#### CERTIFIED TRANSLATION FROM POLISH -/-

[Official paper of the University. Pages joined by ink, round seal with the national emblem of Poland and inscription: Politechnika Krakowska im Tadeusza Kościuszki w Krakowie] -/- [Page 1] -/-

Politechnika Krakowska im Tadeusza Kościuszki [Tadeusz Kościuszko Cracow University of Technology] in Kraków -/-

Herethis diploma supplement is based on the model designed by the European Commission, European Council and UNESCO/CEPES. Its aim is to provide objective and full information for better understanding and fair recognition of academic and professional qualifications in the state and abroad. The supplement contains description of the type, level, content and status of the studies positively completed by the holder of the original diploma. Supplement should not contain any value judgements, statements about equal qualifications or suggestions regarding recognition. It should provide information in regard with all eight parts. Wherever information was not provided, the reason for its lack should be explained. -/-

#### **DIPLOMA SUPPLEMENT -/-**

valid with the Diploma no. 65356 -/-

- I. INFORMATION ON THE DIPLOMA'S HOLDER. -/-
  - 1. Surname: PAJAK -/-
  - 2. Name (names): ARKADIUSZ JAN -/-
  - 3. Date of birth (day, month, year): 19 April 1980 -/-
  - 4. Student's identification no, student's code, or student's credit book no: 28437 -/-

#### II. INFORMATION ON THE DIPLOMA -/

- 1. Higher Education Diploma no. 65356 -/-
- 2. Name of qualification (vocational title)<sup>1)</sup>: **inżynier** -/-
- 3. Field of study and specialisation: -/-

**Environmental Engineering -/-**

Water Engineering and Water Resources Management -/-

4. Name of awarding institution<sup>1)</sup>: -/-

Politechnika Krakowska im Tadeusza Kościuszki -/-

Faculty of Environmental Engineering -/-

Cracow University of Technology is an autonomic, academic, state institution acting on the basis of act of 27 July 2005 Law on the Higher Education, and on the basis of its status. Through its faculties, it is entitled to awarding academic degrees of doctor and habilitated doctor and awarding the academic title of professor. -/-

Cracow University of Technology was founded in 1945 as Faculties of Architecture, Engineering and Communication at Akademia Górnicza [*University of Science and Technology*] in Kraków. It became an autonomic institution on 21 July 1954 by the decision of the Cabinet of Poland. -/-

5. Name and legal status of institution administering studies<sup>2)</sup>: -/-

The whole studies were completed at the Cracow University of Technology during the academic years 2000/2001 – 2009/2010.

Status of the institution: as in point 4. -/-

6. Language(Languages) of instruction/examination: Polish -/-

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## III. INFORMATION ON THE LEVEL OF QUALIFICATION -/-

- 1. Acquired educational level: first cycle studies -/-
- 2. Official length of programme: 4.5 years -/-
- 3. Access requirements: -/
  - a. required documentation: -/-
  - Secondary School Education confirmed by Maturity Certificate -/-
  - grades in chosen subjects (Mathematics, Physics, Modern Foreign Language) received at the end of secondary school education and maturity examination. -/-

## IV. INFORMATION ON THE CONTENTS AND RESULTS GAINED 3) -/-

- 1. Mode of study: extramural studies -/-
- 2. Programme requirements: -/-

No programme requirements designed by the ministry for higher education matters. Teaching programmes designed according to the Faculty's Council decision. -/-

3. Details of study programme and individual achievements, grades / credit points (ECTS) gained -/-

# Academic year 2000/01 -/-

Semester: 01 -/-

Schiester. VI -/-											
Subject	No. of hours per term					Recei	e)	Exa			
								m			
	Lec	Prac	Lab	Proj	Sem	Lect	Prac	Lab	Proj	Sem	
	ture	tice	orat	ect	inar	ure	tice	orat	ect	inar	
			ory					ory			
Basis of Economy	5	5	0	0	0	3.0	3.0	-	-	-	-
Mathematics	10	15	0	0	0	Cred ited	4.0	-	-	-	_
Descriptive Geometry	15	0	0	20	0	3.5	-	-	3.5	-	-
Physics	15	5	10	0	0	_	3.0	4.0	-	-	3.5
Sanitary Chemistry	10	0	10	0	0	-	-	4.5	-	-	4.5

### Academic year 2000/01 -/-

**Semester: 02 -/-**

24meset 1 02 1											
Subject	No. of hours per term					Received credits (grade)					
	Lec	Prac	Lab	Proj	Sem	Lect	Prac	Lab	Proj	Sem	
	ture	tice	orat	ect	inar	ure	tice	orat	ect	inar	
			ory					ory			
English as a Foreign Language	0	0	15	0	0	-	-	5.0	_	-	-

Outline of Philosophy and Sociology	10	10	0	0	0	3.5	3.5	-	-	-	-
Mathematics	10	15	0	0	0	-	3.0	-	-	-	3.0
Computer Aided Design	5	0	15	0	0	4.5	-	4.5	-	-	-
Technical Mechanics and Materials Durability	10	10	0	10	0	-	3.0	-	3.0	-	3.0
Electronic Computing	15	0	15	0	0	3.0	-	3.0	-	-	-

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Academic year 2001/02 -/-

**Semester: 03 -/-**

	No. of hours per term					Received credits (grade)					
Subject	Lec ture	Prac tice	Lab orat ory	Proj ect	Sem inar	Lect	Prac tice	Lab orat ory	Proj ect	Sem inar	
English as a Foreign Language	0	0	15	0	0	-	-	4.0	-	-	-
Mathematics	10	15	0	0	0	-	4.0	-	-	-	4.0
Hydraulics	15	15	5	0	0	cred ited	3.0	4.0	-	-	-
General Construction	10	5	0	0	0	3.0	3.5	-	-	-	-
Mechanics of Structure	10	5	0	10	0	-	3.0	-	3.0	_	3.0
Geology and Hydrogeology	5	0	10	0	0	-	-	3.0	-	-	3.0

# Academic year 2006/07 -/-Curriculum Differences -/-

	No. c	of hours	Received credits				
Subject	Lect ure	Practi ce	Labor atory	Proje ct	Semi nar	Digit grade	ECTS grade
Biology and Ecology	18	4	14	0	0	3.5 Exam	D
Technical Thermodynamics	18	18	0	0	0	3.0	Е
Basis of Engineering and Environmental Protection	24	3	0	0	0	3.0	Е

# **Academic year 2006/07 -/-**

**Semester: 04 -/-**

Cubicat		of hours	Received credits				
Subject	Lect ure	Practi ce	Labor atory	Proje ct	Semi nar	Digit grade	ECTS grade
English as a Foreign Language	0	0	17	0	0	3.5	D
Fluid Mechanics & Hydraulics	10	10	5	0	0	3.5Exam	D
The Materials Science of Installation Materials	15	0	6	0	0	4.0	С
Hydrology, Meteorology and Climatology	15	6	0	15	0	3.5	D
Engineering Geology and Hydrogeology	10	2	6	0	0	3.0	Е
Mechanics of Structure	10	2	0	8	0	4.0	C
Hydraulics of Water Structures	14	12	4	0	0	4.0Exam	C

# Academic year 2007/08 -/-

Semester: 05 -/-

	No. c	f hours	Received credits				
Subject	Lect ure	Practi ce	Labor atory	Proje ct	Semi nar	Digit grade	ECTS grade
Basis of Geotechnics	10	2	4	4	0	4.0	С
Basis of Hydraulic Engineering	8	3	0	13	0	4.0	С
Computing Methods in Water-Engineering	10	4	16	0	0	3.5	D
Hydrology	18	2	0	10	0	4.5Exam	В
Development of Catchment Areas and Mountain Creaks	12	2	0	8	0	3.0	Е
Water Management	10	7	0	8	0	4.5	В
Water Dynamisc – Methods of Analysis and their Applications	15	15	0	0	0	4.0	С

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Academic year 2007/08 -/-

**Semester: 06 -/-**

Semester of t							
	No. o	f hours	per terr	Received credits			
Calliant	Lect	Practi	Labor	Proje	Semi	Digit	ECTS
Subject	ure	ce	atory	ct	nar	grade	grade

Environmental Monitoring	12	5	0	0	0	4.0	C
Development of Catchment Areas and Mountain Creaks	10	2	0	10	0	4.5Exam	В
Water Management	10	7	0	8	0	3.5Exam	D
Water Structures	15	5	0	10	0	4.5Exam	В
Methods of Hydrological Analysis	15	3	0	12	0	5.0	A
Water Resources Monitoring	12	5	0	0	0	5.0	A
Basics of GIS	10	4	16	0	0	5.0	A
Hydrological Protection and Warning Systems	15	3	0	12	0	4.5	В

# Academic year 2008/09 -/-Semester: 07 -/-

Subject		of hours	Received credits				
		Practi ce	Labor atory	Proj ect	Semi nar	Digit grade	ECTS grade
Water and Sewage Systems	20	0	0	20	0	3.0	Е
Water Management in Agriculture and Industry	15	0	0	15	0	3.5Exam	D
Computational Methods in Water Management	10	0	20	0	0	3.0	Е
Dangers and Basics of Flooding Protection	14	6	10	0	0	4.0Exam	С
Water Management Systems	15	15	0	0	0	5.0	A
Geotechnics	14	0	0	10	0	4.0	С

# Academic year 2008/09 -/-Semester: 08 -/-

Subject	No. c	f hours	per terr	Received credits			
	Lect ure	Practi ce	Labor atory	Proj ect	Semi nar	Digit grade	ECTS grade
Environmental Management	10	0	0	6	0	3.5	D
Environmental Impact Assessment	12	0	0	10	0	4.0Exam	С
Special Hydro Technical Objects	15	0	0	15	0	4.0Exam	C
Technology and Organisation of Construction Work	10	5	0	20	0	5.0	A

Structural Flooding Protection	15	0	0	15	0	4.5Exam	В
Water Resources Management	20	0	0	15	0	3.5	D

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Academic year 2009/10 -/-

Semester: 09 -/-

Subject	No. of hours per term				Received credits		
	Lect	Prac tice	Labora tory	Proj ect	Semi nar	Digit grade	ECTS grade
Law in Environmental Protection	20	0	0	0	0	5.0	A
Marketing and Management	15	5	0	0	0	3.5Exam	D
Diploma Seminar	0	0	0	0	30	5.0Exam	A
Engineering Diploma Thesis	0	0	0	0	0	5.0	A

Abbreviations: -/-

[abbreviations not used in translation] -/-

Internship: - -/-

Diploma Thesis: Environmental Impact Assessment of a Planned, Small Hydro Plant at km 31+913 of Czarna Staszowska . -/-

Diploma Thesis Assessment: **very good** -/- Diploma examination result: **very good** -/-

4. Grading scheme and grade distribution guidance: -/-

According to the Rules of Study in the Cracow University of Technology, the following grades scale is used: -/-

		ECTS -/-
1. bardzo dobry (bdb) [very good]	5.0	A -/-
2. ponad dobry (pdb) [more than good]	4.5	B -/-
3. dobry (db) [ <i>good</i> ]	4.0	C -/-
4. dość dobry (ddb) [quite good]	3.5	D -/-
5. dostateczny (dst) [satisfactory]	3.0	E -/-
6. niedostateczny (nd) [fail]	2.0	F -/-

The lowest passing grade is: dostateczny [satisfactory]. -/-

Final study result is the weighted mean grade of: average overall grade, assessment of diploma thesis and result of the diploma examination. -/-

5. Final study result<sup>1)</sup>: **ponad dobry (4.5)** -/-

## V. INFORMATION ON THE QUALIFICATION OF THE DIPLOMA HOLDER -/-

1. Accessibility for further study: -/-

The graduate is entitled to second cycle studies and postgraduate studies -/-

2. Professional qualification: -/-

The graduate can be employed in state and private companies, in manufacturing and services sectors and in public institutions. -/-

The graduate is entitled to apply for professional qualifications in general construction in accordance with applied regulations. -/-

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#### VI. ADDITIONAL INFORMATION<sup>3)</sup> -/-

1. Additional information including: job internships, received awards: -/-

The completed studies received positive assessment by Polish Accreditation Committee.

2. Additional source of information on education: -/-

The Cracow University of Technology: <a href="http://www/pk.edu.pl">http://www/pk.edu.pl</a> -/-

Bureau for Academic Recognition and International Exchange: http://www.buwim.edu.pl -/-

Faculty of Environmental Engineering at The Cracow University of Technology:

http://www.wis.pl.edu.pl

#### VII. CERTIFICATION OF THE SUPPLEMENT -/-

1. Date: 11 June 2010 -/-

2. Seal and signature of the head of basic organizational unit: -/[Ink, round seal with the national emblem of Poland and inscription:] Politechnika
Krakowska im Tadeusza Kościuszki w Krakowie -/-

[Ink, rectangular seal with inscription] Dean of Faculty of Environmental Engineering at the Cracow University of Technology prof. dr hab. inż. Elżbieta Nachlik, illegible signature. -/-

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[On page 7 information on Polish system of education and granting of professional titles and degrees, and notes regarding translation and filling in the supplement.] -/-

I, a sworn translator of English, Anna Gałutowska, entered in the Polish National Register of Translators and Interpreters under the no. TP/5630/05, hereby confirm the consistency of the above translation with the Polish original document. -/-

London, 14 May 2014 -/-

Repertory No. 100/14 -/-