UNIVERSITÀ DEGLI STUDI DI PARMA

Diploma Supplement

Preamble

The Diploma Supplement was developed by the European Commission, Council of Europe and by 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 qualification to which this supplement is appended. It is free from any value-judgements, equivalence statements or suggestions about recognition. Information is provided in eight sections. Where information is not provided, an explanation will give the reason why.

1. Information identifying the holder of the qualification

1.1 Family name(s)
BETTEGA

1.2 Given name(s)
DIEGO

1.3 Date (dd/mm/yyyy)
11/02/1990

1.4 Student identification number or code
212842

2. Information identifying the qualification

2.1 Name of the qualification and (if applicable) title conferred (in original language):
First Degree IN MECHANICAL ENGINEERING
DOTTORE

2.2 Main field(s) of study for the qualification
INDUSTRIAL ENGINEERING - L-9

2.3 Name and status of awarding institution (in original language):
UNIVERSITY OF PARMA (ITALY)
State University
Head Office: Via Universita', 12 PARMA

2.4 Name and status of institution (if different from 2.3) administering studies (in original language):
Not applicable

2.5 Language(s) of instruction/examination
Italian

3. Information on the level of the qualification

3.1 Level of qualification

1° cycle

3.2 Official length of programme
Three years (180 credits)

3.3 Access requirement(s)
TITLE OF SUPERIOR SCHOOL(admission and enrolment)

4. Information on the contents and results gained

4.1 Mode of study
Full time

4.2 Programme requirements
The Degree Course in Computer Engineering was designed with the principal objective of training engineers with adequate knowledge of the methodological aspects of the foundation sciences, and of industrial engineering in general, and possessing specific expertise in the area of mechanical engineering.
Graduates in Mechanical Engineering have to be capable of applying the appropriate techniques and using the best instruments for the design and testing of machinery, plant, production and processing systems, energy transformation and management, and mechanical systems in general. They have to be able to acquire, analyze, process and interpret observed experimental data. They have to be capable of keeping their specialist knowledge up-to-date.
In performing their work, mechanical engineers have to possess knowledge of the questions regarding a company's economic and organizational aspects. Likewise they have to be aware of the professional and ethical responsibilities deriving from their decisions.
Therefore, mechanical engineers have to possess interdisciplinary knowledge based on a solid foundation and a complete mastery of technical and scientific engineering methods and content.

The course is structured as follows:
- the first subjects taught are foundation subjects, Mathematical Analysis, Geometry, Physics and Chemistry;
- as well as tests of knowledge of a foreign language, other subjects with related and integrative technical content are studied, such as Fluid Mechanics, Electronics, and Economics and Corporate Organization;
- course-specific subject activities are also studied, such as: Applied Chemical Technology, Mechanical Technology, Machine Design, Electrical Industrial Applications, Science of Construction, and Technical Physics;
- later, the course concentrates on more applied subject areas, in order to complete the range of knowledge necessary to continue academic study in the Master Degree: these areas comprise Machines, Mechanical Plant, Machine Construction, and Mechanics applied to Machinery.

The course is completed by Activities chosen by the student, Other activities (in laboratories and work-experience at companies), and the Final examination.
Lessons and exercises take place in the lecture hall, with the possibility, as mentioned above, of practical laboratory work at CEDI (Engineering Educational Centre), and at the Department of Industrial Engineering.
The results of academic study are verified by means of examinations, for which marks are given, or by means of practical tests that yield an evaluation of eligibility, with due consideration of the maximum number of examinations applicable.

180 credits

4.3 Programme details (e.g modules or units studied) and the individual grades/marks/credits obtained

Date	Didactic activity	CFU/ECTS credits	Mark	Val./Rec
15/02/2010	MACHINE DESIGN	9	23	
	MACHINE DESIGN (UNIT 2)	*of which 4*		
	MACHINE DESIGN (UNIT 1)	*of which 5*		
25/02/2010	MATHEMATICAL ANALYSIS 1	12	24	
22/06/2010	CHEMISTRY	6	22	
	CHEMISTRY	*of which 6*		
25/06/2010	GENERAL PHYSICS 1	9	25	
28/06/2010	ENGLISH	3	Passed	
08/09/2010	GEOMETRY	9	21	
	GEOMETRY (UNIT 2)	*of which 4*		
	GEOMETRY (UNIT 1)	*of which 5*		
31/01/2011	RATIONAL MECHANICS	6	23	
08/02/2011	GENERAL PHYSICS	6	24	
16/06/2011	ELECTRICAL INDUSTRIAL APPLICATIONS + ELEMENTS OF ELECTRONICS	9	21	
	ELECTRICAL INDUSTRIAL APPLICATIONS + ELEMENTS OF ELECTRONICS (UNIT 1)	*of which 6*		
	ELECTRICAL INDUSTRIAL APPLICATIONS + ELEMENTS OF ELECTRONICS (UNIT 2)	*of which 3*		
07/07/2011	MECHANICAL TECHNOLOGY	9	19	
13/07/2011	CALCULUS 2	6	22	
	MATHEMATICAL ANALYSIS 2	*of which 6*		
21/02/2012	FLUID MECHANICS	6	21	
26/09/2012	APPLIED PHYSICS	9	18	
12/02/2013	TECHNOLOGIES OF APPLIED CHEMISTRY	9	23	
06/03/2013	PRODUCT DESIGN	6	23	
12/06/2013	CHEMICAL FUNDAMENTALS OF TECHNOLOGIES AND INNOVATIVE MATERIALS	6	30 cum laude	
16/07/2013	MACHINERY	9	19	
17/01/2014	MECHANICAL PLANT AND EQUIPMENT	9	27	
09/04/2014	MACHINERY APPLIED MECHANICS	9	20	
02/07/2014	STRUCTURAL MECHANICS	6	24	
10/09/2014	ECONOMICS AND CORPORATE ORGANIZATION	9	21	
	ECONOMICS AND CORPORATE ORGANIZATION (UNIT 2)	*of which 4*		
	ECONOMICS AND CORPORATE ORGANIZATION (UNIT 1)	*of which 5*		
14/11/2014	MACHINE CONSTRUCTION	9	23	
18/11/2014	LABORATORY	6	Passed	
11/12/2014	FINAL EXAM	3	Passed	

Date (dd/mm/yyyy)	Final examination Title	CFU/ECTS	Subject/discipline
11/12/2014	A study of the mutual wear due to lip seals on shafts exposed to various treatments of surface hardening.	3	MACHINERY APPLIED MECHANICS

Legend	
CFU	Credits

4.4 Grading scheme and, if available, grade distribution guidance

Individual subjects are graded on a scale from 1 to 30, with 18 and 30 as minimum and maximum grade respectively. A 'cum laude' can be added to the maximum grade as a special distinction.

Mark	Percentage of students who obtained this mark [Study Course]
30 cum laude	4 %
30	10 %
29	2 %
28	9 %
27	9 %
26	8 %
25	9 %
24	8 %
23	7 %
22	8 %
21	6 %
20	7 %
19	5 %
18	8 %

4.5 Overall classification of the qualification (in original language)

89/ 110, obtained in date 11/12/2014.

The overall classification of the qualification is graded on a scale from 1 to 110 , with 66 and 110 as minimum and maximum grade respectively. A 'cum laude' can be added to the maximum grade as a special distinction

Mark	Percentage of students who obtained this mark [Study Course]
110 cum laude	9 %
108	9 %
107	4 %
106	2 %
105	2 %
104	4 %
103	4 %
102	2 %
101	13 %
100	6 %
99	2 %
98	2 %
97	4 %
96	9 %
95	4 %
94	2 %
93	6 %
92	4 %
91	4 %
89	4 %
88	2 %
85	2 %

5. Information On The Function Of The Qualification

5.1 Access to further study
Not available

5.2 Professional status (if applicable)
Graduates in Mechanical Engineering have extensive opportunities for employment, finding positions rapidly with excellent possibilities of success in various fields. Their extensive training enable them to take their place in the world of employment within a range of different industrial fields, and it is also possible to work as an independent consultant in sectors more closely connected to design.
As regards demand from companies in the local area, graduates from the three-year degree in Mechanical engineering have good chances of finding employment in companies in the mechanical and electromechanical sectors, in plant design, automation, and energy production and conversion.
As regards the ISTAT (Italian statistics authority) classification of professional roles, the figure of reference is in class 2.2.1 – Engineers and related professions, in which the following professional role is described: 2.2.1.1.1 – Mechanical Engineers. The professions comprised in this group apply their knowledge of mechanical engineering to design, technical drawing, monitoring functional characteristics, the production of tools, engines, machines and other mechanical equipment (including their maintenance), performing research and studies on the technological characteristics of the materials used and their manufacturing processes; they supervise and direct these activities.

The course provides a preparation for the profession of

Engineers and related professions
Mechanical engineers

6. Additional information

6.1 Additional information

Not available

6.2 Further information sources

University web pages
http://www.unipr.it/

Ministery web pages
http://offf.miur.it/
http://www.study-in-italy.it/

7. Certification of the supplement

7.1 Date (dd/mm/yyyy)
13/07/2015

7.2 Name and signature

Dott.ssa Gianna Maria Maggiali

7.3 Capacity

signed: The University official Registrar

7.4 Official stamp or seal

8. Information on the national higher education system

The Italian University System

The Italian university system is organised in three cycles, according to the Bologna structure: the main academic degrees are the Laurea(1st cycle), the Laurea Magistrale (2nd cycle) and the Dottorato di Ricerca(3rd cycle).The system also offers other study programmes and related qualifications.

First cycle. This cycle consists exclusively of Corsi di Laurea. These degree programmes provide students with an adequate command of general scientific methods and contents as well as with specific professional skills. The general access requirement is the Italian school leaving qualification awarded after completion of 13 years of schooling and passing the relevant State examination; comparable foreign qualifications may also be accepted. Admission to some degree courses may be based on specific course requirements. The studies last 3 years. The Laurea is awarded to students who have gained 180 ECTS credits (called Crediti Formativi Universitari - CFU) and satisfied all curricular requirements, including the production of a final written paper or equivalent final project. The Laurea gives access to the Corsi di Laurea Magistrale as well as to other 2nd cycle study programmes.

Second cycle. The main degree programmes in this cycle are the Corsi di Laurea Magistrale. They provide education at an advanced level for the exercise of highly qualified activities in specific areas. Access is by a Laurea degree or a comparable foreign degree; admission is based on specific course requirements determined by single universities. The studies last 2 years. The Laurea Magistrale degree is awarded to students who have gained 120 ECTS/CFU credits and satisfied all curricular requirements, including the production and public defence of an original dissertation. Some programmes (namely, those in dentistry, medicine, veterinary medicine, pharmacy, architecture, construction engineering/architecture, law, primary education) are defined "single cycle programmes" (Corsi a ciclo unico); for these programmes access is by the Italian school leaving qualification (or a comparable foreign qualification); admission is based on entrance exams. The studies last 5 years (6 years and 360 ECTS/CFU credits in the cases of medicine and dentistry). A Laurea Magistrale degree is awarded to students who have gained 300 ECTS/CFU credits and satisfied all curricular requirements, including the production and public defence of an original dissertation. A Laurea Magistrale degree gives access to Corsi di Dottorato di Ricerca as well as to other 3rd cycle study programmes.

Third cycle. The main degree programmes in this cycle are Corsi di Dottorato di Ricerca (research doctorate programmes); the students/young researchers enrolled in these programmes will acquire methodologies for advanced scientific research, will be trained in new technologies and will work in research laboratories, wherever appropriate. Access is by a Laurea Magistrale degree (or a comparable foreign degree); admission is based on a competitive exam; studies last at least three years and include the completion and public defence of an original research project.

Other programmes.

- Corsi di Specializzazione. These are 3rd cycle programmes intended to provide students with the knowledge and skills required for the practice of highly qualified professions, mainly in medical, clinical and surgical specialities. Admission is by a Laurea Magistrale degree (or by a comparable foreign degree) and is based on a ompetitive exam; studies may last from 2 (120 ECTS/CFUcredits) to 6 years(360 ECTS/CFU credits) depending on the discipline. The final degree awarded is a Diploma di Specializzazione.

- Corsi di Master Universitario di primo livello These are 2nd cycle programmes intended to provide students with further specialization or higher continuing education after completion of the first cycle. Access is by a Laurea degree (or a comparable foreign degree); admission may be subject to additional requirements. Studies last at least 1 year (60 ECTS/CFU credits). The qualification awarded (Master Universitario di primo livello) does not give access to Corsi di Dottorato di Ricerca or to any other 3rd cycle programme since this type of

course does not belong to the general requirements established at national level, but it is offered under the autonomous responsibility of each university.

- Corsi di Master Universitario di secondo livello These are 3rd cycle programmes intended to provide students with further specialization or higher continuing education studies after completion of the second cycle. Access is by a Laurea Magistrale degree (or a comparable foreign degree); admission may be subject to additional requirements. Studies last at least 1 year (60 ECTS/CFU credits). The qualification awarded (Master Universitario di secondo livello) does not give access to Corsi di Dottorato di Ricerca or to any other 3rd cycle programmes, since this type of course does not belong to the general requirements established at national level, but it is offered under the autonomous responsibility of each university.

Credits: degree courses are structured in credits (Crediti Formativi Universitari -CFU). University credits are based on the workload students need in order to achieve the expected learning outcomes. Each credit corresponds to 25 hours of student workload, including independent study. The average workload of a full time student is conventionally fixed at 60 credits per year. Thus, the CFU fully coincide with ECTS credits.

Classes of Degree Courses: all degree programmes of Laurea and Laurea Magistrale sharing general educational objectives are grouped into "classes". In developing the specific learning outcomes of single programmes, Universities have to comply with some national requirements for each class concerning the types (and corresponding amount of credits) of teaching learning activities to be included. Degrees belonging to the same class have the same legal value.

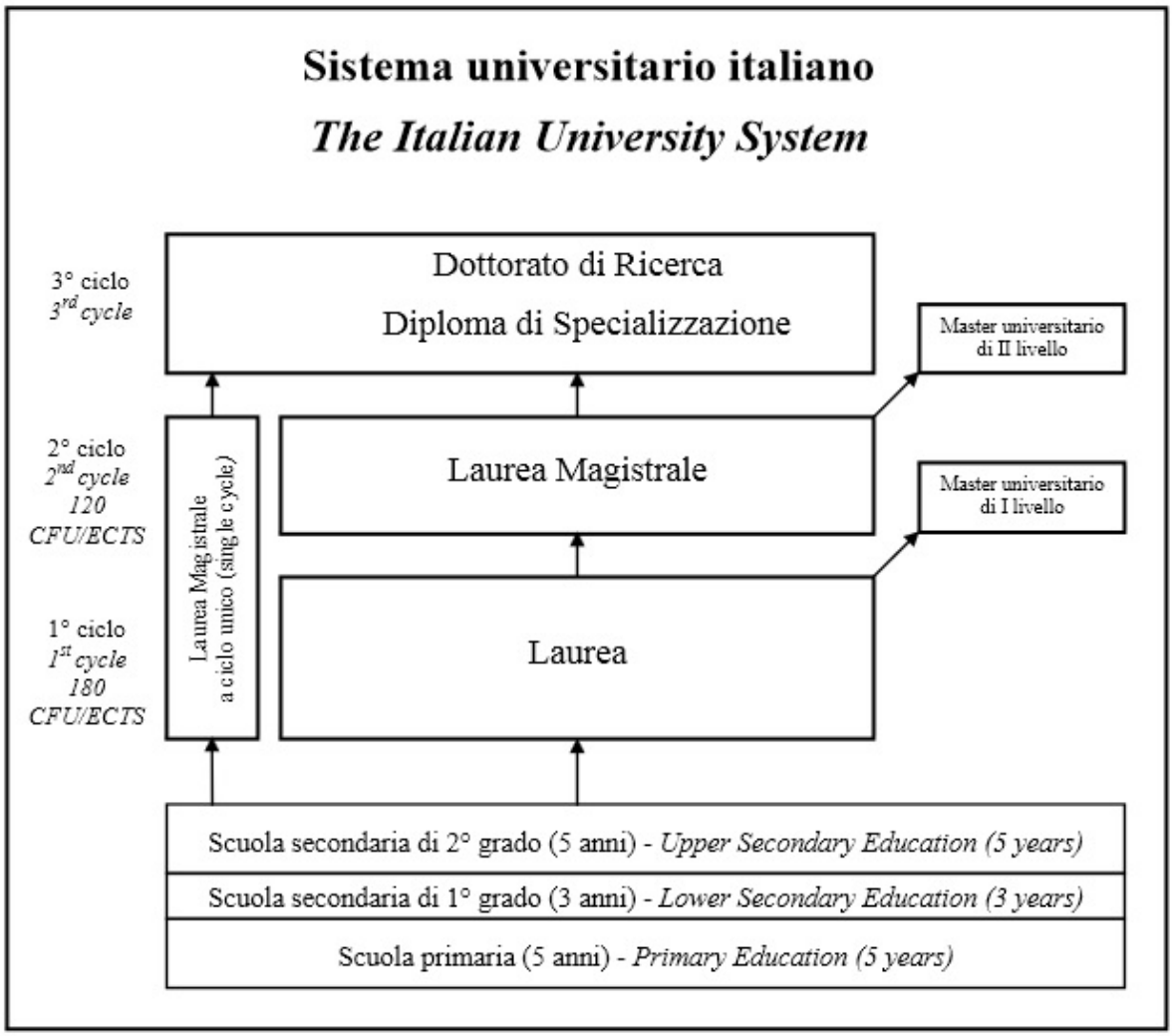
Academic Titles: Those who receive the Laurea are entitled to be called "Dottore", the holders of a Laurea Magistrale have a right to the title of "Dottore Magistrale", the Dottorato di ricerca confers the title of "Dottore di Ricerca" or "PhD".

Joint Degrees: Italian universities are allowed to establish degree programmes in cooperation with Italian and foreign partner universities, on completion of which joint or double/multiple degrees can be awarded.

Further information: Italian Qualifications Framework

Quadro dei Titoli Italiani - QTI

http://www.quadrodeititoli.it


Sistema universitario italiano
The Italian University System
3° ciclo
3rd cycle
Dottorato di Ricerca
Diploma di Specializzazione
Master universitario di II livello
2° ciclo
2nd cycle
120
CFU/ECTS
Laurea Magistrale
Master universitario di I livello
1° ciclo
1st cycle
180
CFU/ECTS
Laurea Magistrale a ciclo unico (single cycle)
Laurea
Scuola secondaria di 2° grado (5 anni) - Upper Secondary Education (5 years)
Scuola secondaria di 1° grado (3 anni) - Lower Secondary Education (3 years)
Scuola primaria (5 anni) - Primary Education (5 years)