

Technical University of Lodz

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. 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 judgments, 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.

DIPLOMA SUPPLEMENT (CERTIFIED COPY)

valid with the diploma nr

I. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

1. Family name:
2. Given name(s):
3. Date of birth (day/month/year):
4. Student identification number or code (if available):

II. INFORMATION IDENTIFYING THE QUALIFICATION

1. Diploma number:
2. Name of qualification and (if applicable) title conferred¹): **magister inżynier**
3. Main field(s) of study and specialization: **Management and Production Engineering**
specialization: **Quality Management**
4. Name and status of awarding institution¹):

**Politechnika Łódzka (Technical University of Lodz), ECTS Label Holder
Żeromskiego 116, 90-924 Lodz, Poland**

Technical University of Lodz is a public autonomous higher education institution possessing the legal status. It acts on the basis of the Law on Higher Education as well as on the Technical University Statute.

Technical University of Lodz confers the professional degree of magister inżynier, magister inżynier architekt, magister, magister sztuki, inżynier, inżynier architekt and licencjat. The University also confers the degree of doktor and doktor habilitowany and applies for the conferment of a scientific title. Technical University of Lodz was founded in 1945.

5. Name and status of institution administering studies²):

Technical University of Lodz - public university

6. Language(s) of instruction/examination: **Polish/Polish**

III. INFORMATION ON THE LEVEL OF THE QUALIFICATION

1. Level of qualification: **fading out pre-Bologna uniform program**
2. Official length of program: **5 years**
3. Access requirements(s):
holding the Maturity-Exam Certificate and passing the entrance exam

IV. INFORMATION ON THE CONTENTS AND RESULTS GAINED³)

1. Mode of study: **full-time**

2. Program requirements:

Magister degree course in the field of management and production engineering lasts 5 years (10 semesters). The number of class hours may not be lower than 3500 including 1695 hours set in educational standards. The total number of class hours in the course of evening studies may not be lower than 80% of the total number of hours required by educational standards, whereas the number of class hours in the course of extramural studies may not be lower than 60% of the total number required by the standards, however the curriculum contents and the number of class hours for subjects required by the educational standards must remain the same as for full-time studies.

Magister degree course in the field of management and production has an interdisciplinary character and combines engineering training in a given field, namely, machine design, civil engineering, chemical engineering, electrotechnics and electronics, agriculture, transport, product research, environmental protection and others, with training in the fields of organization and management, law and finances. The graduate will have acquired substantial knowledge in the fields of a given engineering field of study, basics of economics and management, competencies in a given engineering field of study, management- management of technical functions, such as design of new production systems, operation systems, buildings, management systems, recruitment and training, assessment of results obtained and technical supervision, costs management, projects (industrial consulting and consultancy), marketing, logistics, distribution, capital management and material investments as well as organization and execution of research and development, especially design and implementation of technological and organizational innovations.

The degree program must include at least 330 hours of general knowledge courses in the field of foreign languages, sports, arts and humanities (to be chosen from amongst philosophy, public relations, sociology, psychology, ethics etc), at least 690 hours of fundamental courses in the field of mathematics with statistics, physics and/or chemistry, and/or biology, and/or informatics, engineering graphics (computer graphics), basics of metrology, micro- and macro economy, law, basics of management, at least 675 hours of specialized courses in the fields of: finances and accounting, cost calculation for engineers, operational research, production and services management, personnel management, strategical management, quality management (TQM), marketing, introduction to techniques, natural resources ecology, and environmental protection, materials science, basics of engineering design, basics of automatic control, production processes and techniques.

Within the fundamental and specialized courses individual classes (projects, laboratories, tutorials) should constitute about 40% of all classes. The magister degree course curriculum should include at least 8 weeks of internship, however, depending on the range of studies it is advisable to extend the duration of internship to 16 weeks. It is also advisable to confer the realization of specialization courses (at least two of them) to specialists currently employed in industry or economy.

It is recommended that students prepare final projects in cooperation with different companies.

3. Program details: the individual grades/marks/ ECTS credits obtained:

Form of classes: L - lecture, T - tutorial, Lab - laboratory, P - project, S - seminar, O - other
Semesters: L - spring semester, Z- autumn semester

Academic year	Code	Course title	Number of hours						ECTS credits	Grade
			L	T	La	P	S	O		
2004/05 Z	0980129001	Computer Science I	15	-	30	-	-	-	3,0	4,5
2004/05 Z	0961116001	Engineering Graphics I	15	-	-	30	-	-	3,0	5,0
2004/05 Z	0961115000	Fundamentals of metrology I	15	15	15	-	-	-	3,0	5,0
2004/05 Z	0961117001	Introduction to the basic technology	30	-	15	-	-	-	4,0	5,0
2004/05 Z	0961119002	Materials Science	30	-	-	-	-	-	3,0	5,0
2004/05 Z	0931117001	Mathematics I	30	30	-	-	-	-	6,0	5,0
2004/05 Z	0910118001	Philosophy	30	-	-	-	-	-	2,0	3,0
2004/05 Z	0932113001	Solid State Physics	30	30	-	-	-	-	4,0	3,5
2004/05 L	0980130000	Computer Science II	-	-	45	-	-	-	3,0	4,0
2004/05 L	0961118000	Engineering Graphics II	-	-	-	30	-	-	2,0	4,0
2004/05 L	0990131200	English C-I ,sem.2	-	-	-	-	-	-	2,0	5,0
2004/05 L	0961123000	Fundamentals of metrology II	15	-	15	-	-	-	2,0	4,5
2004/05 L	0921121000	Macroeconomics	30	15	-	-	-	-	5,0	3,0
2004/05 L	0961119003	Materials Science II	15	15	15	-	-	-	5,0	5,0
2004/05 L	0931118001	Mathematics II	30	30	8	-	-	-	6,0	4,5
2004/05 L	0932114001	Physics	15	15	15	-	-	-	5,0	4,0
2004/05 L	0910119001	Sociology of Organizations	30	-	-	-	-	-	3,0	4,5
2004/05 L	0999000200	Sport, sem.2	-	-	-	-	-	-	0,0	pass
2005/06 Z	0955115000	An Enterprise on the Single European Market	30	30	-	-	-	-	3,0	4,0
2005/06 Z	0940145002	Basics of Management	30	15	-	-	-	-	5,0	5,0
2005/06 Z	0990131300	English C-I ,sem.3	-	-	-	-	-	-	2,0	5,0
2005/06 Z	0955112000	European Union	30	-	-	-	-	-	2,0	5,0
2005/06 Z	0965112000	Introduction to bioengineering and biomechanics	30	-	-	-	-	-	2,0	4,5
2005/06 Z	0961124000	Manufacturing Tecvhnologies	15	-	30	-	-	-	3,0	4,0
2005/06 Z	0933118002	Mathematics Statistic	30	15	15	-	-	-	5,0	5,0
2005/06 Z	0973127000	Organisation of Information Systems	15	-	30	-	-	-	5,0	5,0
2005/06 Z	0932114003	Physics II	15	-	30	-	-	-	3,0	4,0
2005/06 Z	0999000300	Sport, sem.3	-	-	-	-	-	-	0,0	pass
2005/06 L	0950134000	Basics of Marketing	30	15	-	-	-	-	3,0	5,0
2005/06 L	0961125000	Basics of the Engineering Design	30	-	-	30	-	-	4,0	4,0
2005/06 L	0965115000	Ecology of Natural Resources and Protection of the Environment	30	-	-	-	-	-	2,0	5,0
2005/06 L	0990131400	English C-I ,sem.4	-	-	-	-	-	-	2,0	5,0
2005/06 L	0922124000	Finance and Accounting	15	30	-	-	-	-	4,0	3,5
2005/06 L	0940147001	Law	45	-	-	-	-	-	2,0	5,0
2005/06 L	0961126000	Material Removal Processes	15	-	15	-	-	-	2,0	5,0
2005/06 L	0921119001	Microeconomics	30	30	-	-	-	-	4,0	5,0
2005/06 L	0933121000	Operation Research	15	15	-	-	-	-	2,0	4,0
2005/06 L	0973123001	Production Engineering	30	-	-	30	-	-	4,0	4,5
2005/06 L	0999000400	Sport, sem.4	-	-	-	-	-	-	0,0	pass
2006/07 Z	0923111000	Banking and the Capital Market	15	15	-	-	-	-	2,0	5,0
2006/07 Z	0961121001	Basics of Automatisaton	15	15	15	-	-	-	3,0	5,0
2006/07 Z	0924123000	Cost Accounting	30	15	-	-	-	-	3,0	5,0
2006/07 Z	0940180001	Crisis management	30	-	-	-	-	-	2,0	5,0
2006/07 Z	0940149101	Economic Law	30	-	-	-	-	-	3,0	5,0
2006/07 Z	0990131500	English C-I ,sem.5	-	-	-	-	-	-	2,0	5,0
2006/07 Z	0974111000	Ergonomy and Safety of Work	15	15	-	-	-	-	3,0	5,0

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			L	T	La	P	S	O		
2006/07 Z	0950131002	Innovations and Entrepreneurship	30	-	-	-	-	-	2,0	4,5
2006/07 Z	0972122000	Production logistics	15	15	-	-	-	-	2,0	5,0
2006/07 Z	0973124102	Productions Processes and Techniques	30	-	15	-	-	-	4,0	5,0
2006/07 Z	0910123000	Psychology of Management	30	-	-	-	-	-	2,0	5,0
2006/07 Z	0999000500	Sport, sem.5	-	-	-	-	-	-	0,0	pass
2006/07 Z	0965111000	Sustainable Development	15	-	-	15	-	-	2,0	5,0
2006/07 L	0971111001	Bases of Total Quality Management	30	15	-	-	-	-	4,0	5,0
2006/07 L	0980135000	Computer Aided Manufacturing	-	-	30	-	-	-	2,0	5,0
2006/07 L	0933123000	Elements of Econometrics	15	15	-	-	-	-	4,0	5,0
2006/07 L	0973133001	Engineering Documentation	-	-	-	30	-	-	2,0	5,0
2006/07 L	0990131600	English C-I ,sem.6	-	-	-	-	-	-	2,0	4,5
2006/07 L	0940175000	Human Resources Managaement	30	-	-	-	-	-	2,0	5,0
2006/07 L	0974112000	Industrial Ergonomy	15	30	-	-	-	-	4,0	4,5
2006/07 L	0963119000	Manufacturing Technology	15	-	15	-	-	-	2,0	4,5
2006/07 L	0973137000	Process Control	15	30	-	-	-	-	3,0	5,0
2006/07 L	0973132001	Production and Services Management	30	-	-	30	-	-	5,0	4,0
2006/07 L	0999000600	Sport, sem.6	-	-	-	-	-	-	0,0	pass
2007/08 Z	0980136001	Computer Integrated Manufacturing	-	-	30	-	-	-	2,0	4,5
2007/08 Z	0933124000	Forecasting and Simulation	15	-	30	-	-	-	3,0	5,0
2007/08 Z	0991001700	Foreign language I , sem.7 v2	-	30	-	-	-	-	4,0	5,0
2007/08 Z	0950130001	Industrial Marketing	15	30	-	-	-	-	3,0	5,0
2007/08 Z	0940173000	International Economics	30	15	-	-	-	-	3,0	5,0
2007/08 Z	0955114000	Procedures of Applying for the Structural Funds of the European Union	15	-	-	30	-	-	3,0	5,0
2007/08 Z	0973134001	Production and Services Management	30	-	-	30	-	-	4,0	5,0
2007/08 Z	0940169001	Project Management and Consulting	15	-	15	-	-	-	2,0	4,5
2007/08 Z	0974113000	Safety Management	15	-	15	-	-	-	2,0	5,0
2007/08 Z	0940176000	Strategic Management	30	15	-	-	-	-	4,0	5,0
2007/08 L	0971117801	Accreditation, Certification and Standarisation	15	30	-	-	-	-	3,0	4,5
2007/08 L	0971118801	Documentation of Quality System	15	-	-	30	-	-	3,0	5,0
2007/08 L	0971116800	Methods and Techniques of Quality Management	30	30	-	-	-	-	5,0	5,0
2007/08 L	0940177000	Negotiations	-	30	-	-	-	-	3,0	5,0
2007/08 L	0971114801	Quality Management	30	30	-	-	-	-	6,0	5,0
2007/08 L	0971115800	Quality Management Systems	30	30	-	-	-	-	5,0	5,0
2007/08 L	0965121801	Systems of Environmental Management	30	30	-	-	-	-	3,0	4,0
2007/08 L	0973133801	Systems of Occupational Safety Management	30	15	-	-	-	-	2,0	5,0
2008/09 Z	0971124801	Computer Aided Quality Management	-	-	-	30	-	-	2,0	4,0
2008/09 Z	0940156801	Creating Visual Image of a Company	30	-	-	30	-	-	4,0	5,0
2008/09 Z	0971122800	Ergonomic Quality	15	-	-	30	-	-	4,0	5,0
2008/09 Z	0971120800	Implementation of Quality Management Systems	30	-	-	30	-	-	4,0	4,5
2008/09 Z	0902111000	Industrial Placement	-	-	-	-	-	-	0,0	pass
2008/09 Z	0971119801	Integration of Quality Management System	30	-	-	30	-	-	5,0	5,0
2008/09 Z	0971123800	Methods and Techniques of Quality Management	-	-	-	30	-	-	2,0	4,0
2008/09 Z	0913748000	Production and Operations Management	30	-	-	-	-	-	2,0	5,0
2008/09 Z	0971121800	Products Quality Planning	15	-	-	30	-	-	5,0	5,0
2008/09 Z	0911121501	Proseminary	-	-	-	-	30	-	2,0	5,0
2008/09 L	0912112001	Final Project	-	-	-	-	200	-	24,0	pass
2008/09 L	0940168000	Manager's Ethics and Etiquette	30	-	-	-	-	-	3,0	5,0
2008/09 L	0911121601	Seminar	-	-	-	-	30	-	3,0	5,0

Academic year	Code	Course title	Number of hours						ECTS credits	Grade
			L	T	La	P	S	O		

Information about the diploma project and the diploma examination:

Title of the Master's Thesis:

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Grade for the diploma project: **4,50**

Grade for the diploma examination: **5,00**

Date of the diploma examination:

The program of study possesses the accreditation of the State Accreditation Committee.

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

Grading scale for particular courses, diploma project and diploma examination:

5.0 (five); 4.5 (four and a half); 4.0 (four); 3.5 (three and a half); 3.0 (three); 2.0 (two). The lowest grade and the only one failing is 2.0 (two). Calculation of the final study result is based on: a) weighted average of grades for exams and continuous assessment during the whole study period excluding the grade 2.0 (two); b) grade for the diploma project; c) grade for the diploma examination. The final study result is the sum of: 0,6 of the grade under point a) and 0,2 of the grades under points b) and c). The final diploma provides the final grade for studies, which is specified on the basis of the final study result in accordance with the rule: 4.85 and higher - excellent (celujący); 4.55 - 4.84 very good (bardzo dobry); 4.2 - 4.54 more than good (ponad dobry); 3.8 - 4.19 good (dobry); 3.4 - 3.79 satisfactory (dość dobry); up to 3.39 sufficient (dostateczny).

5. The final result of study: **very good**

V. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

1. Access to further study:

doctoral studies, postgraduate studies

2. Professional status:

Student possesses qualifications.

VI. ADDITIONAL INFORMATION ³⁾

1. Additional information, including trainings, awards:

Student did industrial placement included in the study programme.

2. Further information

source: Technical University of Lodz - www.p.lodz.pl

The Ministry of Science and Higher Education, 00-529 Warszawa 53, ul. Wspólna 1/3;

www.nauka.gov.pl

Bureau for Academic Recognition and International Exchange - www.buwiwm.edu.pl

VII. CERTIFICATION OF THE SUPPLEMENT

1. Date: **21 July 2009**

2. Signature and seal of the head of the basic organizational unit:

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VIII. INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

1. Higher education access criteria

The total length of education until graduation, which gives one the right to sit *matura exam*, is 12-15 years. Having passed the *matura exam* graduates receive *dojrzałości* certificate, which entitles them to apply for admission to a higher education institution.

2. Higher education system

The system of education and the basis of its functioning are set out in the Law of 27th July 2005- Prawo o Szkolnictwie Wyższym. The provisions of that Law apply to both public and non-public higher education institutions and the process of education follows the same rules and needs to meet the same standards.

Higher education institutions, regardless of their status, are divided into: *uczelnie akademickie* (academic higher education institutions) and *uczelnie zawodowe* (vocational higher education institutions).

Academic higher education institution is an institution in which at least one organizational unit has the right to award the degree of doktor.

Vocational higher education institution is an institution offering first or second degree programs or fading-out pre-Bologna uniform programs, which does not hold the right to award the degree of doktor.

Study programs in academic higher education institutions are conducted as first-cycle study programs, second-cycle study programs, fading-out pre-Bologna uniform programs or doctoral studies (as third cycle).

First cycle degree programs, that is licencjat study program, last from six to eight semesters, whereas inżynier study programs last from seven to eight semesters.

Second cycle degree programs last three or four semesters and pre-Bologna uniform programs - from nine to twelve.

Third cycle degree programs last not longer than four years and their participants receive third cycle graduation certificate. In separate proceedings graduates receive the degree of doktor or doktor of fine arts.

First, second and third cycle study programs may be offered in the form of full-time and part-time studies.

3. Titles awarded to graduates of higher education institutions

- licencjat, licencjat pielęgniarstwa (nursing) or licencjat położnictwa (obstetrics), inżynier, inżynier pożarnictwa (fire engineering), inżynier architekt (architecture), inżynier architekt krajobrazu (landscape architecture)-awarded to graduates of first cycle degree programs,

- magister or equivalent titles: magister sztuki (fine arts), magister farmacji (pharmacy), magister inżynier, magister inżynier architekt (architecture), magister inżynier architekt krajobrazu (landscape architecture), magister inżynier pożarnictwa (fire engineering), magister pielęgniarstwa (nursing), magister położnictwa (obstetrics), lekarz, lekarz dentysta (dentists), lekarz weterynarii (veterinary).

4. Credit points

The number of ECTS points awarded per semester of study ranges from 17 to 33, whereas per academic year that number equals 60 ECTS. The number of points awarded on completion of a first cycle degree program falls between 180 and 240 ECTS, for the second cycle - 90-120 ECTS and fading-out pre-Bologna uniform programs - 270-360 ECTS.

5. Degrees, degrees in fine arts, titles, titles in fine arts

The degree of *doktor* and *doktor habilitowany* of a particular science within a particular scientific discipline are considered degree.

The degree of *doktor* and *doktor habilitowany* of a particular fine art within a particular artistic discipline are considered degrees in fine arts.

Degrees are awarded by higher education units, Polska Akademia Nauk (Polish Academy of Sciences) and research and development institutions, in compliance with the rights they had obtained in separate proceedings.

The title of *profesor* of a particular scientific discipline is a scientific title whereas the title of *profesor* in a particular fine arts discipline is a title in fine arts.

The title of *profesor* is awarded by the President of the Republic of Poland.

¹⁾ In case of translation into a foreign language, the content remain in the original language.

²⁾ Indicate the status of the awarding institution: public/non-public, please also indicate the name of the institution offering joint programs, in the original language.

³⁾ Sections IV.2-4 and points VI.1-2 may be expanded by an appropriate number of pages, should the need arise.