DIPLOMA OF HIGHER EDUCATION

(COPY)

Part A

(diploma holder's signature)

Diploma No. 129989

THE SILESIAN UNIVERSITY OF TECHNOLOGY

The Faculty of Automatic Control, Electronics and Computer Science

(name of the unit)

DIPLOMA

Mr/Mrs Tomasz BUJŁOW
(full name)

born on 5 August 1984

in Wałcz

completed studies in the field of Computer Science

majoring in Databases, Computer Networks and Systems

obtained the final grade very good with distinction

and on 14 October 2008

was granted the degree of magister inżynier

Dean/University Unit's Head

DZIEKAN

(seal and signature)

Rector

REKTOR

prof. dr hab. inż. Andrzej Karbowniak

(seal and signature)

Gliwice
(town)

Date: 26.11.2008

Silesian University of Technology

Part B of diploma no. 129989: SUPPLEMENT *)

COPY

I. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

1. Surname: **Bujłow**
2. First name(s): **Tomasz**
3. Date of birth (day, month, year): **05-08-1984**
4. Student identification number or code: **136818**

II. INFORMATION IDENTIFYING THE QUALIFICATION

1. Name of qualification and title conferred: **magister inżynier**
2. Main field of study and field of specialisation: **Computer Science**

\ **Databases, Computer Networks and Systems**

3. Name of awarding institution: Politechnika Śląska
4. Name(s) and status of institution(s) in which part of the study was completed:

The Silesian University of Technology was founded pursuant to the Decree of the 24th of May 1945, with the headquarters in Katowice. By the Decree of the 20th of March it was transferred to Gliwice one year later. The Silesian University of Technology, as the state technical university, functions in accordance to the Higher Education Act. Its faculties are entitled to confer the scientific degree of PhD and DSc and to initiate the proceedings of conferring the scientific degrees.

5. Language(s) of instruction/examination: Polish

III. INFORMATION ON THE LEVEL OF THE QUALIFICATION

1. Level of qualification: **M.Sc. studies**
2. Official length of programme: **5 years /10 semesters/**
3. Access requirements: secondary school leaving examination certificate, passed entrance examination in maths and physics, and successful completion of qualification procedure

IV. INFORMATION ON THE CONTENTS AND RESULTS GAINED

1. Mode of study: **full-time**
2. Programme requirements: standards of teaching in acorrdance with the decree of the Minister of National Education and Sport of 18 April, 2002, concerning the standards of teaching for particular fields of studies and levels of teaching (the Journal of Law of 2003, No. 144,entry 1401). Standards define general requirements, including number of teaching hours, graduate profile, syllabi (contents of teaching) for particular subjects: general education, foundation and leading subjects as well as recommendations and requirements for student work placements.
3. Programme details and individual achievements, grades/marks/(ECTS) credits obtained:

	Number of hours					Mark	ECTS Points
	Lect.	Class.	Lab class.	Proj	Other		
Academic year 2003/2004							
Semester 1							
Mathematics	45	30				4.0	7
Physics	30	15				3.5	5
Computer programming	30		30			5.0	6
Foreign Language		60				4.5	4
Theory of automata	30	15				4.0	4
Circuit Theory	30	15				4.5	4
Physical education		30				5.0	0
Semester 2							
Foreign Language		60				5.0	4
Mathematics	30	30				4.5	6
Theory of automata	30	15				5.0	5
Circuit Theory	15	15				3.0	3
Physics			15			5.0	2
Computer programming	30		15			4.5	5
Digital systems arithmetics	30					3.5	2
Electronics	30	15				4.0	3
Physical education		30				5.0	0
Academic year 2004/2005							

	Number of hours					Mark	ECTS Points
	Lect.	Class	Lab. class.	Proj.	Other		
Semester 3							
Digital Circuits	30	15				5.0	4
Electronics	15		30			5.0	4
Algorithm analysis	30	30				4.5	4
Computer programming	30		15			5.0	4
Software engineering	30		15			5.0	4
Numerical methods	30		15			4.5	4
Theory of automata			30			5.0	3
Fundamentals of computer science	15	15				4.5	3
Semester 4							
Computer Networks	30	15				5.0	4
Databases	30		30			4.5	5
Fundamentals of computer science	30	30	30			4.5	7
Computer programming			30			5.0	2
Microinformatics	30	30				5.0	5
Software engineering			30			5.0	3
Concurrent Programming	30					5.0	2
Operating systems	30					4.0	2
Academic year 2005/2006							
Semester 5							
Microinformatics	30		45			5.0	6
Operating systems	30		30			5.0	5
Computer Networks	30		30			5.0	5
Databases	30					5.0	2
Assembler	30		15			5.0	4
Computer interfaces	30					5.0	2
Computer architecture	30					4.5	2
Computer graphics	30					5.0	2
Statistical methods	30					5.0	2
Semester 6							
Assembler				30		5.0	3
Computer architecture			30			4.5	3
Computer graphics			30			5.0	3
Industrial networks	15		15			5.0	3
Microinformatics				30		5.0	3
Databases				30		4.5	2
Operating systems			30			4.0	2
Computer Networks			30			5.0	2
Computer interfaces			30			4.5	2
Statistical methods			15			5.0	2
Humanities/Socjal Sciences/Fine Arts	30					5.0	2
Industrial Computer Distributed Visualization Systems	30		15			5.0	3
Academic year 2006/2007							
Semester 7							
Computer architecture	30		30			5.0	5
Discrete mathematics	30	15	15			4.5	5
Algorithm analysis	30	15				5.0	4

	Number of hours					Mark	ECTS Points
	Lect.	Class.	Lab. class.	Proj.	Other		
Digital modelling	30	15				5.0	4
Computer systems and networks evaluation	30					5.0	3
Databases	30					5.0	3
Industrial computer systems	30					5.0	2
SQL server	30		30			5.0	4
Computer multimedia systems	30					5.0	2
Semester 8							
Digital modelling	15		30			4.0	5
Databases			45			4.0	3
Analysis and Design of Information Systems	30					3.0	3
Computer systems and networks evaluation			30			4.0	3
Pattern recognition	30					5.0	3
Computer networks	30					5.0	2
Computer Systems Design	30					5.0	2
Industrial computer systems			30			5.0	3
Computer multimedia systems	15					5.0	1
Wireless Networks and Mobile Devices	30					5.0	2
Safety in computer systems	30		30			5.0	4
Practical, Final Project Training					0	5.0	0
Academic year 2007/2008							
Semester 9							
Project Management					30	4.5	6
Object Oriented Programming 1					30	4.5	6
Object Oriented System Analysis and Design					30	4.5	6
Project System Integration 1					30	4.5	12
English Language Course Unit 1					30	4.5	0
Semester 10							
Diploma Thesis					0	5.0	24
Project System Integration 2					30	4.0	0
Network Security					30	4.5	0
Distributed Systems and Applications					30	4.5	0
XML,Web Serwice Technologies and Web Serwices					30	5.0	6

Lect. - lecture, Class. - classes, Lab. class. - laboratory classes , Proj. - project

The topic of thesis: **Invoicinmg applicatgion for mining company.**

Examination mark: **5**

4. Grading scheme and, if available, grade distribution guidance:

Marks	Value	Credits in ECTS system
very good	5.0	A
good plus	4.5	B
good	4.0	C
satisfactory plus	3.5	D
satisfactory	3.0	E
fail	2.0	F

At studies which are not embraced by the 'points system' (based on ECTS system) the average result of the whole course of studies is the arithmetic average rounded off to two decimal places, which is calculated on the basis of the arithmetic average of all examination marks and the arithmetic average of all credits, considering all marks entered in a credits book.

At studies which are embraced by the 'points system' (based on ECTS system) the average result of the whole course of studies is calculated as a 'weighted average' rounded off to two decimal places, according to the following formula:

$$\text{average mark} = \frac{\sum (\text{final result x points})}{\sum \text{points}}$$

The basis for calculating the final result of studies consists of:

1) the average mark of the whole course of studies,
2) the average mark of Master's thesis constituting the arithmetic average rounded off to two decimal places of marks given by the thesis supervisor and the reviewer(s),
3) the average mark of a Master's degree examination rounded off to two decimal places.

The final result of the whole course of studies consists of a rounded off to two decimal places total sum 0.5 of a mark mentioned in point 1), 0.25 of a mark for Master's thesis mentioned in point 2) and 0.25 of a mark for a Master's degree examination mentioned in point 3).

The final result of the whole course of studies is written in a diploma of higher education according to the following rule:

The result of studies	The final result of studies
up to 3.24	satisfactory (3.0)
from 3.25 to 3.69	satisfactory plus (3.5)
from 3.70 to 4.14	good (4.0)
from 4.15 to 4.49	good plus (4.5)
above 4.49	very good (5.0)
**	very good with honorable mention

** A diploma with the final result 'very good with honorable mention' can be granted to graduates who:

1) completed the course of studies in the period of time determined by the schedule of studies,

2) gained during the whole course of studies the average of all marks not below 4.50,

3) gained marks 'very good' (average 5.0) for the Master's thesis and a Master's degree examination.

A diploma with 'honorable mention' is granted by the Rector on the basis of the motion put forward by the Faculty Council.

5. Overall classification of the qualification: **bardzo dobry z wyróżnieniem (5)**

V. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

1. Access to further study: **possibility of enrolment for Ph.D. studies**

2. Professional status (if applicable):

VI. ADDITIONAL INFORMATION

1. Additional information, including practical placements completed, research activities undertaken, awards received: scholarship for progress in studies from 01-10-2004 to 30-09-2005, scholarship for progress in studies from 01-10-2005 to 30-09-2006, scholarship for progress in studies from 01-10-2006 to 30-09-2007, scholarship for progress in studies from 01-10-2007 to 30-09-2008, Socrates-Erasmus special scholarship from 01-10-2007 to 31-10-2007.

Sem X studied abroad in University of Southern Denmark, as a part of ERASMUS Program.

2. Sources of further information on the qualification obtained, including institution website:

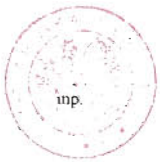
the Silesian University of Technology website: www.polsl.pl

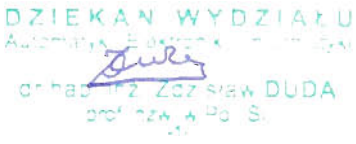
the Bureau for Academic Recognition and International Exchange website: www.buwiwm.edu.pl

VII. CERTIFICATION OF THE SUPPLEMENT

1. Date:**26-11-2008**

2. Signature and name-bearing stamp or seal of the dean or head of the organisational unit:





*) 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 transparency and fair academic and professional recognition of qualifications at international and national levels. It is designed to provide a description of the nature, level, content and status of the studies that were completed. It should be free from any value judgements, equivalence statements or suggestions about recognition.

VIII. DESCRIPTION OF NATIONAL HIGHER EDUCATION SYSTEM

THE SYSTEM OF EDUCATION IN POLAND

1. **School education system**

Until September 1999, the first stage of education in Poland was an eight-year primary school. Primary school leavers were entitled to apply for admission to post-primary schools, general or vocational.

In addition to curricular changes, the school education reform of 1999 introduced new types of schools: a six-year primary school, a three-year gymnasium (lower secondary school), and post-gymnasium (upper secondary) schools: a three-year general lyceum, a three-year specialised lyceum, a four-year technical school, a basic vocational school where education lasts between 2 and 3 years, a two-year supplementary general lyceum and a three-year supplementary technical school (with the latter two types of schools designed for basic vocational school leavers). In the transition period, post-primary schools and postgymnasium schools work in parallel.

The total duration of education until completion of a school which offers the possibility of taking the secondary school leaving examination (maturity examination) is 12-15 years. Having passed successfully the secondary school leaving examination (maturity examination), graduates are awarded a secondary school leaving certificate (maturity certificate) which entitles them to apply for admission to a higher education institution.

2. **Higher education system**

The higher education system in Poland includes State (public) and non-State (non-public) higher education institutions, the latter established since 1990. Non-State higher education institutions are established on the basis of a permit issued by the Minister of National Education and Sport, and acquire legal personality upon their entry into the register of non-State higher education institutions kept by the Minister of National Education and Sport.

In addition to existing university-type institutions, State and non-State higher vocational education schools have been established since 1998. A major component of training in these schools is a compulsory 15-week practical placement.

Higher education programmes may be offered as full-time, part-time or extramural studies. Full-time studies are the basic mode of study, unless the statutes of a higher education institution state otherwise. The minimum requirement for access to a higher education institution is a secondary school leaving certificate. Procedures for admission to the first year of study are laid down independently by the higher education institutions. Some institutions hold entrance examinations, other institutions admit students on the basis of the grades given on secondary school leaving certificates, and others admit solely on the basis of registration.

3. **Degrees ("professional titles") awarded to graduates of higher education institutions**

- **licencjat**: the degree obtained upon completion of first-cycle programmes which last 3 or 3.5 years;
- **licencjat pielęgniarstwa** or **licencjat położnictwa**: the degrees obtained upon completion of

first-cycle programmes in the field of Nursing or Midwifery respectively;
- **inżynier**: awarded to graduates of first-cycle programmes in engineering and technology, except in the field of Architecture and Urban Planning, in agriculture and forestry, as well as in other fields of study where course units covering engineering and technology, agriculture or forestry account for no less than 50% of the total course load as provided for in syllabuses and curricula for these fields;
- **inżynier architekt**: awarded to graduates of first-cycle programmes in the field of Architecture and Urban Planning;
- **magister** and equivalent degrees of **magister sztuki**, **magister inżynier**, **magister inżynier architekt**, **lekarz**, **lekarz dentysta** (until 30 April 2004: **lekarz stomatolog**), **lekarz weterynarii**, **magister pielęgniarstwa**, **magister położnictwa**: awarded upon completion of 4- to 6-year Master's degree programmes offered in one cycle.

The degree of **magister** may also be awarded upon completion of 2- to 2.5-year second-cycle Master's degree programmes, undertaken by those who have completed a first-cycle programme and obtained the degree of licencjat or inżynier.

In order to obtain the above-mentioned degrees, a student is required to complete all course units and practical placements included in a syllabus, to submit and defend a thesis, and to pass successfully the final examination.

In the fields of Medicine, Medicine and Dentistry, and Veterinary Surgery, the degree is awarded on the basis of the final qualifying examination required.

A graduate of a higher education institution obtains a higher education diploma in a specific field of study and, upon request, a copy of the diploma in a foreign language.

4. **Higher-level degrees ("academic degrees" and "academic titles")**

The academic degrees are the degrees of doktor and doktor habilitowany of a specific area of science in a given scientific discipline. The degrees awarded in arts are the degrees of doktor and doktor habilitowany of a specific area of arts in a given artistic discipline (until 30 April 2003, kwalifikacje artystyczne I stopnia and kwalifikacje artystyczne II stopnia were awarded in arts and artistic disciplines, which provided the basis for conferring a qualification equivalent to the academic degrees of doktor and doktor habilitowany respectively).

The degree of doktor is conferred to a person who holds the degree of magister, magister inżynier, lekarz or another equivalent degree, has passed doctoral examinations covering the scope defined by the board of the awarding organisational unit, and has submitted and defended a doctoral thesis. Access to the procedure leading to the degree of doktor habilitowany is open to a person who holds the degree of doktor, has significant academic or artistic achievements, and has submitted a dissertation. The procedure is completed by a resolution of the board of the awarding organisational unit conferring the degree of doktor habilitowany.

The degrees of doktor and doktor habilitowany are conferred in organisational units of higher education institutions and in other academic institutions which are entitled to confer them.

The academic title is the degree of profesor of a specific area of science, while the equivalent degree in arts is the degree of profesor of a specific area of arts. The degree of profesor is conferred by the President of the Republic of Poland.