

Student n. 415169

Certificate n. 201940514601343



Ms BARSOTTI ANNALISA

born in PIETRASANTA (LU) on August the 7th 1987,

enrolled in October the 2nd 2006 (2006/2007) in the BACHELOR DEGREE in BIOMEDICAL ENGINEERING

passes the following exams:

	Marks	Credits
12/01/2007 MATHEMATICS	21/30	<12>
15/02/2007 COMPUTER SCIENCE	18/30	<6>
05/06/2007 GEOMETRY AND LINEAR ALGEBRA	23/30	<12>
12/06/2007 ELEMENTS OF THERMODYNAMICS	27/30	<3>
12/06/2007 GENERAL PHYSICS	23/30	<12>
14/06/2007 INTRODUCTION TO ORGANIC CHEMISTRY	22/30	<1> P
03/07/2007 PRINCIPLES OF PROGRAMMING	30/30	<3>
05/07/2007 PRINCIPLES OF CHIMICAL ENGINEERING	19/30	<6>
25/07/2007 BIOCHEMISTRY	30/30	<6>
25/01/2008 PRINCIPLES OF AUTOMATICS	24/30	<6>
24/09/2008 PHYSIOLOGY	23/30	<6>
13/01/2009 ANALYSIS OF BIOMEDICAL SIGNALS	21/30	<12>
18/02/2009 TECHNICAL SCIENTIFIC COMMUNICATIONS	Approved	<1> P
05/03/2009 ADVANCED LINGUISTIC KNOWLEDGE	Approved	<3>
05/03/2009 ENGLISH LANGUAGE TEST	Approved	<3>
06/04/2009 ELECTRONICS	23/30	<12>
24/04/2009 ANALYSES OF CIRCUITS AND ELECTRICAL MACHINERY	21/30	<6>
24/07/2009 MECHANICS	22/30	<12>
23/09/2009 MEDICAL COMPUTER SCIENCE	27/30	<6>
10/12/2009 MANAGEMENT HEALTH TECHNOLOGY	26/30	<6>
27/07/2010 SCIENCE AND TECHNOLOGY OF MATERIALS	23/30	<6>
11/11/2010 BIOSENSORS AND BIOINSTRUMENTATION	22/30	<12>
18/11/2010 BIOELECTRIC PHENOMENA	28/30	<12>
17/12/2010 BIOENGINEERING LABORATORY	22/30	<3>
22/02/2011 FINAL EXAM	30/30	<6>
22/02/2011 TRAINING/PROJECT	30/30	<9>

obtained the

BACHELOR DEGREE in BIOMEDICAL ENGINEERING,

degree class Industrial engineering (10),

whose standard duration is THREE years,

on 22/02/2011 with the final grade of NINETY-SIX OUT OF ONE HUNDRED AND TEN (96/110).

GRADING SYSTEM

For exams from 0 / 30 to 30 / 30 cum laude.

For graduation from 66 / 110 to 110 / 110 cum laude.

The highest mark obtained for exams is 30 / 30 cum laude.

The highest mark obtained for graduation is 110 / 110 cum laude.

The lowest passing mark given for exams is 18 / 30.

The lowest passing mark given for graduation is 66 / 110.

She passed the State Exam, which is required to join the professional register of Ingegnere dell'Informazione in the Prima sessione of the year 2017.





Student n. 415169

In order to get BACHELOR DEGREE, the student obtained 180 credits.

This certificate does not require a revenue stamp, in compliance with Law Decree DL 642/1972. This certificate is issued only for authorised purposes abroad, under Presidential Decree DPR 445/2000, art 40.

Pisa, October 14th 2019

The Office Manager
Dott. Luigi RIVETTI

Key

Exams:

C: supplementary
L: free choice
P: additional
M: International mobility

Exam status:

V: validated
E: Erasmus/Socrates programme
K: validated prior integration



UNIVERSITÀ DI PISA



Diploma supplement

Issued to ANNALISA BARSOTTI

born in Pietrasanta (LU) (Italy)

on 07/08/1987



Diploma supplement
English version from page



UNIVERSITÀ DI PISA

Diploma Supplement

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)**

BARSOTTI

1.2 Given name(s)

ANNALISA

1.3 Date (dd/mm/yyyy)

07/08/1987

1.4 Student identification number or code

415169

grade respectively. A 'cum laude' can be added to the maximum grade as a special distinction.

4.5 Overall classification of the qualification (in original language)

96/ 110, obtained in date 22/02/2011.

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

2. Information identifying the qualification**2.1 Name of the qualification and (if applicable) title conferred (in original language):**

Laurea in Ingegneria Biomedica. The holder of this qualification has the right to the title of "Dottore/Dottressa in Ingegneria Biomedica" "Dottoranda"

2.2 Main field(s) of study for the qualification

Industrial engineering - 10

2.3 Name and status of awarding institution (in original language):

Università di Pisa
Public University
Head Office: Lungarno Pacinotti, 43/44 PISA

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

7. Certification of the supplement**7.1 Date (dd/mm/yyyy)**

14/10/2019

7.2 Name and signature

Dott. Luigi RIVETTI

Document issued according to article 3 paragraph 2 of the government decree February 12th, 1993, no. 39

7.3 Capacity

The Office Manager

7.4 Official stamp or seal**3. Information on the level of the qualification****3.1 Level of qualification**1st cycle / EQF LEVEL 6**3.2 Official length of programme**

Three years (180 credits are required in order to graduate)

3.3 Access requirement(s)

Upper Secondary School diploma (State Exam) or equivalent foreign qualification (admission and enrolment)

4. Information on the contents and results gained**4.1 Mode of study**

Full time

4.2 Programme requirements

The course is for three-year and involves the acquisition of 180 credits. Each academic year provides for the acquisition of approximately 60 credits.

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

See table on next page

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



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
12/01/2007	MATHEMATICS	12	21	
15/02/2007	COMPUTER SCIENCE	6	18	
05/06/2007	GEOMETRY AND LINEAR ALGEBRA	12	23	
12/06/2007	ELEMENTS OF THERMODYNAMICS	3	27	
12/06/2007	GENERAL PHYSICS	12	23	
14/06/2007	INTRODUCTION TO ORGANIC CHEMISTRY	1	22	
03/07/2007	PRINCIPLES OF PROGRAMMING	3	30	
05/07/2007	PRINCIPLES OF CHMICAL ENGINEERING	6	19	
25/07/2007	BIOCHEMISTRY	6	30	
25/01/2008	PRINCIPLES OF AUTOMATICS	6	24	
24/09/2008	PHYSIOLOGY	6	23	
13/01/2009	ANALYSIS OF BIOMEDICAL SIGNALS	12	21	
18/02/2009	TECHNICAL SCIENTIFIC COMMUNICATIONS	1	Approved	
05/03/2009	ADVANCED LINGUISTIC KNOWLEDGE	3	Approved	
05/03/2009	ENGLISH LANGUAGE TEST	3	Approved	
06/04/2009	ELECTRONICS	12	23	
24/04/2009	ANALYSES OF CIRCUITS AND ELECTRICAL MACHINERY	6	21	
24/07/2009	MECHANICS	12	22	
23/09/2009	MEDICAL COMPUTER SCIENCE	6	27	
10/12/2009	MANAGEMENT HEALTH TECHNOLOGY	6	26	
27/07/2010	SCIENCE AND TECHNOLOGY OF MATERIALS	6	23	
11/11/2010	BIOSENSORS AND BIOINSTRUMENTATION	12	22	
18/11/2010	BIOELECTRIC PHENOMENA	12	28	
17/12/2010	BIOENGINEERING LABORATORY	3	22	
22/02/2011	TRAINING/PROJECT	9	30	
22/02/2011	FINAL EXAM	6	30	

Legend	
CFU	Credits



8. Information on the national higher education system

The Italian University System

Since 1999, Italian university studies have been fully reformed so as to meet the objectives of the "Bologna process". The university system is now organised on 3 cycles: the 1st cycle academic degree, that is the Laurea, grants access to the 2nd cycle, and the Laurea Specialistica/Magistrale, the main degree of the 2nd cycle, gives access to 3rd cycle doctorate programmes resulting in the degree called Dottorato di Ricerca. In addition to the mentioned degree sequence after the Bologna pattern, the system offers other degree programmes and related degrees both within the 2nd and 3rd cycle.

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 competitive exam; studies may last from 2 (120 ECTS/CFU credits) 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.

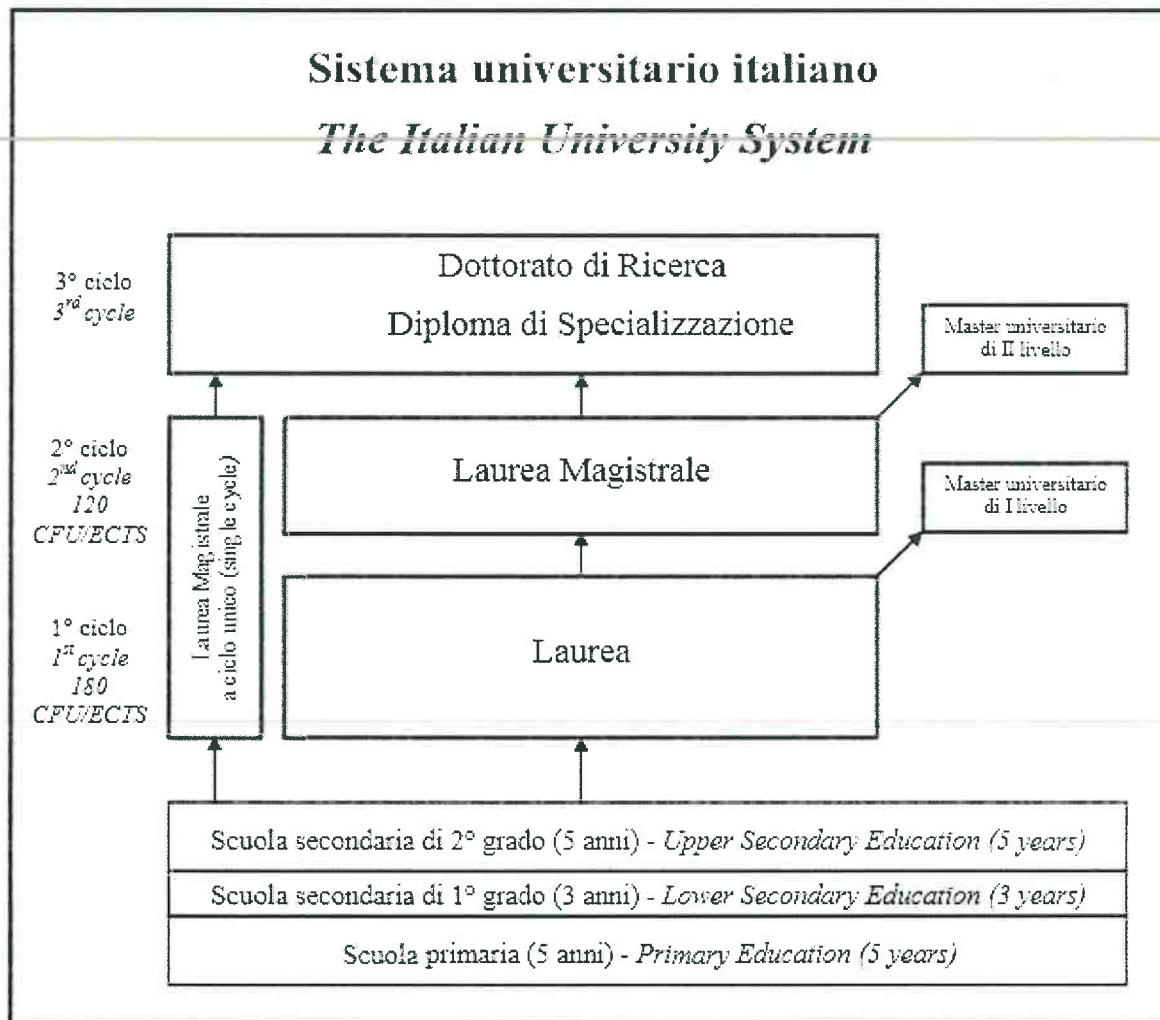
Academic Titles: Those who receive the Laurea are entitled to be called "Dottore", the holders of a Laurea Magistrale have a right to the title of "Dottore Magistrale", the Dottorato di ricerca confers the title of "Dottore di Ricerca" or "PhD".

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>



Student n. 415169

Certificate n. 20194051473 1343



Ms BARSOTTI ANNALISA

born in PIETRASANTA (LU) on August the 7th 1987,

enrolled in February the 23rd 2011 (2010/2011) in the MASTER DEGREE in BIOMEDICAL ENGINEERING

passes the following exams:

	Marks	Credits
04/05/2011 LAB-BASED COURSE ON THE DESIGN OF ELECTROMEDICAL DEVICES	30/30	<3>
24/09/2012 TOWARDS JOB PLACEMENT	Approved	<3>
14/01/2013 BIOMEDICAL ELECTRONICS I	26/30	<9>
30/06/2014 MECHANICS OF SCHELETAL MUSCLE	25/30	<6>
05/08/2014 BIOIMAGING	26/30	<12>
20/10/2014 BIOMEDICAL ELECTRONICS II	22/30	<12>
12/03/2015 RADIATION BIOPHYSICS AND BIOENGINEERING	21/30	<12>
14/07/2015 ECONOMICS AND MANAGEMENT OF HEALTHCARE AND HEALTH TECHNOLOGY ASSESSMENT	27/30	<6>
18/09/2015 SOFTWARE TOOLS FOR MEDICINE	22/30	<12>
22/02/2016 MULTIDIMENSIONAL SIGNAL PROCESSING	27/30	<6>
10/06/2016 MODELING AND IDENTIFICATION OF PHYSIOLOGICAL SYSTEMS	25/30	<12>
13/06/2016 MODELLING AND ANALYSIS OF BIOMEDICAL SIGNALS	25/30	<12>
02/12/2016 FINAL EXAM	29/30	<15>

obtained the

MASTER DEGREE in BIOMEDICAL ENGINEERING,

degree class Biomedical engineering (LM-21),

whose standard duration is TWO years,

on 02/12/2016 with the final grade of ONE HUNDRED OUT OF ONE HUNDRED AND TEN (100/110).

GRADING SYSTEM

For exams from 0 / 30 to 30 / 30 cum laude.

For graduation from 66 / 110 to 110 / 110 cum laude.

The highest mark obtained for exams is 30 / 30 cum laude.

The highest mark obtained for graduation is 110 / 110 cum laude.

The lowest passing mark given for exams is 18 / 30.

The lowest passing mark given for graduation is 66 / 110.

She passed the State Exam, which is required to join the professional register of Ingegnere dell'Informazione in the Prima sessione of the year 2017.

In order to get MASTER DEGREE, the student obtained 120 credits.

This certificate does not require a revenue stamp, in compliance with Law Decree DL 642/1972. This certificate is issued only for authorised purposes abroad, under Presidential Decree DPR 445/2000, art 40.

Pisa, October 14th 2019

The Office Manager
Dott. Luigi RIVETTI






Student n. 415169

Key

Exams:

C: supplementary
L: free choice
P: additional
M: International mobility

Exam status:

V: validated
E: Erasmus/Socrates programme
K: validated prior integration





UNIVERSITÀ DI PISA



Diploma supplement

Issued to ANNALISA BARSOTTI

born in Pietrasanta (LU) - (Italy)

on 07/08/1987

Diploma supplement
English version from page





UNIVERSITÀ DI PISA

Diploma Supplement

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)

BARSOTTI

1.2 Given name(s)

ANNALISA

1.3 Date (dd/mm/yyyy)

07/08/1987

1.4 Student identification number or code

415169

2. Information identifying the qualification

2.1 Name of the qualification and (if applicable) title conferred (in original language):

Laurea magistrale in Ingegneria biomedica. The holder of this qualification has the right to the title of "Dottore/Dottoressa magistrale in Ingegneria biomedica"
Dottoressa Magistrale

2.2 Main field(s) of study for the qualification

Biomedical engineering - LM-21

2.3 Name and status of awarding institution (in original language):

Università di Pisa
Public University
Head Office: Lungarno Pacinotti, 43/44 PISA

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

2° cycle / EQF LEVEL 7

3.2 Official length of programme

Two years (120 credits are required in order to graduate)

3.3 Access requirement(s)

Upper Secondary School diploma (State Exam) or equivalent foreign qualification (admission and enrolment)

or

UNIVERSITY DIPLOMA (admission and enrolment)

Upper Secondary School diploma (State Exam) or equivalent foreign qualification (admission and enrolment)

or

Upper Secondary School diploma (State Exam) or equivalent foreign qualification (admission and enrolment)

MASTER DEGREE (admission and enrolment)

or

Upper Secondary School diploma (State Exam) or equivalent foreign qualification (admission and enrolment)

BACHELOR DEGREE (admission and enrolment)

or

MASTER DEGREE (admission and enrolment)
Upper Secondary School diploma (State Exam) or equivalent foreign qualification (admission and enrolment)

or

MASTER DEGREE (admission and enrolment)
Upper Secondary School diploma (State Exam) or equivalent foreign qualification (admission and enrolment)

or

MASTER DEGREE (admission and enrolment)
Upper Secondary School diploma (State Exam) or equivalent foreign qualification (admission and enrolment)

or

MASTER DEGREE (admission and enrolment)
Upper Secondary School diploma (State Exam) or equivalent foreign qualification (admission and enrolment)

or

OTHER FOREIGN ACADEMIC
QUALIFICATION (admission and enrolment)

4. Information on the contents and results gained

4.1 Mode of study

Full time

4.2 Programme requirements

The course is for two-year and involves the acquisition of 120 credits. Each academic year provides for the acquisition of approximately 60 credits.

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

See table on next page

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 [Classes of Degree Courses]
30 cum laude	5 %
30	13 %
29	11 %
28	15 %
27	16 %
26	13 %
25	10 %
24	6 %
23	4 %
22	2 %
21	2 %
20	1 %
19	1 %
18	1 %

Academic years considered:
2013/2014 - 2015/2016

Total marks: 2302

4.5 Overall classification of the qualification (in original language)

100/ 110, obtained in date 02/12/2016.

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 [Classes of Degree Courses]
110 cum laude	28 %
110	23 %
109	2 %
108	6 %
107	5 %
106	6 %
105	7 %
104	6 %
103	5 %
102	3 %
101	3 %
99	1 %
98	1 %
97	2 %
95	1 %
94	1 %

Academic years considered:
2013/2014 - 2015/2016

Total marks: 126

7. Certification of the supplement

7.1 Date (dd/mm/yyyy)

14/10/2019

7.2 Name and signature

Dott. Luigi RIVETTI

Document issued according to article 3 paragraph 2 of the government decree February 12th, 1993, no. 39

7.3 Capacity

The Office Manager

7.4 Official stamp or seal



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
04/05/2011	LAB-BASED COURSE ON THE DESIGN OF ELECTROMEDICAL DEVICES	3	30	
24/09/2012	TOWARDS JOB PLACEMENT	3	Approved	
14/01/2013	BIOMEDICAL ELECTRONICS I	9	26	
30/06/2014	MECHANICS OF SCHELETAL MUSCLE	6	25	
05/08/2014	BIOIMAGING	12	26	
20/10/2014	BIOMEDICAL ELECTRONICS II	12	22	
12/03/2015	RADIATION BIOPHYSICS AND BIOENGINEERING	12	21	
14/07/2015	ECONOMICS AND MANAGEMENT OF HEALTHCARE AND HEALTH TECHNOLOGY ASSESSMENT	6	27	
18/09/2015	SOFTWARE TOOLS FOR MEDICINE	12	22	
22/02/2016	MULTIDIMENSIONAL SIGNAL PROCESSING	6	27	
10/06/2016	MODELING AND IDENTIFICATION OF PHYSIOLOGICAL SYSTEMS	12	25	
13/06/2016	MODELLING AND ANALYSIS OF BIOMEDICAL SIGNALS	12	25	
02/12/2016	FINAL EXAM	15	29	

Date (dd/mm/yyyy)	Thesis title	CFU/ECTS	Subject/discipline
02/12/2016	Studio di fattibilità per la registrazione di segnali EEG ed EMG durante il cammino overground con esoscheletro.	15	

Legend	
CFU	Credits



8. Information on the national higher education system

The Italian University System

Since 1999, Italian university studies have been fully reformed so as to meet the objectives of the "Bologna process". The university system is now organised on 3 cycles: the 1st cycle academic degree, that is the Laurea, grants access to the 2nd cycle, and the Laurea Specialistica/Magistrale, the main degree of the 2nd cycle, gives access to 3rd cycle doctorate programmes resulting in the degree called Dottorato di Ricerca. In addition to the mentioned degree sequence after the Bologna pattern, the system offers other degree programmes and related degrees both within the 2nd and 3rd cycle.

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 competitive exam; studies may last from 2 (120 ECTS/CFU credits) 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>

