

Transcript of Academic Record and Comparison

of the courses of **X Y**

at Budapest University of Technology and Economics (BUTE)

and the courses at

Florida Institute of Technology (FIT)

The following abbreviations can be found in this document:

C	Credit Numbers
T	Number of the Theory Part of the course
E	Number of the Exercise Part of the course
L	Number of the Labor Part of the course
Del.	The course was deleted ¹
GPA	Grade Point Average

In Hungary the grades can be earned in a 1-5 system:

5	Excellent	(A at FIT)
4	Good	(B at FIT)
3	Satisfactory	(C at FIT)
2	Passed	(D at FIT)
1	Failed	(F at FIT)

This document is to certify that

Name: **X,Y**

Place of birth: **city, Hungary**

Date of birth: **DD Month, YYYY**

was a full time student of the Budapest University of Technology and Economics, Faculty of Electrical Engineering and Informatics, from the academic year **1995/96** till the academic year **1999/2000**. After the Hungarian name of each subject is the official translation as accepted at BUTE (if appropriate).

¹ This means that this course is not counted in the GPA neither as hours nor as grade

Memorandum of Understanding

This section provides background information for the evaluation of this academic record.

Hungarian Higher Education System

The Hungarian higher education has a dual system, there are colleges and universities, some colleges are associated with universities as college faculties of the universities. The tenure of training at college level (corresponding to B.Sc. level) is minimum 3 years; the tenure of education at university level (corresponding to M.Sc. level) is minimum 5 years.

The Law on Higher Education places almost all universities under the supervision of the Ministry of Education. The law established two key intermediary institutions to provide professional advice on development and control of higher education: the Hungarian Accreditation Committee (HAC) and the Higher Education and Scientific Council (HESC). In Hungary all the accredited courses have uniform qualification requirements accepted by HAC when the initiative of the given course was submitted from a university.

Budapest University of Technology and Economics (BUTE)

Mission Statement

The Budapest University of Technology and Economics, as one of the greatest Hungarian higher education institutions regards its mission the differentiated, multi-level, wide base quality education, elite-training, research and development, based on a strong primary training to social demands and the general development of science. Aim of the BUTE is the high level university training, professional further training, scientific training, and scientific qualification on several fields of natural and technical sciences, the inanimate and animate natural sciences as well as social sciences. According to its good traditions the University ensures in the education the unity of theory and practice, namely the high level theoretical foundation and the practical training also based on industrial, agricultural, and other economic connections. It considers its duty, keeping in view the progress of science and the social demands, the continuous development of the training's subject both in the training's multi-level and multilingual fields.

Full-Time Degree Programs

The Technical University of Budapest offers degree programs accredited by HAC in both Hungarian and English. The programs taught in English lead to the B.Sc. and to the M.Sc. degree. The programs taught in Hungarian follow a traditional continental European curriculum and lead, in minimum five years, to the Dipl. Ing. degree, which is regarded as an equivalent to the M.Sc. degree.

Faculty of Electrical Engineering and Informatics

The education is based on the credit system and for a 'műszaki informatikus' degree (text figuring in the diploma) the students need to collect 300 credits with a rather strict structure (compulsory subjects, elective technical and freely elective subjects).

The basis of comparison and the differences w.r.t. the American B.Sc./M.Sc. system

We suggest the number of the subjects, the quality of the subjects, and the number of the exams and projects as the basis of comparison.

Since the Faculty of Electrical Engineering and Informatics of BUTE grants only M.Sc. degrees, the main difference in our system from the American B.Sc./M.Sc. one is

that there is no need for an additional project for the B.Sc. degree and one can directly obtain the M.Sc. degree at the end of his studies.

Nevertheless, in our system there is an intermediate checkpoint at the end of the fifth semester (may also depend on the student's advancement) in order to control the students' knowledge in the major fundamental fields of engineering. This checkpoint corresponds to three comprehensive (i.e. global) exams: calculus, digital systems, and computational theory. Final exams (similar to the comprehensive ones) and a final project close the M.Sc. curriculum. These may be mostly missing from the American system.

For any further information, please contact Bálint KISS, liaison officer² (BUTE, Department of Control Engineering and Informatics, 1117 Budapest, Magyar tudósok körútja 2., Hungary, tel: +361 4634096, fax: +361 4632204, email: bkiss@iit.BUTE.hu).

Budapest, October 2008

Redacted by

Bálint KISS, PhD
liasion officer

² engagement associated to the Memorandum of Agreement between the College of Engineering, FIT and the Faculty of Electrical Engineering and Informatics, BUTE in the framework of the STARS grant (<http://stars.iit.bme.hu>).

BUTE							FIT								
Code	Title	C	T	E	L	Grade	Course Name	Course Number	Title	Grade	Credit Hours	Earned Hours	GPA Hours	Grade Points	GPA
	Analízis (1) Calculus	8	4	2		5	MTH	1001	Calculus 1	A	4	4	4	16	
	Diszkrét Matematika (1) Discrete Mathematics	5	2	2		5	MTH	2051	Discrete Mathematics	A	3	3	3	12	
	Fizika (1) Physics	5	4			5	PHY	1001	Physics 1	A	4	4	4	16	
	Digitális Technika (1) Digital Design	5	4			5	ECE	1551	Digital Logic	A	4	4	4	16	
	Programozás Alapjai (1) Programming	2.5	2			5	CSE	1001	Fundamentals of Software Dev. 1	A	4	4	4	16	
	Számítógép Labor (1) Programming Practice	2.5			2	5			Programming Practice (Pascal)						
	Közgazdaságtan (1) Economics	2	2			5	BUS	2304	Microeconomics	A	3	3	3	12	
	A kommunikáció Szociológiája	2	2			5			Sociology of Communication						
	General Technical English	2				5									
	Testnevelés			2		5			Physical Education						
											Semester Totals	22	22	88	4
											Cumulative Totals	22	22	88	4

BUTE							FIT								
Code	Title	C	T	E	L	Grade	Course Name	Course Number	Title	Grade	Credit Hours	Earned Hours	GPA Hours	Grade Points	GPA
	Analízis (2) Calculus	8	4	2		5	MTH	1002	Calculus 2	A	4	4	4	16	
	Diszkrét Matematika (2) Discrete Mathematics	5	2	2		5	MTH	3051	Combinatorics and Graph Theory	A	3	3	3	12	
	Fizika (2) Physics	5	4			5	PHY	1001	Physics 2	A	4	4	4	16	
	Digitális Technika (2) Digital Design	5	4			5	ECE	1552	Computer Design	A	4	4	4	16	
	Programozás Alapjai (2) Programming	2.5	2			5	CSE	1002	Fundamentals of Software Dev. 2	A	4	4	4	16	
	Számítógép Labor (2) Programming Practice	2.5			2	5			Programming Practice (C)						
	Közgazdaságtan (2) Economics	2	2			5	BUS	2303	Macroeconomics	A	3	3	3	12	
	Játékelmélet a társadalomtud.-kban	2	2			5			Game Theory						
	General Technical English	2				5									
	Testnevelés			2		5			Physical Education						
											Semester Totals	22	22	88	4
											Cumulative Totals	44	44	176	4

BUTE							FIT								
Code	Title	C	T	E	L	Grade	Course Name	Course Number	Title	Grade	Credit Hours	Earned Hours	GPA Hours	Grade Points	GPA
	Valószínűségyszámítás Probability Theory	5	4			5	MTH	2401	Probability / Statistics	A	3	3	3	12	
	Algoritmusok elmélete Theory of Algorithms	5	3	1		5	CSE	2010	Algorithms & Data Struct	A	4	4	4	16	
	Jelek és Rendszerek (1) Signals and Systems	5	4			4	ECE	3222	Signals and Systems	B	3	3	3	9	
	Számítógép Architektúrák Computer Architectures	5	4			3	CSE	3102	Computer Organization	C	3	3	3	6	
	Programozás Technológiája Software Technology	5	4			4	CSE	3421	Software Design Methods	B	3	3	3	9	
	Számítógép Labor (3) Programming Practice	2.5			2	4			Programming Practice (C++, x86 Assembly)						
	Bevezetés a Társadalmi informatikába	2	2			5	HUM	2450	Intro to Cult Anthropology	A	3	3	3	12	
	Testnevelés			2		5			Physical Education						
	Francia középfeladó	0							French						
											Semester Totals	19	19	64	3.36
											Cumulative Totals	63	63	240	3.8

BUTE							FIT								
Code	Title	C	T	E	L	Grade	Course Name	Course Number	Title	Grade	Credit Hours	Earned Hours	GPA Hours	Grade Points	GPA
	Queuing	5	4			4	MTH	5430	Queuing Theory	B	3	3	3	9	
	Formális Nyelvek Formal Languages	5	2	2		4	CSE	4083	Formal Lang & Automata Theory	B	3	3	3	9	
	Jelek és Rendszerek (2) Signals and Systems	5	4			5	ECE	4225	Digital Filtering	A	3	3	3	12	
	Elektronika Electronics	2.5	2			5	ECE	3331	Electron Devices	A	3	3	3	12	
	Mérés Labor (1) Laboratory	2.5			2	5			Electronic Measurement Laboratory						
	Matematikai Logika Mathematical Logic	5	4			5	HUM	2510	Logic	A	3	3	3	12	
	Számítógép Labor (4) Programming Practice	2.5			2	4			Programming Practice (Java)						
	Párhuzamos Programozás Parallel Programming					Del.									
	Testnevelés			2		5			Physical Education						
	Francia középfeladó					Del.			French						
											Semester Totals	15	15	54	3.6
											Cumulative Totals	78	78	294	3.77

BUTE							FIT								
Code	Title	C	T	E	L	Grade	Course Name	Course Number	Title	Grade	Credit Hours	Earned Hours	GPA Hours	Grade Points	GPA
	Információelmélet Information Theory	5	4			3	ECE	5234	Communication Theory	C	3	3	3	6	
	Szabályozástechnika Control Theory	5	4	1		3	ECE	4231	Control Systems	C	3	3	3	6	
	Elektronika (2) Electronics	5	4			4	ECE	3111	Electronics	B	4	4	4	12	
	Mérés Labor (2) Laboratory	2.5			2	5			Electronic Measurement Laboratory						
	Programozási Paradigmák Programming Paradigms	5	4			5	CSE	3001	Prog Lang Concepts	A	3	3	3	12	
	Operációs Rendszerek Operating Systems	5	4			3	CSE	5230	Operating Systems	C	3	3	3	6	
	Számítógép Labor (5) Programming Practice	2.5			2	4			Programming Practice (Novell)						
	Döntési informatika	2	2			5	MGT	5071	Decision Theory	A	3	3	3	12	
											Semester Totals	19	19	54	2.84
											Cumulative Totals	97	97	348	3.59

BUTE							FIT									
Code	Title	C	T	E	L	Grade	Course Name	Course Number	Title	Grade	Credit Hours	Earned Hours	GPA Hours	Grade Points	GPA	
	Adatbázisok Databases	5	4			5	CSE	4020	Database Systems	A	3	3	3	12		
	Banki Információs Rendszerek					Del.										
	Elektronika (3) Electronics	5	4			3	ECE	4113	Electronics Design	C	3	3	3	6		
	Kódelmélet Coding Theory	5	4			3	ECE	5238	Error Control Coding	C	3	3	3	6		
	Konfliktuskezelés	2	2			5			Conflict Handling							
	Mérés Labor (3) Laboratory	2.5			2	5	ECE	4330	Intg Cir Des / Layout Lab	A	3	3	3	12		
	Számítógép Hálózatok Computer Networks	5	4			5	CSE	5231	Computer Networks	A	3	3	3	12		
	Számítógép Labor (6) Programming Practice	2.5			2	Del.										
	A társadalmi inf. új útjai	2	2			Del.			New Trends in Social Informatics							
												Semester Totals	15	15	48	3.2
												Cumulative Totals	112	112	396	3.54

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Comprehensive Exams

Stamps:

3rd semester Comprehensive Exam
Subject: **Calculus**
Result: **Excellent (5)**
Budapest **25. June 1996.**

4th semester Comprehensive Exam
Subject: **Digital Systems**
Result: **Excellent (5)**
Budapest **25. March 1997.**

5th semester Comprehensive Exam
Subject: **Computational Theory**
Result: **Excellent (5)**
Budapest **25. March 1997.**

Courses without an FIT equivalent³

This section describes all those courses which do not have an equivalent course at FIT or do not have credit hours associated to them.

Compulsory Courses (not belonging to any major)

Programming Practice (1, 2, 3, 4, 5 and 6)

Each of these courses introduces a programming language or a software product and allows students to get some experience with them. The programming languages and softwares covered in these courses are written in the parentheses after the course name.

Measurement Laboratory (1, 2 and 3)

These laboratory courses cover experiments in combinational circuits, sequential circuits, programmable logic, analog devices, oscillators and such.

Compulsory Courses (belonging to Communications Engineer major)

Telecommunication Laboratory

This course covers experiments and measurements in telephone networks and protocols.

Integrated Broadband Telecommunication

Introduction to high speed digital networks and protocols. Topics include FDDI, SDH, frame relay, ATM and such.

Integrated Broadband Telecommunication Laboratory

This course covers experiments in and modelling of SDH networks.

Communication Networks Design Lab

Introduction to communication networks monitoring and management.

Compulsory Courses (belonging to Optimization major)

Optimization Practice (1, 2 and 3)

These courses deal with the usage of different software tools for solving linear and non-linear optimization problems.

Freely elective courses

There are freely elective courses in humanities, social science and languages which serve as auxiliary subjects to the computer science courses. The main role of these courses is to allow the students to take excursions to less technical areas of science.

Sociology of Communication

This course provides an introduction to social science with special interest towards communication between individuals.

³ Courses for which no matching FIT course could be found.

Game Theory

An introduction to game theory and its applications in social science.

General Technical English

Course on writing technical reports and presentations in English.

Conflict Handling

Handling of intra- and inter-group conflicts that naturally arise in every professional environment.

Electronic Office Systems

This course gives an overview of usage and configuration of softwares that students will likely encounter in any modern office.

Courses without credits

Physical education

This course is a compulsory subject for the first four semester.

French

This course is part of the optional language education program provided at BUTE.

We hereby certify that this document is conform to the official Hungarian Academic Record of **Mr. X Y** as issued by the Budapest University of Technology and Economics.

Budapest, 6 November, 2008

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