

HELLENIC REPUBLIC
UNIVERSITY OF PATRAS



SCHOOL OF ENGINEERING
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
UNIVERSITY CAMPUS, 26500, RIO, PATRAS, GREECE
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DIPLOMA SUPPLEMENT

This Diploma Supplement is based on 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 accompanying 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.

1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION			
1.1	Family Name(s)	1.2	Given Name(s)
1.3	Student identification number or code		
1.4	Date of birth (day/month/year)	Place, Country of Birth	
2. INFORMATION IDENTIFYING THE QUALIFICATION			
2.1	Name of the qualification and (if applicable) title conferred (in original language):		
	ΔΜΔΕ στην «Κατανομημένη πράσινη ηλεκτρική ενέργεια και οι προηγμένες δικτυακές υποδομές για τη διαχείριση και την οικονομία της» MSc in «Distributed Green Electric Power and the Advanced Network Infrastructure for its Management and Economy»		
2.2	Main field(s) of study for the qualification:		
	Electrical Engineering (Power systems, Communication systems, Computer systems, Control systems) in Green Electric Power		
2.3	Name and status of awarding institution (in original language):	2.4	Name and status of institution (if different from 2.3) administering studies (in original language) :
	University of Patras (HEI), Public University		As in 3.4
2.5	Language(s) of instruction/examination:		
	Greek		
3. INFORMATION ON THE LEVEL OF THE QUALIFICATION			
3.1	Level of qualification	3.2	Official length of programme
	MSc, 2nd Cycle, 7th level		Minimum time length of the course is 12 months. Maximum time length is 18 months, but the additional time is provided only for the completion of the Postgraduate Thesis.
3.3	Access requirement(s):		
	Candidates for the Interdepartmental Postgraduate Master's Degree should hold a degree in Electrical and Computer Engineering or Computer Engineering and Informatics or Mechanical Engineering or Chemical Engineering or Physics. The degree must be awarded from a Greek University or be recognized as equivalent from the National Academic Recognition Information Centre. Graduates of Technological Educational Institutions from the Departments of Electrical, Telecommunications, Electronics, Computers and Informatics can also be accepted in the course.		

4. INFORMATION ON THE CONTENT AND RESULTS GAINED

4.1 Mode of study

Full-time

4.2 Programme requirements

In order to receive the Interdepartmental Postgraduate Master's Degree in «Distributed Green Electric Power and the Advanced Network Infrastructure for its Management and Economy» students should complete 75 ECTS. From these 50 ECTS are from the successful completion of 10 courses and more specific: 6 courses in the 1st semester (2 compulsory and 4 elective, 30 ECTS) and 4 courses in the 2nd semester (2 compulsory and 2 elective, 20 ECTS). The Postgraduate Dissertation provides a total of 25 ECTS (10 ECTS in the 2nd semester and 15 ECTS after completion). The Dissertation is examined and approved by a three-member examination committee appointed by the Special Interdepartmental Committee of the postgraduate programme. The examination committee is chaired by the student's supervisor. The other two members of the examination committee must be: a) in the same field of research with the dissertation, b) members of Faculties or Researchers of Grades A', B' or C' and hold a PhD.

This Postgraduate Study Programme (PSP) aims at providing high quality postgraduate studies in the field of distributed green electric energy and advanced network infrastructure for its distribution and economy. This field concerns the sustainable development with environmental protection and includes the cooperation of power systems, control, telecommunications, computers, digital and analog electronics in the service of electric energy production and advanced distribution infrastructure. Renewable energy sources and advanced distribution grids require modern electronic devices and computer systems, equipped with state-of –the-art telecommunication systems, so that they can be controlled in real-time. Graduates of the course acquire essential qualifications in a continually advancing technology by:

- a) Attending well-organized postgraduate courses that provide a broad knowledge of the field,*
- b) Writing a Dissertation under the supervision of an experienced academic researcher.*

The scientific field of the PSP covers many modern energy generation and distribution related issues. The purpose, the structure and content of the proposed PSP have solid scientific and academic foundations in accordance with standards universities of Europe and America. The PSP seeks to organize a pilot teaching and research environment (with excellent technological infrastructure, organized cooperation of staff and postgraduate students and a significant number of postgraduate research dissertations) which will provide a major boost to this research field. It covers the needs of the labor market for qualified scientists in areas which contribute to the achievement of sustainable development in an environment rapidly changing technology.

Alumni will explain and solve operational problems and the interconnection problems of dispersed electricity generation units (especially the Renewable energy sources). It would also solve the problems and will evolve the functionality of advanced electricity networks. To achieve the previous will implement intelligent control in real time, using sophisticated electronic devices, computer networks and telecommunications systems. Graduates are offered the opportunity to design the advanced electrical energy systems of the future and the advanced network infrastructure for their management and economy. To plan and will rationalize the deregulated electricity market, to ensure the ecological, sustainable development in an environment rapidly changing technology.

4.3

Programme details: (e.g. modules or units studied), and the individual grades/marks/credits obtained: (if this information is available on an official transcript this should be used here)

Courses that the student has successfully attended are shared in compulsory (C) and elective (E) courses as follows:

CODE	COURSES	TYPE	Semester	ECTS Credits	Grade	Examination Period	ECTS Grading
DGP_101	Microprocessors and microcomputers	C	A	5	9,0	FEB 2016 or SEP 2016	A or Pass (P)
DGP_102	Automatic control systems	C	A	5			
DGP_103	Energy and Environment	E	A	5			
DGP_104	Advanced networks of electric power systems	E	A	5			
DGP_105	Communications Networks featuring the Internet and the Distributed Generation	E	A	5			
DGP_106	Modern technology of wireless networks	E	A	5			
DGP_107	Computers network for distributed control	E	A	5			
DGP_108	Systems for resources management	E	A	5			
DGP_109	Optimum and robust control of distributed grids and power generating systems	E	A	5			
DGP_110	Intelligent (adaptive, fuzzy and evolutionary) control of electrical energy	E	A	5			
DGP_111	Economics of natural resources and environment	E	A	5			
DGP_113	Economics of energy	E	A	5			
DGP_114	Financial Management	E	A	5			
DGP_115	Marketing	E	A	5			
DGP_201	Electrical power systems control and stability	C	B	5		JUN 2016 or SEP 2016	A or Pass (P)
DGP_202	Communications Networks	C	B	5			
DGP_209	Initiation of MSc Dissertation	C	B	10			
DGP_203	Control of voltage source inverters and interaction with the network	E	B	5			
DGP_204	Applications of wireless networks in energy	E	B	5			
DGP_205	Methodologies of software agents	E	B	5			
DGP_206	Identification and faults isolation in the production and distribution of electric	E	B	5			
DGP_208	Investment Evaluation	E	B	5			
DGP_211	Wind and water energy	E	B	5			
DGP_212	Photovoltaic systems	E	B	5			
DGP_213	Business Strategy	E	B	5			
DGP_214	Organizational Theory and Behavior	E	B	5			
DGP_210	Completion of MSc Dissertation	C	Summer period	15		SEP 2016 or FEB 2017	
DIPLOMA GRADE							

The successful completion of the MSc in «Distributed Green Electric Power and the Advanced Network Infrastructure for its Management and Economy» prerequisites that the student has successfully attended 4 compulsory and 6 elective courses with 50 ECTS. The minimum passing grade is 5 and the average grade of all courses must be at least 6. Moreover the student has completed the Diploma Dissertation under the title «.....», with 25 ECTS.
ECTS grading, according to the Φ.5/89656/Β3/2007 Ministerial Decision, is based on a sample of a minimum of 100 students and where the sample is insufficient, the characterization "Pass", is noted.

4.4 Grading scheme and, if available, grade distribution guidance

8.50-10.00	ΑΡΙΣΤΑ (ARISTA) - EXCELLENT
6.50-8.49	ΛΙΑΝ ΚΑΛΩΣ (LIAN KALOS) – VERY GOOD
5.00-6.49	ΚΑΛΩΣ (KALOS) - GOOD
Minimum passing grade: 5.00	
ECTS Grading	
10%	A
25%	B
30%	C
25%	D
10%	E

4.5 Overall classification (in original language)

9,00 «Άριστα», (ARISTA), ECTS grade: A

5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1 Access to further study

5.2 Professional status (if applicable)

Access to postgraduate studies (3rd cycle, PhD)

Unavailable.

6. ADDITIONAL INFORMATION

6.1 Additional information

6.2 Further information sources

Unavailable.

Site ΔΜΔΕ: greenpower.upatras.gr/
University of Patras: www.upatras.gr
Department of Electrical and Computer Engineering: www.ece.upatras.gr
Greek Ministry of Education and Religious Affairs, Sport and Culture:
<http://www.ypepth.gr/>
European Union: <http://www.ec.europa>

7. CERTIFICATION OF THE SUPPLEMENT

7.1 Date

7.2 Signature

7.3 Capacity

7.4 Official stamp or seal

Rector of the University of Patras

8. INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

<http://www.eurydice.org>

http://www.eurydice.org/Eurybase/frameset_eurybase.html