement (*stage*) in the third year of study, and a final project, including a thesis, in the fourth year.

Entrance requirements

Most first-year students are recent secondary-school graduates, admitted on the basis of one of several diplomas; *VWO* (six years of pre-university education), *HAVO* (five years of general secondary education) or *MBO* (three or four years of vocational education following four years of general secondary education). Applicants may also be required to have passed final secondary-school examinations in specific subjects, depending on the field in question. For some fields there are recommended rather than required subjects. Applicants over the age of 21 who do not have one of these diplomas may be admitted on the basis of an educational assessment (the '21+ entrance examination').

Workload

The workload is measured in credits (*studiepunten*), based on the *European Credit Transfer System*. One credit represents 28 hours of study, including contact hours and the number of hours considered necessary to master the material, prepare assignments and prepare for exams. A complete *HBO* study programme requires 240 credits, or 60 credits per year. A full-time load is 40 hours a week and an academic year is 42 weeks long.

System of assessment

In the Dutch system, individual courses are concluded with examinations (*tentamens*). Further requirements include a final project and a thesis, both of which draw upon practical experience as well as theoretical knowledge acquired in courses. The review of a student's progress to see if all requirements have been met is also referred to as an examination (*examen*).

Grading system

Grades are given from 1 (very poor) to 10 (outstanding). The lowest passing grade is 6; 9's are seldom given and 10's are extremely rare. Grading scales are generally absolute, as opposed to sliding scales in which students are measured against each other in terms of achievement.

The numerical marks in the student's transcript can be compared to the American grading system as follows:

8, 9 or 10	A	excellent
7	B	above average
6	C	average
5	D	below average
4 or less	F	fail

The non-numerical marks in the student's transcript have the following meaning:

v	passed
---	--------

The institution - Hogeschool van Amsterdam

university of professional education

With its more than 18,000 students, 2,000 staff members and 60 study programmes, the Hogeschool van Amsterdam is the largest university of professional education in the greater Amsterdam area.

The 60 study programmes are offered within different clusters:

- business and management studies
- economics
- education
- engineering
- health care
- information sciences
- maritime sciences
- social welfare
- fashion, management and design

Learning to learn

All institutes of the Hogeschool van Amsterdam implemented a 'learning centered' didactical work model, in which the students assume responsibility for their own learning process.

The learning to learn concept is based on the following assumptions:

- as the student moves through his years of study, he is increasingly capable of organising and controlling his own learning process
- meta skills, both cognitive and affective, are an essential part of the curriculum
- the current challenges in the real life professional environment are the starting point of the teaching and learning processes
- assessment and self assessment (including using peers) are an essential part of the reviewing and examination procedures
- the teachers and staff members, in their role of coach, expert and role model, facilitate the learning process by process oriented instructions. The staff is responsible for the shaping and the monitoring of the individual learning process of each student.

The study programme - Publishing, Media and Bookselling

(Boekhandel en Uitgeverij)

Graduates of the four-year, full-time Publishing, Media and Bookselling programme are trained for a wide range of jobs in the following areas:

- traditional publishing and corporate publishing, handling folio products (books, newspapers, magazines and brochures), in both the profit and non-profit sectors
- publishing of electronic information products (databases, CD-ROM, CD-i, Internet publications)
- marketing and distribution of the products mentioned above
- retail trade in these products

Jobs

- publisher, assistant publisher, packager
- general editor, copy editor, publishing editor, editor-in-chief, editorial coordinator, proofreader
- Website manager, Website editor
- artwork editor, picture researcher
- production supervisor, production coordinator, DTPer, layout person
- sales manager, sales staff, PR staff, sales representative
- magazine manager, junior magazine manager, sales manager
- marketing manager, marketing staff, marketing assistant
- marketing specialist, assistant marketing specialist, media planner, advertising salesperson
- bookseller, purchasing manager, departmental manager

Structure of the programme

Students can choose from the following specializations:

- Editing / Production, which focuses on devising, generating and producing publications (folio or electronic)
- Marketing of information products / Bookselling, which is geared strongly towards the external environment of the information company (marketing, purchasing, sales and distribution)

Within these two areas, students may further specialize in a field of their own choice. The results of which are included in a final project / thesis. As a rule, the research is related to an assignment from the professional field.

For further information, please contact

Hogeschool van Amsterdam
Information Centre
P.O.Box 931
1000 AX Amsterdam
The Netherlands

Telephone +31 20 5702 525
Telefax +31 20 5702 510

Internet www.hva.nl

This is to certify that the
International Diploma Supplements

issued by
the Hogeschool van Amsterdam

to students who have completed the programme in
Publishing, Media and Bookselling

were designed by Nuffic, on the basis of the model adopted in 1988 by
UNESCO and the Council of Europe.

No rights may be derived from this document.

The information contained in this document serves only as a supplement to the information contained in the official diploma issued to the bearer. Nuffic cannot be held responsible for the correctness of data pertaining exclusively to the person in whose name this document was compiled.

The English translations in this document were provided by Babel Taaltrainingen en Vertalingen B.V. in Utrecht, the Netherlands, and approved by Nuffic. Nuffic has granted Babel the exclusive right to use the Nuffic IDS model.

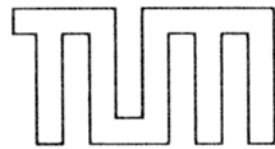
© 1997 Nuffic

The Netherlands organization for international cooperation in higher education (Nuffic) was founded in 1952 by the Dutch universities with the aim of promoting and facilitating international cooperation in higher education and research.

Nuffic's Department for International Credential Evaluation serves educational institutions and other official bodies in an advisory capacity by evaluating foreign educational credentials. As a service to authorities and institutions in other countries, it provides information on Dutch educational qualifications and how they may be interpreted in an international context.

Nuffic has been designated the Dutch National Academic Recognition Information Centre (NARIC) within the networks of the European Communities, the Council of Europe, and UNESCO by the Ministry of Education, Culture and Science (OCW).

4.
Oklevélmelléklet a Müncheni Műszaki Egyetemen



TECHNISCHE
UNIVERSITÄT
MÜNCHEN

Diploma Supplement



	DIPLOMA SUPPLEMENT	TECHNISCHE UNIVERSITÄT MÜNCHEN
This Diploma Supplement model was developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international „transparency“ and fair academic and professional recognition of qualifications (diplomas, degrees, certificates, etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It should be free from any value judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why. Information in italics is in original language – (*) = if applicable – (n.a.) = not applicable		
1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION		
1.1. Family Name / 1.2. First Name:	<i>Mustermann, Thomas</i>	
1.3. Date, Place, Country of Birth:	February 19, 1975, Munich / Germany	
1.4. Student Number or Code*:	Matr.Nr. 1234567	
2. INFORMATION IDENTIFYING THE QUALIFICATION		
2.1. Name of Qualification (Full, Abbreviated):	Diploma in Engineering Sciences	
Name of Title* (Full, Abbreviated):	<i>Diplom-Ingenieur (Dipl.-Ing.)</i>	
2.2. Main Field(s) of Study for the Qualification:	Mechanical Engineering	
2.3. Name of Institution Awarding Qualification:	<i>Technische Universität München</i>	
Status (Type / Control):	Department of Mechanical Engineering University / State Institution	
2.4. Name of Institution Administering Studies*:	<i>(same)</i>	
Status (Type / Control):	<i>(same / same)</i>	
2.5. Language(s) of Instruction/ Examination:	German	
3. INFORMATION ON THE LEVEL OF THE QUALIFICATION		
3.1. Level of Qualification:	Integrated „long“ program (4.5 years), single subject, with thesis, cf. Sec. 8.41	
3.2. Official Length of Programme:	4.5 years, full time	
3.3. Access Requirement(s):	General / Specialised Higher Education Entrance Qualification (<i>Abitur</i>), cf. Sec. 8.7	
4. INFORMATION ON THE CONTENTS AND RESULTS GAINED		
4.1. Mode of Study:	Full time, 4.5 years. 18 weeks of practical experiences in industry are prescribed.	
4.2. Program Requirements:	The study is divided into two stages. The first stage (2 years) focuses on broad orientations and foundations (i.e. mathematical and technical basis) and ends with a intermediate examination (<i>Diplom-Vorprüfung</i>). Passing this examination is prerequisite to enter the second stage of advanced studies and specialisations. Students have to elect two of 34 specialisation fields and then to choose in these specialisation fields a variety of lectures, exercises and practical courses. Two term projects are obligatory - one construction and one theoretical project. The second stage ends with the final examination (<i>Diplom-Hauptprüfung</i>). Finally the students have to submit a diploma thesis (<i>Diplomarbeit</i> – duration 6 months) – mostly basing on own research activities in one of the department's chairs.	
4.3. Program Details:	See Transcript for list of courses and grades; and „ <i>Prüfungszeugnis</i> “ (Final Examination Certificate) for subjects offered in final examinations (written and oral), and topics of thesis, including evaluations.	
4.4. Grading Scheme, grade distribution guidance:	See back side of the cover „Diploma Supplement“	
4.5. Overall Classification:	1,5 in the grading scheme. Degree: magna cum laude	

5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION		
	5.1. Access to Further Study:	Qualifies to apply for admission for doctoral work (thesis research) – Prerequisite: Overall grade of at least 2.5 in the grading scheme and acceptance of doctoral thesis research project.
	5.2. Professional Status:	The <i>Diplom</i> -degree in an engineering discipline entitles its holder to the legally protected professional title „ <i>Ingenieur</i> “ and to exercise professional work in the fields of engineering for which the degree was awarded.
6. ADDITIONAL INFORMATION		
	6.1. Additional Information:	
	6.2. Additional Information Sources:	On the institution: www.mw.tum.de , for national information sources cf. Sec. 8.8
7. CERTIFICATION OF THE SUPPLEMENT		
	This Diploma Supplement refers to the following original documents: <i>Diplomzeugnis</i>, Translation of the „<i>Diplomzeugnis</i>“ (Grades), Explanation Report on Lectures, Laboratories, and Diploma Thesis, Grading Scheme of the <i>Technische Universität München</i> Garching, 2003-11-06	
	Official Stamp/Seal	Prof. Dr. rer. nat. Heiner Bubb Chairman Examination Committee
8. INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM: GERMANY		
	See addendum	

8. INFORMATION ON THE GERMAN HIGHER EDUCATION SYSTEM¹

8.1. Types of Institutions and Institutional Control

Higher education (HE) studies in Germany are offered at three types of *Hochschulen*²:

- *Universitäten* (Universities), including various specialized institutions, comprise the whole range of academic disciplines. In the German tradition, universities are also institutional foci of, in particular, basic research, so that advanced stages of study have strong theoretical orientations and research-oriented components.
- *Fachhochschulen* (Universities of Applied Sciences): Programs concentrate in engineering and other technical disciplines, business-related studies, social work, and design areas. The common mission of applied research and development implies a distinct application-oriented focus and professional character of studies, which include one or two semesters of integrated and supervised work assignments in industry, enterprises or other relevant institutions.
- *Kunst- und Musikhochschulen* (Colleges of Art/Music, etc.) offer graduate studies for artistic careers in fine arts, performing arts and music; in such fields as directing, production, writing in theatre, film, and other media; and in a variety of design areas, architecture, media and communication.

¹ The information covers only aspects directly relevant to purposes of the Diploma Supplement. All information as of 1 Jan 2000.

² Hochschule is the generic term for higher education institutions.

HE institutions are either state or state-recognized institutions. In their operations, including the organization of studies and the designation and award of degrees, they are both subject to HE legislation.

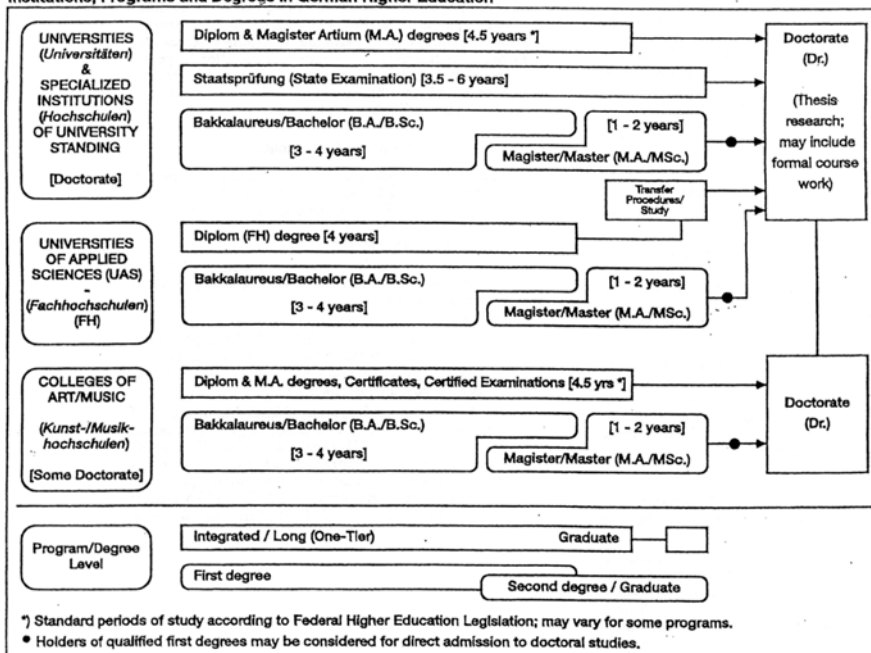
8.2 Types of programs and degrees awarded

- Studies in all three types of institutions are traditionally offered in integrated "long" (one-tier) programs leading to *Diplom-* or *Magister Artium* degrees or completion by a *Staatsprüfung* (State Examination).
- In 1998, a new scheme of first- and second-level degree programs (*Bakkalaureus/Bachelor* and *Magister/Master*) was introduced to be offered parallel to or in lieu of established integrated "long" programs. While these programs are designed to provide enlarged variety and flexibility to students in planning and pursuing educational objectives, they enhance also international compatibility of studies.
- For details cf. Sec. 8.41 and Sec. 8.42, respectively. Table 1 provides a synoptic summary.

8.3 Approval/Accreditation of Programs and Degrees

To ensure quality and comparability of qualifications, the organization of studies and general degree requirements have to conform to principles and regulations jointly established by the Standing Conference of Ministers of

Institutions, Programs and Degrees in German Higher Education



* This text has been officially approved by the *Kultusministerkonferenz* (KMK) and the *Hochschulrektorenkonferenz* (HRK) - cf. sec. 8.8 - as description of the German higher education system to be included as Section 8/National Statement of the European Council/European Union/UNESCO *Diploma Supplement*.

Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany (KMK) and the Association of German Universities and other Higher Education Institutions (HRK). In 1999, a system of accreditation for programs of study has become operational under the control of an Accreditation Council at national level. Programs and qualifications accredited under this scheme are designated accordingly in the Diploma Supplement.

8.4 Organization of Studies

8.4.1 Integrated "Long" Programs (One-Tier):

Diplom degrees, Magister Artium, Staatsprüfung

Studies are either mono-disciplinary (single subject, *Diplom* degrees, most programs completed by a *Staatsprüfung*) or comprise a combination of either two major or one major and two minor fields (*Magister Artium*). As common characteristics, in the absence of intermediate (first-level) degrees, studies are divided into two stages. The first stage (1.5 to 2 years) focuses - without any components of general education - on broad orientations and foundations of the field(s) of study including propaedeutical subjects. An Intermediate Examination (*Diplom-Vorprüfung* for *Diplom* degrees; *Zwischenprüfung* or credit requirements for the M.A.) is prerequisite to enter the second stage of advanced studies and specializations. Degree requirements always include submission of a thesis (up to 6 months duration) and comprehensive final written and oral examinations. Similar regulations apply to studies leading to a *Staatsprüfung*.

- Studies at *Universities* last usually 4.5 years (*Diplom* degree, *Magister Artium*) or 3.5 to 6 years (*Staatsprüfung*). The *Diplom* degree is awarded in engineering disciplines, the exact/natural and economic sciences. In the humanities, the corresponding degree is usually the *Magister Artium* (M.A.). In the social sciences, the practice varies as a matter of institutional traditions. Studies preparing for the legal, medical, pharmaceutical and teaching professions are completed by a *Staatsprüfung*. The three qualifications are academically equivalent. As the final (and only) degrees offered in these programs at graduate-level, they qualify to apply for admission to doctoral studies, cf. Sec. 8.5.
- Studies at *Fachhochschulen* (FH) /Universities of Applied Sciences (UAS) last 4 years and lead to a *Diplom* (FH) degree. While the FH/UAS are non-doctorate granting institutions, qualified graduates may pursue doctoral work at doctorate-granting institutions, cf. Sec. 8.5.
- Studies at *Kunst- und Musikhochschulen* (Colleges of Art/Music, etc.) are more flexible in their organization, depending on the field and individual objectives. In addition to *Diplom*/*Magister* degrees, awards include Certificates and Certified Examinations for specialized areas and professional purposes.

8.4.2 First/Second Degree Programs (Two-tier):

Bakkalaureus/Bachelor, Magister/Master degrees

These programs apply to all three types of institutions. Their organization makes use of credit point systems and modular components. First degree programs (3 to 4 years) lead to *Bakkalaureus*/Bachelor degrees (B.A., B.Sc.). Graduate second degree programs (1 to 2 years) lead to *Magister*/Master degrees (M.A., M.Sc.). Both may be awarded in dedicated form to indicate particular

specializations or applied/professional orientations (B./M. of ...; B.A., B.Sc. or M.A., M.Sc. in ...). All degrees include a thesis requirement.

8.5 Doctorate

Universities, most specialized institutions and some Colleges of Art/Music are doctorate-granting institutions. Formal prerequisite for admission to doctoral work is a qualified *Diplom* or *Magister*/Master degree, a *Staatsprüfung*, or a foreign equivalent. Admission further requires the acceptance of the Dissertation research project by a supervisor. Holders of a qualified *Diplom* (FH) degree or other first degrees may be admitted for doctoral studies with specified additional requirements.

8.6 Grading Scheme

The grading scheme usually comprises five levels (with numerical equivalents; intermediate grades may be given): "Sehr Gut" (1) = Very Good; "Gut" (2) = Good; "Befriedigend" (3) = Satisfactory; "Ausreichend" (4) = Sufficient; "Nicht ausreichend" (5) = Non-Sufficient/Fail. The minimum passing grade is "Ausreichend" (4). Verbal designations of grades may vary in some cases and for doctoral degrees. Some institutions may also use the ECTS grading scheme.

8.7 Access to Higher Education

The General Higher Education Entrance Qualification (*Allgemeine Hochschulreife, Abitur*) after 12 to 13 years of schooling gives access to all higher education studies. Specialized variants (*Fachgebundene Hochschulreife*) allow for admission to particular disciplines. Access to *Fachhochschulen*/(UAS) is also possible after 12 years (*Fachhochschulreife*). Admission to Colleges of Art/Music may be based on other or require additional evidence demonstrating individual aptitude.

8.8 National Sources of Information

- Kultusministerkonferenz (KMK) [Standing Conference of Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany] - Lennéstrasse 6, D-53113 Bonn; Fax: +49/[0]228/501-229; with
 - Central Office for Foreign Education (ZaB) as German NARIC and ENIC; www.kmk.org; E-Mail: zab@kmk.org
 - "Documentation and Educational Information Service" as German EURYDICE-Unit, providing the national dossier on the education system (EURYBASE, annual update, www.eurydice.org; E-Mail eurydice@kmk.org).
- Hochschulrektorenkonferenz (HRK) [Association of German Universities and other Higher Education Institutions]. Its "Higher Education Compass" (www.higher-education-compass.hrk.de) features comprehensive information on institutions, programs of study, etc. Ahrstrasse 39, D-53175 Bonn; Fax: +49/[0]228 / 887-210; E-Mail: sekr@hrk.de

DSDoc 01/03.00



Herrn
Thomas Mustermann
L. f. Thermodynamik
im Hause

Certification

We hereby certify that the diploma in mechanical engineering according to the bylaws of the Technische Universität München is equivalent to the master's degree of any university-level institution.

Garching, 2003-11-06

Dr. Karl-Werner Müller

Secretary of the Examination Board
for Mechanical Engineering



TECHNISCHE
UNIVERSITÄT
MÜNCHEN

GRADES

Diploma Examination
in "Mechanical Engineering"

Mr.

Thomas Mustermann

born on February 19, 1975
in Munich / Germany

has completed all requirements for the
Diploma Examination
according to the bylaws of the
Technische Universität München
with the final grade

„magna cum laude“

The individual grades for each subject
as noted in the protocol are enclosed.

Garching, May 27, 2002

Chairman of the Examination Board for
Mechanical Engineering

Signed by
Univ. Prof. Dr. rer. nat. Heiner Bubb

Mr.

Thomas Mustermann

received the following grades for the diploma examination in „Mechanical Engineering“:

Areas of Specialization:		Systematic Product Design Machine Engineering		
Subjects	Weight	Grade	ECTS-Credits	
A: Core Subjects				
1. Fluid Mechanics II	3	1,7*	6	
2. Mechanics of Solids	3	1,6	6	
3. Methods of Product Development	3	2,0	6	
B: Compulsory and Optional Subjects				
1. Heat and Mass Transfer	3	1,3	6	
2. System engineering for vehicle drive lines	3	1,0	6	
3. Automation Technology	3	1,7	6	
4. Electrical Drives for Mechanical Engineers	3	2,3	6	
5. Gasturbines	3	1,7	6	
6. Basics of Motor Vehicle Construction	3	1,0	6	
7. Lightweight structures I	3	1,3	6	
8. Oilhydraulic Power and Control	3	2,7	6	
9. Product Development and Design	3	2,3	6	
10. Project Management	2	1,7	4	
11. Automatic Control Systems	3	2,0*	6	
12. Cutting Technologies	3	3,0	6	
13. Metal forming	3	2,0	6	
14. Combustion engines	3	1,3	6	
15. Heat Transfer Phenomena	3	2,3*	6	
C: Term Projects				
1. Thermodynamics		1,0	10	
2. Agricultural Machinery - Construction		1,0	10	
D: Diploma Thesis				
Untersuchungen über die Stofffülle von Diplomarbeiten		1,0	30	
Final Grade: 1,5 The degree is awarded „magna cum laude“				
The final grade is composed to 68% out of the graded exams taken during the main course of study, to 12% out of the term projects and to 20% out of the graded diploma thesis (paragraph 55 section 2 of the examination regulations for the diploma and bachelor's program on Mechanical Engineering).				
*: Marked grades are performed abroad and transformed into the German grading scheme.				

E: Additional Subjects / Practical Courses

1. Drive Line Systems (Practical Course)	2,0	5
2. Automation Technology (Practical Course)	1,7	5
3. Computer Integrated Product Development - CAD (Practical Course)	2,0	5
4. Automatic Control Systems (Practical Course)	1,3	5
5. English for Science and Technology I	1,3	4

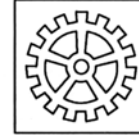
F: Practical Experience in Industry

26 weeks	26
Total ECTS-Credits	206

Garching, May 27, 2002

Authorized by: The Examination Office of the
Technische Universität München

Signed by Government Administrator (Scholz)



Explanation Report
on
Lectures, Laboratories, and Diploma Thesis

Thomas Mustermann
born on February 19, 1975 in Munich / Germany

A: Lectures and Tutorials:

1. Fluid Mechanics II

3 hours/week

Aerostatics: thermodynamical relations, fundamental equations of aerostatics, application to the atmosphere. One-dimensional compressible flows: speed of sound, Mach and Laval number, isentropic flows, Condi nozzle, shock waves. Potential theory: fundamental equations of three-dimensional inviscid fluids (conservation laws), rotational and irrotational flows, laws of rotation, velocity potential, stream function, two-dimensional flows (method of singularities), Kutta-Joukowski theorem, d'Alembert's Paradox. Vortex flow: circulation, vortex filament, induced velocity field, the Biot-Savart law, Stokes' theorem. Introduction to Aerodynamics: function of aircraft components, equilibrium of forces during steady flight, airfoil and wing geometry, pressure distribution on the airfoil, lift, drag.

2. Mechanics of Solids

3 hours/week

Material-independent fundamentals of 3-dimensional continuum mechanics: Stresses, strains, equilibrium, compatibility, balance of external and internal work, generalized continua: concept of generalized stresses and strains, beam and plate as examples. Elastic materials: General definition; 3-dimensional linear and isotropic elasticity with application to thick walled tube under internal and external pressure, torsion of wharping rods, equations of LAME and NAVIER; beam and plate as generalized elastic continua.

Dynamics of mechanical systems. Relative kinematics and the principles of linear and angular momenta, Lagrange equations. Eigenbehaviour of linear vibration systems, questions concerning stability, approximation methods according to Ritz and Galerkin for continuous vibration systems. Nonlinear vibrations classic approximations, stability according to Ljapunov, mechanisms that cause vibrations.

3. Methods of Product Development

3 hours/week

Contents of the lecture are basic working and problem solving methods for the successful development of products. Based on basic methods (black box, point rating, abstraction etc.), important methods, that are used in industry, are exemplarily procured and deepened in case scenarios (QFD, morphology, methods on contradictions etc.). Starting from the idea of Systems Engineering, the emphasis is on methods for clarification of the task, finding solutions (intuitively and systematically), as well as for assessment of alternatives and choice of solutions. Complementary methods serve the effective and efficient controlling and timing of development and design processes.

4. Heat and Mass Transfer

3 hours/week

Conduction: Numerical methods. Steady-state conduction in fins and extended surfaces. Transient conduction: phase transition as thermal energy generation.

Convection: Heat transfer at forced convection: Boundary layer considerations, plane wall, internal flow in tubes and ducts, flat plate in parallel flow, external flow. Free convection: Vertical plate, external flow, horizontal and vertical gap. Boiling and condensation: Boiling phenomena, nucleation, formation of bubbles, film boiling. Heat transfer at free and forced convection nucleate boiling. Heat

transfer at spray cooling and under post-dryout condition. Condensation: Dropwise condensation, heat transfer at laminar and turbulent film condensation. Heat exchangers.
 Radiation: Blackbody radiation, directional radiation, radiation of technical surfaces: view factors, gas radiation.
 Mass Transfer: Diffusion and Ficks law, convective mass transfer, equimolar diffusion, analogy of heat-, mass- and momentum transfer, one-sided mass transfer, Stefans law.

5. System engineering for vehicle drive lines

3 hours/week

-requirements for vehicle drive lines -systematology for passenger car transmissions -configuration of transmissions, i-v-diagram -synchronisations -epicyclic gears, kinematic, torque- and powerflow, efficiency -electronic and hydraulic control units for automatic transmissions -hybrid drivelines for passenger cars

6. Automation Technology

3 hours/week
 The lecture deals with the components used to automate machines and installations. At first an overall view is given about the different sorts of automation. Afterwards the sensors and actors as the interface between the technical process and information computing are presented. In a further part, the four levels of industrial communication are discussed. The lecture also considers the co operation between different components in an automation system. It describes the methodical way for conception of automation systems from requirement analysis, design, implementation and test to commissioning. Industrial examples are regarded in detail. Additionally, the basics of project management are introduced.

7. Electrical Drives for Mechanical Engineers

3 hours/week

The lecture gives a survey of modern electrical drives technology which enables the mechanical engineer to select dc and ac motors, the suitable power converters as well as the controls for the design of devices or plants. The following points are discussed:
 Electrical motor and mechanical processing machine as a system: Motion equations, static speed-torque characteristics, stability, dynamic operation. Heat losses and motor dimension-ing. Shunt- and series wound dc machines: Method of functioning and open loop speed control. Introduction to power electronics: Survey of power semiconductors and their static characteristics. Converters for dc machines: Line-commutated 1- to 4-quadrant converters and choppers. Induction motors and synchronous motors: Method of functioning and open loop speed control. Variable frequency converters: Voltage and current source dc-link converters, inverters with pulse width modulation, cyclo-converters. Closed loop control of electrical drives: Principle of cascaded control, step responses and their characteristic values, analog and digital controllers, current, torque, speed and position controls of dc-machines, field oriented controls with asynchronous and synchronous motors.

8. Gasturbines

3 hours/week

Introduction: Principles of gas turbines and their components. Applications and historic overview. Thermodynamic cycle of gas turbines: Fundamentals of thermogasdynamics. Ideal and actual working cycles, optimization. Efficiency augmentation: heat exchanger, intercooler, and sequential combustion. Gas turbine design, components, and system aspects Fundamentals of turbomachinery: energy transfer, parameters, velocity triangles. Compressor: centrifugal and axial flow compressor, characteristics, stability. Combustion chamber: design criteria, fuels, emissions. Turbines: cooled and non-cooled turbine stage, characteristics. Design aspects, cooling, air and oil system. Performance characteristics: Performance analysis of gas turbines. Control and condition monitoring. Examples representative gas turbines.

9. Basics of Motor Vehicle Construction

3 hours/week; ECTS:

Wheels and tires: Structural design, longitudinally and laterally adhesion ratios between tires and road surface - Forces on the vehicle: Tractive resistance - Vehicle propulsion: Requirements for the drive engine, mechanical and hydrodynamic clutches, gearbox ratios and design of mechanical transmission, hydrodynamic torque converter, automatic transmissions for passenger cars and trucks - Brake systems: design and structure of hydraulic service brake systems, time performance, brake balance, antilock braking systems, overview of pneumatic brake systems - Suspension and damping: Improve-ment of ride comfort and safety, layout of suspension and damping, function of

the components - Steering and course holding: Cornering at low and high speed, vehicle handling qualities and measures to have influence on them, structure of wheel suspensions and steering – Design of road vehicles: Structures of passenger cars and trucks, occupant-protection systems, compatibility of different heavy cars.

10. Lightweight structures I

3 hours/week

typical designs and materials applied in lightweight structures in aerospace, vehicles and special designs; essentials of tensor and matrix algebra and engineering mechanics (anisotropic law of materials, principle of virtual work); finite element methods in statics; essentials of finite element methods in eigendynamics; typical design measures to improve structural performance in statics and eigendynamics; basics of structural reliability. The theory is highlighted with different practical examples in different fields (aerospace, vehicles) as well as life demonstrations with a representative generic finite element model for statics and eigendynamics analysis.

11. Oilhydraulic Power and Control

3 hours/week

Basic principle, hydrostatic fluids, fundamentals of fluid and friction mechanics, ISO-symbols, pumps and motors, cylinder, control valves, connecting elements, basic circuits, control principles (incl. electrohydraulics), building up hydrostatic systems, analysis of typical applications (system architecture, function, operational characteristics): aircrafts, agricultural machinery, construction machinery, municipal vehicles, passenger cars, trucks etc.

12. Product Development and Design

3 hours/week

Topic of the lecture is the systematic development of innovative products. The path from an idea of the product via the conceptional design to the final realization, regarding the whole product life cycle, is centred. Thereby, the situative arrangement of development processes is an important aspect. Other main elements of the lecture are the general design methodology (functional regard, physical effects, variation etc.), Design to X (Manufacturing, Security, Environment etc.), the specific use of variants, and legal general conditions. The lecture "Methods of Product Development" is recommended additionally.

13. Project Management

2 hours/week

In this lecture "Project Management" methods and tools for planning and controlling projects successfully are explained. In addition to project organisation and guidance models, psychosocial facts and their influence on an effective and efficient project are taught. The lecture starts with a full time workshop

14. Automatic Control Systems

3 hours/week

Mathematical models of mechanical, electrical and hydraulic control system components. Linearization of nonlinear systems using Taylor series. Laplace transformation and transfer functions. Second order systems. Final value theorem. Block diagram schematic and block diagram reductions. Time domain and frequency domain representation. Closed Loop Systems. Time response. Stability analysis in the time domain. Routh Hurwitz Test. Bode diagrams. Gain margin and phase margin. Nyquist criterion. Root locus techniques. Controller design using root locus plots and bode diagrams. PID-Controller. Phase-lead and phase-lag compensation components. Discretization of time-continuous systems. Shannon-theorem. State variable representation. Transfer functions from state space models.

15. Cutting Technologies

3 hours/week

In this course the basics of cutting technologies (kinetics, geometry, chip formation and chip types, cutting force calculation, cutting materials) are treated. Furthermore metal cutting machine tools for the handling with geometrically well-defined and not well-defined tool edges (turning, milling, sawing, drilling, grinding, honing, lapping), as well as machine tools for thread production and gear cutting are discussed. On the basis of a general process specification the characteristic modules and auxiliary facilities of the respective type of machine are described and its possible designs are derived.

16. Metal forming

3 hours/week

Constitution of metals and principles of deformation mechanism. Stress and Strain under ideal respective practical metal forming conditions. Metal forming basics, various methods of forming and cutting

17. Combustion engines

3 hours/week

Basic thermodynamic considerations - Gas exchange losses and control devices in two and four-stroke engines - The heat release and its influence on the internal process - Real indicator diagram - Ignition of hydrocarbons - Combustion in gasoline and diesel engines: Mixture formation and combustion differences - hybrid engines - fuels: Structures, production, chemical and physical behavior - Exhaust emissions of combustion engines: Formation, composition, measuring methods, measures for reduction, legal regulations - turbocharging: Interaction of engine and compressor, different turbocharging methods, compound operation - gas turbine - Stirling engine.

18. Heat Transfer Phenomena

3 hours/week

Fourier's law, one-dimensional steady-state conduction with and without thermal energy generation, two-dimensional conduction, transient conduction of the semi-infinite solid, plane wall, cylinder and sphere, lumped capacitance method

Convection:

Fundamental equations, conservation laws for mass, momentum and energy, dimensionless characteristic numbers derived from the fundamental equations and the similitude theory. Heat transfer at forced convection: Boundary layer considerations, plane wall, internal flow in tubes and ducts, flat plate in parallel flow, external flow. Fundamentals of free convection.

Radiation:

Fundamentals and definitions, Fundamentals of: Blackbody radiation, directional radiation, radiation of technical surfaces.

B: Practical Courses, Laboratories:

1. Drive Line Systems (Practical Course)

4 hours/week

The practical course „Drive Line Systems“ is organised within a co-operation between the three chairs fml, fzg, ltm of the institute for machine technology.

Especially the certain needs of drive lines for the machine technology should be the topics of that course. Most important in present time is to think in systems and therefore to know the contribution of mechanical, electronical and informatical components within drive line systems. Not only the actoring parts like electric drives should be part of that course, the sensoric parts, which are enormously important for controlled processes should be treated as well.

The topics of the units are:

1. measuring technique (sensors)
2. electric drives (actor)
3. measurement of friction factors
4. hydraulic control
5. PLC / electronic control
6. Strength of mechanical parts (gear wheel)

2. Automation Technology (Practical Course)

4 hours/week

The target of the practical course in automation technology is to deepen the theoretically contents of the lecture on automation technology and to make clear their use in practice. Further it shall serve to give all interested students from other fields of mechanical engineering a look at automation technology in practice. After 7 dates, each 4 hours long, the complete plant shall be in work. The plant is divided into 4 stations, step by step small bottles are filled with a synthetic granulate, are locked with lids and are put on small carriers, 6 pieces together on each. At each station 2 students work together as a team.

3. Computer Integrated Product Development - CAD (Practical Course)

4 hours/week

This practical course provides an overview of the use of modern computer-based tools in product development. Main content is the education in a parametrical, volume-orientated 3D-CAD-System. Supported by tutors, the participants learn about the possibilities of modelling component parts and assemblies as well as the creation of drawings in CAD-systems, exemplified by a Stirling motor. Special emphasis lies on the systematically and logical set-up of the model.

In the second half of the practical course, the participants look at the generation of free-form surfaces and the generating of data for numerically controlled machines. Finally, a product data management system (PDM), that is used for the administration of the data within the practical course, will be configured.

4. Automatic Control Systems (Practical Course)

4 hours/week

The practical course aims at illustrating the issues of the corresponding lecture. It consists of the following six parts:

- Control of the water level in a pump station
- Speed control of a water turbine
- Control of the pressure in a large container
- Control of the pH-value
- Control of the water level by an industrial controller
- SPS for the position control with pneumatic component

C: Term Projects and Diploma Thesis:

Every student has to complete two term projects and one diploma thesis.

The extent of each term project should not exceed 250 hours of work.

The diploma project starts after the final examinations. It has a normal duration of 6 months.

Term Project 1:

Area: Thermodynamics

Title (if available):

n.a.

Term Project 2:

Area: Agricultural Machinery - Construction

Title (if available):

n.a.

Diploma Thesis:

Title:

Untersuchungen über die Stofffülle von Diplomarbeiten

Abstract (if available):

n.a.

Garching, 2003-11-06

Dr. Karl-Werner Müller

Secretary of the Examination Board

Dr. Karl-Werner Müller
Schriftführer Hauptprüfungsausschuss MW
Zimmernummer: MW 2013

Tel.: +49-(0)89-289-15011/15010
Fax: +49-(0)89-289-15012
E-mail: hpa@mw.tum.de

Internet: <http://www.mw.tum.de/DHP>
Hausadresse: Boltzmannstraße 15
85748 Garching bei München

Erläuterungen

(Auszug aus § 16 der Allgemeinen Diplomprüfungsordnung)

1. Die Urteile über die einzelnen Prüfungsleistungen der Kandidaten werden von dem jeweiligen Prüfer durch folgende Noten ausgedrückt:

Note 1	"sehr gut"
Note 2	"gut"
Note 3	"befriedigend"
Note 4	"ausreichend"
Note 5	"nicht ausreichend"
2. Zur differenzierteren Bewertung der Leistungen können die Notenziffern um 0,3 erniedrigt oder erhöht werden. Die Note 4,3 gilt als "nicht ausreichend". Die Noten 0,7 und 5,3 sind ausgeschlossen.
3. Die Fachnote lautet bei einem Durchschnitt

bis 1,5	"sehr gut"
von 1,6 bis 2,5	"gut"
von 2,6 bis 3,5	"befriedigend"
von 3,6 bis 4,0	"ausreichend"
über 4,0	"nicht ausreichend"
4. Das Prädikat einer bestandenen Prüfung lautet bei einer Gesamtnote

bis 1,2	"mit Auszeichnung bestanden"
von 1,3 bis 1,5	"sehr gut bestanden"
von 1,6 bis 2,5	"gut bestanden"
von 2,6 bis 3,5	"befriedigend bestanden"
von 3,6 bis 4,0	"bestanden"

Annotations

(Excerpt from § 16 of the "Allgemeine Diplomprüfungsordnung")

- 1.** *The candidates' individual results in the examination are expressed by the following grades:*

<i>grade 1</i>	<i>"very good"</i>
<i>grade 2</i>	<i>"good"</i>
<i>grade 3</i>	<i>"satisfactory"</i>
<i>grade 4</i>	<i>"sufficient"</i>
<i>grade 5</i>	<i>"failed"</i>

- 2.** *To allow for a more differentiated evaluation it is possible to increment or decrement the grade numerals by 0.3. The grade 4.3 is considered "failed". The grades 0.7 and 5.3 are excluded.*

- 3.** *The subject grade is denoted for an average*

<i>up to 1.5</i>	<i>as "very good"</i>
<i>between 1.6 and 2.5</i>	<i>as "good"</i>
<i>between 2.6 and 3.5</i>	<i>as "satisfactory"</i>
<i>between 3.6 and 4.0</i>	<i>as "sufficient"</i>
<i>beyond 4.0</i>	<i>as "failed"</i>

- 4.** *The predicate of a passed exam is denoted for an overall grade*

<i>of up to 1.2</i>	<i>as "summa cum laude"</i>
<i>between 1.3 and 1.5</i>	<i>as "magna cum laude"</i>
<i>between 1.6 and 2.5</i>	<i>as "cum laude"</i>
<i>between 2.6 and 3.5</i>	<i>as "rite"</i>
<i>between 3.6 and 4.0</i>	<i>as "passed"</i>

5.
Oklevélmelléklet a Pilseni Nyugat-Csehországi
Egyetemen

DIPLOMA SUPPLEMENT

This Diploma Supplement follows the model developed by the European Commission, the Council of Europe, and UNESCO CEPES. It serves as an addendum to an original academic or professional qualification document (diploma, degree, certificate, etc.) and has the purpose of providing the necessary data for the international 'transparency' and recognition of the original document. It describes the nature, level, context, content, and status of studies successfully completed by the individual. It contains no value judgments, statements of equivalency, or expectations of recognition. All eight sections of the document should be completed and explanations provided for missing or inapplicable items.

1 HOLDER OF QUALIFICATION

Family name(s)	Given name(s)	Date of birth (day/month/year)	Diploma serial No.
KAHOVEC	Jakub	22.05.1978	ZČU * 8101

2 QUALIFICATION

2.1 Name of the qualification and title conferred	Inženýr - Ing.
2.2 Main field(s) of study	
2.3 Name and type of awarding institution	University of West Bohemia in Pilsen
2.4 Name and type of institution	same
2.5 Language(s) of instruction/examination	Czech

3 LEVEL OF THE QUALIFICATION

3.1 Level of qualification	Master Undergraduate Programme
3.2 Official length of programme	5 years
3.3 Access requirements	secondary school - graduation certificate

4 PROGRAMME OF STUDY AND ACHIEVEMENTS

4.1 Mode of study

Full time

4.2 Programme requirements

Courses in this field have been designed to give students in-depth knowledge of computer hardware and software technologies, such as computer architectures, computer networks, operating systems, information systems, computer graphics, multimedia systems, artificial intelligence and financial management.

4.3 Programme details

Academic year: 1	Exam mark	Credits
English for Engineers 6	2	2
Discrete Mathematics	3	4
Fundamentals of Cybernetics	R	4
Mathematical Analysis 2	2	7
Mathematical Computational Systems	R	3
Computers and Programming 2	2	5
Sports	R	2
English for Engineers 5	R	2
Linear Algebra	3	4
Mathematical Analysis 1	3	9
Computers and Programming 1	1	5
Sports	R	2
Introduction to EI Engineering	R	2
Safety Regulations in EI. Engineering 1	R	1
Basic Economic Theories	1	2
Introduction to Philosophy 1	1	2
Academic year: 2	Exam mark	Credits
Physics for applied science students 1	2	5
Program Structures	2	5
Fundamentals of Computer Systems	2	5
Russian for Engineers 2	R	2
System Theory	2	4
Selected Algorithmical Methods	2	4
MS Windows Graphical Interface	1	6
Fundamentals of Measurements FAV	3	6
Physics for Applied Science students 2	2	5
Programming in C	2	6
Probability and Statistics A	3	5
Programming Techniques	3	5
Russian for Engineers 1	R	2
Theory of Electrical Engineering FAV	3	5
Mathematical Theory of Computer Science	2	5
Academic year: 3	Exam mark	Credits
Logic Systems	3	6
Numerical Methods	2	5
Computer Aided Creativity	3	6
Russian for Engineers 4	R	2

Art. Intelligence and Pat. Recognition	2	6
Fundamentals of Computer Graphics	3	6
Electronic Devices	2	6
Russian for Engineerse 3	R	2
Machine Oriented Languages	3	6
Fundamentals of Computer Networks	3	6
Fundamentals of Operating Systems	2	6
Academic year: 4	Exam mark	Credits
Digital Electronic Systems	1	7
Database Systems 2	1	6
Interactive Systems	2	6
Microprocessors and Computer Equipment	1	5
Object-Oriented Programming	2	6
Software Engineering Principles	2	6
Peripheral Devices	1	6
Computer Architecture 1	2	6
Database Systems 1	1	6
Formal Languages and Compilers	2	6
Mathematics in English 1	R	3
Safety Regulations in El. Eng. 2	R	1
Operating Systems	3	6
Academic year: 5	Exam mark	Credits
Diploma Thesis	R	18
IVT Diploma Thesis Defense	1	0
Structural Analysis of Inform. Systems	1	6
Mathematical Practice on Computers I	R	3
Publishing and Program. for the Internet	1	6
Parallel Programming	2	6
Database System-Case Study	R	2
Probability Modelling of Computer Syst	3	6
State Examination	Exam mark	
Database Technologies	1	
Design and Implementation of Informatic	1	
System Programming and Operating Systems	1	
Diploma Thesis		
Srovnání významných aplikačních serverů a vhodnost jejich použití v praxi	1	

4.4 Grading scheme

1 - Excellent	2 - Very good	3 - Good	4 - Unsatisfactory (fail)
P - Exam was passed in previous study			
R - Satisfactory completion of course, no grade			

5 FUNCTION OF THE QUALIFICATION

5.1 Access to further study

5.2 Professional status (if applicable)

possibility of continuation in Ph.D. Programme

6 ADDITIONAL INFORMATION

e-mail

www

publications

address

studium@rek.zcu.cz

http://www.zcu.cz

University of West Bohemia in Pilsen (in English)

Západočeská univerzita v Plzni (in Czech)

Univerzitní 8

306 14 Plzeň

Czech Republic

7 CERTIFICATION OF THE SUPPLEMENT

Date

Signature

Capacity

Official stamp

04.11.2003

Dean

Doc. RNDr. František Ježek, CSc.

8 INFORMATION ABOUT THE HIGHER EDUCATION SYSTEM OF THE CZECH REPUBLIC

The institutions of higher education in the Czech Republic provide the highest levels of education available. They include universities and other educational institutions which offer both accredited degree programmes of study and non-degree lifelong learning opportunities.

Universities offer both Master and Doctoral level programmes of study and are involved in research, developmental, artistic and other creative activities. Some also offer Bachelor's programmes of study. Non-university institutions offer primarily Bachelor's programmes and related research, developmental, artistic and other creative activities. An accredited programme of study consists of a specific curriculum which students follow either full-time or part-time.

The higher education system includes public, private, and state institutions. Twenty-four public and twenty-five private institutions fall under the oversight of the Ministry of Education. The state institutions include three military universities, which are administered by the Ministry of Defense, and the police academy, which is administered by the Ministry of the Interior.

Admission to a Bachelor's or full-length Master's programme requires the completion of a comprehensive secondary university preparation or vocational education programme with a secondary school graduation certificate (*maturitní vysvědčení*). Admission to short Master's programmes, which are continuations of Bachelor's programmes, requires the completion of the Bachelor's programme. Admission to a Doctoral programme requires the satisfactory completion of a Master's programme.

Higher Education Degrees

There are three levels of degrees: 1) Bachelor Study Programmes (*bakalářské studijní programy*), 2) Master Study Programmes (*magisterské studijní programy*) and 3) Doctoral Study Programmes (*doktorské studijní programy*).

A Bachelor's programme takes from 3-4 years to complete. Graduates are awarded either the degree upon completion of a programme which may be either theoretically or vocationally oriented.

1. *bakalář (Bc.)* Bachelor;
2. *bakalář umění (BcA.)* Bachelor of Arts;

A Master's programme takes from 4-6 years to complete after secondary school, or 2-3 years after completing a Bachelor's programme. There are six Master's degrees.

1. *magistr (Mgr.)* Master's in the subjects areas of humanities, science, education, pharmacy, and theology after 4-5 years of study;
2. *magistr umění (MgA.)* Master of Arts in one of the arts after 4-6 years of study;
3. *inženýr (Ing.)* Engineer in a technical, chemical, economic or agricultural subject area, after 5-6 years of study;
4. *inženýr architekt (Ing.arch.)* Engineer Architect in the field of architecture, after 5.5 - 6 years of study.

Graduates must pass the state examination and defend a Master's thesis before the public;

5. *doktor medicíny (MUDr.)* Doctor of Medicine after 6 years of study.
6. *doktor veterinární medicíny (MVDr.)* Doctor of Veterinary Medicine after 6 years of study.

Doctoral degrees in the same subject as the Master's degree are awarded to candidates who pass a state doctoral examination and defend a dissertation before the public. There are eight such doctoral degrees.

1. *doktor práv (JUDr.)* Doctor of Law;
2. *doktor filozofie (PhDr.)* Doctor of Philosophy in the fields of humanities; education and social studies;
3. *doktor přírodních věd (RNDr.)* Doctor of Natural sciences;
4. *doktor farmacie (PharmDr.)* Doctor of Pharmacy;
5. *licenciát teologie (ThLic.)* Licentiate in Catholic theology;
6. *doktor teologie (ThDr.)* Doctor of Theology;

Otherwise, a Doctoral programme usually takes 3 years after a Master's degree. A candidate must pass a state doctoral examination and defend a dissertation before the public. There are two such doctoral degrees.

7. *doktor (Ph.D.)* Doctor of Philosophy
8. *doktor teologie (Th.D.)* Doctor of Theology;

Note: All titles precede the name except the last two doctoral degrees, which follow the name.

Grading System

Výborně	Excellent
Velmi dobře	Very good
Dobře	Good
Nevyhověl	Unsatisfactory

A Felsőoktatási Kutatóintézet a magyar oktatásügy átfogó problémáinak tudományos kutatóhelye.

Vizsgálatai a felsőoktatáson túl a közoktatásra, a szakképzésre és az ifjúsági korosztályokra is vonatkoznak, ezek problémáit összefüggéseikben elemzik és így elősegítik az oktatásügy egészére vonatkozó döntések hosszú távú tudományos megalapozását, előkészítését.

Elemzése a rendszerváltás oktatási következményeire éppúgy irányulnak, mint az ezredforduló globalizációs kihívásainak és az Európai Unió csatlakozás követelményeihez történő társadalmi alkalmazkodásnak az oktatáspolitikai feltételeire.

Az Oktatási Minisztérium felsőoktatási helyettes államtitkára által felügyelt intézet kutatási profilja – eltérően a más hasonló intézményekétől –, stratégiai jellegű, vagyis a felsőoktatási-, a köz- és szakoktatási rendszernek a strukturális, szerkezeti, politikai, finanszírozási, fejlesztési problémáira irányul, ezeket országos, regionális, területi és helyi, illetve intézményi szinten egyaránt vizsgálja.

Empirikus szociológiai kutatásaival, statisztikai és oktatás-gazdaságtani elemzéseivel, politikai esettanulmányaival a Felsőoktatási Kutatóintézet hozzájárul a felsőoktatás, és a középfokú iskolahálózat fejlesztéséhez, az iskolázási létszámok és a pedagógusszükséglet előrejelzéséhez, az oktatásfinanszírozási alternatívák kimunkálásához, a felsőoktatási és tudományos kutatás Európai Unió és nemzetközi integrációjához.

Eredményeit a kormányzati oktatáspolitikai formálói közvetlenül is felhasználják, de munkatársai szakértőként a helyi önkormányzatok, a parlamenti bizottságok oktatási koncepcióinak kialakításához is hozzájárulnak.

Az intézet fenntartója az Oktatási Minisztérium, de kutatási költségeinek jelentős részét pályázati úton (OTKA, OKTK, külföldi és nemzetközi szervezetek, stb.) nyeri el, illetve külső megrendelésre (önkormányzatok, kormányzati és érdekszervezetek, felsőoktatási intézmények, nagyvállalatok, alapítványok, stb.) megbízásából is végez vizsgálatokat, közvélemény-kutatásokat, szakképzési és felsőoktatási intézmények, intézményhálózatok átvilágítását.

Kialakult kapcsolatrendszere sokrétű: az intézet, illetve vezető munkatársai éppúgy tagjai számos nemzetközi kutatási szervezet, folyóirat és intézmény irányító testületének, mint ahogyan a hazai tudományos és közélet testületeinek is – az MTA Pedagógiai Bizottságától a Magyar Akkreditációs Bizottságig.

A Felsőoktatási Kutatóintézet a Debreceni Egyetemmel együttműködve a felsőoktatás-kutatók posztgraduális képzésének egyik országos központja, és közös Kutatási Központot működtet az ELTE Szociológiai- és Szociálpolitikai Intézetével is. Az intézet munkatársai e mellett tanítanak az ELTE, a DE, a SZTE, a PTE, BKÁE stb. egyetemi kurzusain és több főiskolán, illetve a pedagógus továbbképzés területi intézményeiben is.

A Felsőoktatási Kutatóintézet legújabb kiadványai

Kutatás közben füzet sorozat: A jelen kiadvány hátoldalán

Educatio folyóirat

Eddig megjelent kilenc évfolyam.

Legújabb számaink:

Sajtó alatt:

Nyelvtudás

Oktatás – Politika – Kutatás

Fogyatékos fiatalok

Értékek

Ezredforduló

Mérlegen 1990-2002.

Diplomások

Család

Tanesszköz-politika

Felsőoktatási reformok

Felvételi

E-learning

Felsőoktatás-politika Európában

Társadalom és oktatás könyvsorozat

11. Kozma Tamás – Lukács Péter (szerk.): Szabad legyen vagy kötelező?
12. Kozma Tamás: Reformvitáink
13. Sáska Géza: Ciklikusság és centralizáció
14. Halász Gábor (szerk.): Az oktatás jövője és az európai kihívás
15. Andor Mihály – Liskó Ilona: Az utolsó igazgatóválasztás
16. Ladányi János: Rétegződés és szelekció a felsőoktatásban
17. Hrubos Ildikó (szerk.): Az ismeretlen szakképzés
18. Kelemen Elemér: Hagyomány és korszerűség
19. Nagy Péter Tibor: Hajszálcsovek és nyomáscsoportok
20. Kozma Tamás: Határokon innen, határokon túl
21. Havas Gábor – Kemény István – Liskó Ilona: Cigány gyerekek az általános iskolában
22. Hrubos Ildikó: A "bolognai folyamat"
23. Forray R. Katalin – Hegedüs András: Cigányok, iskola, oktatás-politika

A Felsőoktatási Kutatóintézet kiadványai megvásárolhatók vagy levélben megrendelhetők a Kódex Könyvruházban.

1054 Budapest, Honvéd u. 5. Tel/fax: 331-63-50, 302-8275/106

Ára: 670,- Ft

A Kutatás Közben sorozat újabb füzetei:

- 225 Forray R. Katalin – Kozma Tamás:** Regionális folyamatok és térségi oktatás-politika
- 226 Hrubos Ildikó:** A japán felsőoktatási modell
- 227 Kozma Tamás:** Regionális együttműködések a harmadfokú képzésben
- 228 Györgyi Zoltán – Imre Anna:** Az alap- és középfok közötti átmenet
- 229 Tót Éva:** Számítógépek az iskolában
- 230 Fehérvári Anikó:** Párhuzamos szakképzési rendszerek az iskolarendszeren kívüli képzésben
- 231 Havas Gábor–Kemény István–Liskó Ilona:** Cigány gyerekek az általános iskolákban
- 232 Györgyi Zoltán – Mártonfi György:** Vissza a munkaerőpiacra
- 233 Kozma Tamás:** Regionális egyetem
- 234 Liskó Ilona:** Cigány tanulók a középfokú iskolákban
- 235 Hrubos Ildikó:** A "bolognai folyamat"
- 236 Mátyai Melinda:** Fiatal, budapesti elit értelmiségiek szocializációja
- 237 Czeizer Zoltán:** Az oktatási intézmények informatikai helyzete és a fejlesztés lehetőségei Magyarországon
- 238 Török Balázs:** Távoktatás a határon túli magyarok képzésében
- 239 Liskó Ilona:** A közoktatás és a szakképzés illeszkedése
- 240 Forray R. Katalin – Híves Tamás:** A leszakadás regionális dimenziói
- 241 Györgyi Zoltán:** Tanulás felnőttkorban
- 242 Kozma Tamás – Rébay Magdolna (szerk.):** Felsőoktatási akkreditáció Európában
- 243 Venter György:** A tanári mesterség alapozása I.
- 244 Venter György:** A tanári mesterség alapozása II.
- 245 Radácsi Imre:** Regionális oktatáspolitikai és területfejlesztés az Európai Unióban és Magyarországon
- 246 Hrubos Ildikó – Szentannai Ágota – Verosza Zsuzsanna:** A gazdálkodási filozófia és gyakorlat érvényesülése az egyetemeken
- 247 Liskó Ilona:** A szakmai előkészítő oktatás bevezetése
- 248 Kozma Tamás:** Kisebbségi oktatás Közép-Európában
- 249 Forray R. Katalin – Híves Tamás:** A szakképző intézmények alkalmazkodása a társadalmi-gazdasági feltételekhez (1990-2000)
- 250 Liskó Ilona:** Kudarcok a középfokú iskolákban
- 251 Tót Éva:** A Socrates program értékelésének tanulságai
- 252 Victor Karady – Peter Tibor Nagy:** Educational Inequalities and Denominations – Database for Transdanubia, 1910 I.
- 253 Victor Karady – Peter Tibor Nagy:** Educational Inequalities and Denominations – Database for Transdanubia, 1910 II.
- 254 Forray R. Katalin – Híves Tamás:** A szakképzési rendszer szerkezeti és területi átalakulása (1990-2000)
- 255 Polónyi István:** A hazai felsőoktatás demográfiai összefüggései a 21. század elején
- 256 Polónyi István:** A felnőttképzés megtérülési mutatói
- 257 Liskó Ilona:** A szakképző iskolák kollégiumai

A Felsőoktatási Kutatóintézet kiadványai megvásárolhatók vagy
levélben megrendelhetők a Kódex Könyvtárházban.
1054 Budapest, Honvéd u. 5. Tel/fax: 331-63-50, 302-8275/106